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Dynastic Capital and the Inheritance of Social Advantage^{*}

Abstract

We use population-wide Norwegian administrative data to examine how social capital is transmitted across generations. We construct a multidimensional measure of families' social position based on six dimensions: elite education, elite occupation, executive status, corporate elite, elite positions in top firms, and elite residential tract. Social capital is highly persistent across generations and strongly predicts children's long-run income and access to elite positions, even conditional on parental income, wealth, education, and cognitive ability. Horse-race regressions suggest that social capital is a distinct dimension of inherited advantage that is quantitatively as important as parental income and cognitive ability in shaping children's outcomes. Moreover, the influence of social capital grows over the life cycle, and reaching the very top of the income distribution typically requires both high inherited income and high inherited social capital. Accounting for social capital also meaningfully alters conventional estimates of income-based mobility, indicating that part of what is typically attributed to inherited income reflects the transmission of social position. Quasi-experimental evidence from adoption placements and parental lottery prizes suggests that these patterns primarily reflect environmental transmission rather than genetic inheritance or direct financial resources.

JEL classification

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Keywords

social capital, intergenerational mobility, inequality, elite positions

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1 Introduction

Economic advantage remains strikingly persistent across generations. Even in societies characterized by extensive redistribution, universal education, and low levels of income inequality, children’s long-run economic success remains strongly tied to their family background. Identifying the family characteristics responsible for this persistence remains a central challenge in the study of intergenerational mobility. A large literature documents substantial intergenerational persistence in income, wealth, and educational attainment (Solon, 1992; Charles and Hurst, 2003; Black and Devereux, 2011; Björklund and Jäntti, 2012; Karlson and Landersø, 2025; Ahrsjö et al., 2025).¹ A complementary literature examines the mechanisms underlying this persistence, emphasizing the roles of parental income, wealth, education, and cognitive ability in shaping children’s long-run outcomes (Becker and Tomes, 1979; Black et al., 2005; Lefgren et al., 2012; Sikhova, 2023; Daysal et al., 2023).

Yet these characteristics do not fully explain the persistence of economic advantage across generations. Observed parental characteristics, including income, wealth, and education, account for only a limited share of intergenerational transmission of advantage, while evidence from adoption studies indicates that family environments are at least as important as genetic inheritance (Fagereng et al., 2021; Björklund et al., 2006). A separate literature broadens the unit of analysis beyond parents to siblings and extended families, uncovering substantially stronger persistence in economic outcomes than is captured by conventional parental characteristics (Lindahl et al., 2015; Adermon et al., 2021; Collado et al., 2023).² Together, these findings point to important forms of inherited advantage that extend beyond income, wealth, and education.

One potential source of parental advantage that could be central in shaping children’s outcomes is families’ social capital. Since the seminal work of Bourdieu (1986) and Coleman (1988), researchers have argued that families transmit advantage not only through financial resources and human capital, but also through access to influential networks, elite institutions, and high-status social environments. Consistent with this view, a large body of empirical evidence shows that neighborhoods, social connectedness, labor market networks, and access to elite educational institutions each have lasting effects on long-run outcomes (Chetty et al., 2016; Chetty and Hendren, 2018; Chetty et al., 2022a; Hensvik and Nordström Skans, 2016; Barwick et al., 2023; Anelli, 2020). At the same time, a separate literature shows that access to many of these social positions is itself strongly transmitted across generations (Torche, 2011; Zimmerman, 2019; Cattani et al., 2023; Benveniste, 2024). Yet these social and institutional dimensions of family advantage have proven difficult to measure systematically at the population level. As a

¹See Mogstad and Torsvik (2023) for a recent review of the literature on the intergenerational transmission of income.

²Clark (2015) similarly documents substantial persistence in advantage based on surnames across countries and time.

result, little is known about how strongly social capital persists across generations or how much it contributes to children’s long-run outcomes beyond income, wealth, education, and cognitive ability (Nybom et al., 2026).

This paper constructs a population-wide measure of dynastic social capital, examines how it is transmitted across generations, and assesses whether and how it shapes children’s long-run outcomes independently of standard measures of parental background (such as income). The term social capital has been used in different ways in the literature; here, we define it as families’ social position—their embeddedness in high-status institutions, organizations, firms, and neighborhoods that provide access to opportunities beyond those from financial resources or cognitive ability. We ground this broader concept in well-defined components recorded in administrative data that, while not exhaustive, capture key institutional dimensions of social position that can be observed consistently at the population level. We then quantify how this form of social capital affects children’s long-run economic and social outcomes, over and above parental income and cognitive ability. Finally, by combining administrative data with adoption placements and lottery-induced income shocks, we provide evidence that distinguishes the roles of environmental transmission versus genetic inheritance and financial resources in determining these intergenerational patterns.

Understanding the social dimension of advantage is important for several reasons. First, many of the pathways through which opportunity is created—referrals, mentorship, institutional access, and visibility to influential gatekeepers—operate through social structures rather than through financial resources. To the extent that these forms of social capital vary across families independently of income, they may contribute to differences in children’s long-run opportunities even in contexts with relatively equal access to education and low income inequality. Second, differences in social position may support access to elite educational and career trajectories that disproportionately generate top incomes, amplifying inequality at the upper tail. Third, because social capital cannot be directly taxed, transferred, or offset through standard redistribution levers, its transmission may be less responsive to traditional policy instruments than the transmission of income or wealth.

We begin by constructing a measure of social capital that can be observed consistently across the population and linked across generations. The measure combines six indicators capturing distinct dimensions of families’ social position: elite university–program combinations, high-status occupations, senior organizational roles, corporate elite, elite positions in top firms, and residence in elite residential tract. Each indicator captures entry into a domain characterized by selective institutions, influential peer groups, and organizational environments that provide greater access to information, networks, and opportunities than is typical in the broader population.

Specifically, we identify individuals who complete one of Norway’s most prestigious university–program combinations (elite education); work in the highest-earning professions (elite

occupation); hold senior positions at the top of the occupational hierarchy (executive status); serve in C-suite or board positions in Norway’s most profitable firms (corporate elite); occupy high-ranking positions within those firms (elite position in top firms); or reside in a residential tract with a high concentration of individuals holding these elite educational, occupational, and corporate positions (elite residential tract).³ These six domains differ in structure and in the pathways through which individuals enter them. They overlap only modestly, indicating that our measure captures multiple dimensions of social capital.

To construct these measures and examine both the intergenerational transmission of social capital and its consequences for children’s long-run outcomes, we leverage Norwegian administrative data linking parents and children over several decades. These data allow us to follow children from birth into their early-40s and to observe their parents across the entirety of their working lives, providing rare life-cycle coverage of income, education, occupations, firm roles, residential histories, and cognitive test scores (from military entrance exams). These registers also include complete records on parental lottery winnings from the early 1990s and nationwide foreign adoption data, which we use to assess alternative interpretations of the intergenerational patterns we document.

Our analysis distinguishes between two related but conceptually distinct objects. First, does parental social capital provide independent information about children’s long-run outcomes beyond parental income, education, and cognitive ability? That is, do families differ along an additional dimension of advantage not reflected in standard measures of background? Second, does accounting for social capital alter the parent–child income relationship, indicating that social capital is a channel through which income-based advantage is transmitted? We focus primarily on the first object and use the second to shed light on mechanisms.

The main takeaway of this paper is that dynastic social capital is a distinct dimension of inherited advantage not reflected in parental income, wealth, cognitive ability, or education. Social capital is strongly transmitted across generations and predicts children’s long-run outcomes - including income and access to elite positions - even conditional on standard measures of family background. In addition, incorporating social capital into standard intergenerational regressions attenuates the parent–child income relationship, indicating that conventional income-based measures partly capture underlying differences in social position. These relationships strengthen over the life cycle and are particularly pronounced in the upper tail of the income distribution.

We substantiate these findings through six sets of results. First, social capital is strongly persistent across generations. Children of high social capital parents are far more likely to occupy similarly high status positions as adults. The intergenerational rank–rank correlation is 0.22 and remains large (0.17) even after conditioning on parental income rank, parental cognitive rank (measured through mandatory military entrance exams), and demographics.

³See Section 3 for a full description of our social capital measures.

These results suggest that dynastic social capital captures an inherited dimension of advantage distinct from conventional family background measures.

Second, parental social capital is a strong predictor of children’s long-run economic success: a one-percentile increase in parental social capital is associated with a 0.14-percentile increase in children’s income rank in their mid-30s. Conditioning on parental income rank, cognitive rank, and demographics reduces this coefficient to 0.08, but the relationship remains economically and statistically significant.

Third, horse-race regressions show that parental income, cognitive ability, and social capital are all quantitatively important and are of comparable magnitude but capture different dimensions of advantage. When included simultaneously, a one-percentile increase in parental income is associated with about a 0.10-percentile increase in children’s income rank, compared with roughly 0.10 for parental cognitive ability and 0.08 for parental social capital. In addition, including social capital reduces the conventional income rank–rank coefficient by more than 20 percent, indicating that standard income-based measures partly capture underlying differences in social position.

Fourth, inherited advantages widen over the life cycle. Using complete income histories from ages 18 to 40, we show that while children from high–social capital families begin their careers in similar positions as their peers, their income trajectories diverge steadily from the mid-20s onward. Examining an extended career window therefore is essential for understanding how intergenerational differences emerge and accumulate over time.

Fifth, social and financial capital jointly shape children’s outcomes. Each dimension matters independently, however neither is a strong predictor on its own of reaching the very top. Specifically, individuals who inherit only income or only social capital fare markedly better than those who inherit neither, but the group endowed with both advantages pulls away early and continues to widen the gap over time. The contributions of social capital and income appear largely additive on average, however for the production of top incomes they are complements: the full advantage is realized only when both are inherited together. One implication of this finding is that those from both high income and high social capital households have more than a double advantage, especially for reaching the top of the income distribution.

Sixth, we find evidence of assortative partner matching on social capital and income. Children from higher social capital (income) families are more likely to be married and match to spouses who come from higher social capital (income) families. Hence, the transmission of parent advantage works partially through the marriage market, which generates higher transmission to family units than to individuals.

To shed light on the mechanisms underlying these relationships, we first examine educational outcomes and firm quality as proxies for two potential channels: human capital accumulation and access to networks. Our results show that both are important mechanisms for the transmission of social advantage.

We next ask whether the transmission of social capital reflects family environments or genetic inheritance. To address this question, we examine adoptees. Adoption placements provide a setting close to an ideal experiment in which children are exposed to different family environments independently of their genetic background. Thus, any association between adoptive-parent characteristics and children’s adult outcomes must operate through environmental transmission rather than through inherited traits. We find that the associations between adoptive-parent social capital, income, and children’s long-run outcomes are similar in magnitude to those in the biological sample, despite the smaller sample size, indicating that the intergenerational relationships we document primarily reflect environmental transmission.

Finally, because incorporating social capital attenuates the parent–child income relationship, we ask whether it simply proxies for unobserved dimensions of parental financial advantage. Put differently, do parental resources create social capital among children? To address this question, we exploit parental lottery prizes, which generate large, exogenous changes in financial resources without directly altering families’ social position, networks, or institutional affiliations. We find that large prizes have no meaningful effect on children’s social capital or income ranks, nor do they alter the intergenerational transmission of social capital. Hence, our measure of social capital, although correlated with parental income, captures a distinct dimension of inherited advantage that is not causally downstream from parental financial resources.

Taken together, these two sources of variation allow us to distinguish between competing interpretations of our main results. The adoption analysis shows that the associations we document are driven by environmental factors rather than by genetic inheritance, while the lottery analysis shows that they are not simply a reflection of unobserved parental financial resources. These findings point to the role of the social environments in which children are raised—networks, institutions, and high-status settings—as a key mechanism underlying the persistence we document.

Our findings have important implications for policies aimed at promoting intergenerational mobility. Much of the policy discussion focuses on equalizing financial resources through education, taxes, and transfers. Our results suggest that an important component of inherited advantage operates through families’ social position rather than financial resources alone. Because these dimensions of advantage are embedded in social environments, institutions, and networks, they may not respond to policies that primarily redistribute income or wealth. This perspective may help explain why substantial public investment and relatively compressed income distributions do not necessarily eliminate intergenerational persistence (Clark, 2015). More broadly, our findings underscore the importance of understanding the institutional and social environments through which families transmit advantage.

We make several contributions to the literature. First, a large and longstanding body of work documents substantial persistence in socioeconomic status across generations (e.g., Behrman and Taubman, 1976; Solon, 1992; Charles and Hurst, 2003; Black et al., 2005; Black

and Devereux, 2011; Björklund and Jäntti, 2012; Lindahl et al., 2015; Ahrsjö et al., 2025). This work traditionally has focused on income-based measures of mobility and on the roles of education and human capital in driving parent–child correlations (Becker and Tomes, 1979; Black et al., 2005; Lefgren et al., 2012). Early contributions highlight the joint transmission of income and wealth (Behrman and Taubman, 1976), while more recent work decomposes the roles of cognitive skills, education, and parental investments (Lefgren et al., 2012; Sikhova, 2023). Schools play only a limited role in mediating income persistence, with job networks and local labor and marriage markets explaining more of the intergenerational correlation than the education system itself (Rothstein, 2019). Complementing this evidence, recent research emphasizes the importance of lifetime resources—rather than snapshot measures of income—in predicting mobility and family influence (Eshaghnia et al., 2022). Much less is known about the social and relational channels through which advantage is transmitted. By developing new population-wide measures of social capital and showing how they relate to canonical income and education-based measures, we extend this literature by incorporating forms of inherited advantage that are both empirically relevant and that existing data rarely capture. An important contribution of the paper is to show that well-defined components of these broader channels can be isolated and quantified using administrative data, allowing for systematic measurement at the population level.

Second, we contribute to research on networks, social context, and the foundations of opportunity (Bourdieu, 1986; Coleman, 1988; Chetty and Hendren, 2018; Chetty et al., 2022a, 2016; Rothstein, 2019; Eshaghnia et al., 2022). Existing work shows that friendships, neighborhoods, and institutional environments matter for mobility. These papers typically examine single dimensions of social context in isolation, often within a single generation, and rarely across the lifecycle of children. None of this research measures social capital as a broad, inherited bundle of institutional affiliations, occupational status, elite positions, and neighborhood environments. The closest paper to ours is Chetty et al. (2022b), which uses Facebook data to measure social capital at the county level. They show that areas with higher levels of cross-SES friendships generate higher mobility rates. Despite the shared terminology, the two papers capture very different aspects of social structures. Chetty et al. (2022b) measure connectedness within local areas and relate it to area-level mobility rates. In contrast, we construct a multidimensional measure of family-level social advantage and trace it across the working lives of parents and children. This allows us to study how social position is accumulated, when it begins to matter, and how it interacts with other dimensions of background to shape outcomes from adolescence into adulthood.

Third, we contribute to the literature on elite formation, institutional access, and dynastic persistence (e.g., Torche, 2011; Zimmerman, 2019; Cattani et al., 2023; Benveniste, 2024; Barrios Fernández et al., 2024; Ellersgaard, 2024). This work shows that access to top schools, high-status occupations, and leadership positions is far from random. Elite universities play a partic-

ularly important role in the transmission of both human and social capital (Barrios Fernández et al., 2024), and sociological evidence highlights the mechanisms through which elites reproduce their advantage—family ties, legitimation through prestigious educational institutions, and the accumulation of organizational networks (Ellersgaard, 2024). By constructing population-level measures of social capital and linking them across generations, we show how different components of social capital (education, occupational networks, firm leadership, and neighborhood environment) contribute to dynastic persistence. Because we observe income, education, cognitive ability, and life-cycle trajectories, we can run direct horse-races between social, financial, and human capital and quantify which forms of inherited advantage matter most for accessing elite positions.

Finally, we contribute to causal research on how family environments determine children’s outcomes, including work using adoption and quasi-experimental income shocks (e.g., Björklund et al., 2006; Björklund and Jäntti, 2012; Chetty et al., 2016; Fagereng et al., 2021; Eshaghnia et al., 2022). This literature has been central to distinguishing nature from nurture and for assessing the role of financial resources (Rothstein, 2019; Sikhova, 2023). Far less is known about whether, and how, social capital itself is transmitted. By combining adoption data with quasi-experimental income shocks, we provide new evidence on the environmental transmission of non-financial forms of advantage.

2 Institutional Background

Our analysis is set in Norway, a high-income welfare state with institutions that substantially compress economic inequality and equalize access to public services. In this section, we provide an overview of labor market institutions, education, and early-life environments in Norway, which provide an important backdrop to our analysis of intergenerational transmission of social capital.

Labor market institutions. Norway combines high unionization — over roughly 65% of workers are unionized or covered by collective bargaining — with a compressed wage structure and generous social protection. Unemployment and disability insurance replace a large share of prior income, and benefits are income-contingent, offering stable fallback outside employment. The tax and transfer system is strongly redistributive, further narrowing disposable income differences across families. As a result, income inequality is relatively low: the national Gini coefficient for disposable household income is around 0.25, compared to about 0.41 in the United States. Even in this setting, where financial resource differences are heavily compressed, prior research still finds a noticeable degree of intergenerational income persistence. Estimates for Norway and other Nordic countries typically place the parent–child income rank–rank correlation at roughly 0.20 (e.g., Nilsen et al., 2012; Ahrsjö et al., 2025). This correlation is substantially lower than the 0.30–0.35 correlations typically reported for the United States

(e.g., [Solon, 1992](#); [Chetty et al., 2016](#); [Chetty and Hendren, 2018](#)).

Education and early-life environment. Education in Norway is publicly funded from primary school through university, and admission to upper-secondary and higher education is determined almost entirely by academic performance (GPA). Private schooling is uncommon (less than 1 percent of students attend private school), and the market for private tutoring is very limited. Variation in school quality is modest by international standards: public schools are funded through national grants rather than through local property taxes to ensure equal opportunities for children across all geographic regions, and students typically attend the school closest to them. Childcare is universally available from age one at heavily subsidized prices, with enrollment rates over 80 percent at age one and more than 95 percent by age two. Although overall tertiary attainment is similar to other high-income countries, the combination of public financing, limited private alternatives, and standardized admissions substantially equalizes access to educational opportunities. As a result, parental financial resources create relatively small differences in children’s early-life environments compared to many other countries.

3 Data

3.1 Population Registers and Intergenerational Linkages

Our analysis uses Norway’s population-wide administrative registers, which cover the entire resident population and can be linked across generations through permanent personal identifiers. These identifiers allow us to connect children to their biological parents, adoptive parents, grandparents, and siblings. The data provide complete coverage of demographic characteristics, educational histories, income, occupations, and residential locations over multiple decades.

The registers we use include the population register, which provides complete family linkages and demographic information; the national education registers, which record all completed degrees and fields of study; the income and tax registers, which contain annual earnings and tax-relevant income from 1967 onward; the wealth register, which contains annual measures of taxable wealth; the employer–employee register, which documents firm affiliations and detailed occupational codes; the firm accounting and enterprise registers, which provide firm-level financial information; and the board and corporate role registers, which record executive and board positions. We also use the national conscription register, which provides cognitive test scores for men at age 19, and the national address register, which records residential histories at fine geographic resolution. In addition, we use complete records of major lottery prizes and nationwide adoption data. Together, these sources create a comprehensive multi-generational panel with rich information on family background, human capital, labor-market outcomes, wealth, firm roles, and social environments.

3.2 Sample Construction

Our main intergenerational estimates rely on parental and child income, social capital, and cognitive ability ranks. Income is measured at age 35, an age at which lifecycle bias in income is minimized (Haider and Solon, 2006; Böhlmark and Lindquist, 2006). Social capital is constructed as an index of the maximum value of each proxy observed across the life course, as described in Section 3.4. Cognitive ability is measured from the mandatory military conscription test taken around age 19. We focus on ranks because of the need to standardize the measurement of variables with fundamentally different scales (income, social capital, test scores) in order to compare effects of these different domains of parental advantage on child outcomes. We use paternal ranks for all parental characteristics in our baseline specifications because the cognitive test scores from Norway’s mandatory military conscription are observed only for men. Figure A.1 shows the distribution of father income we use to construct income ranks (trimmed at 1,000,000 NOK). Importantly, our results for income- and social capital-based intergenerational transmission are robust to instead using maternal ranks or the maximum rank across parents (see Online Appendix Tables A.1 and A.2).

In addition to these static benchmarks, the richness of our data enables us to track children’s income, occupations, and institutional positions annually from ages 18 to 40, allowing us to examine how intergenerational advantages evolve across most of the working career.⁴

Our analysis focuses on cohorts for which adult outcomes can be consistently observed across generations: children born before 1988 and fathers born between 1950 and 1970. The child upper bound ensures that children are observed at age 35 - when adult income has materialized - by the end of our data period. For fathers, the cohort bounds ensure a meaningful career history within the social capital measurement window, allowing reliable observation of social position. Fathers are no older than 53 at the beginning of the period with detailed firm, occupational, and residential data, and at least 50 by the end of this period. Table A.4 provides descriptive statistics on our core analysis sample. Online Appendix Table A.5 documents how each restriction affects sample size and composition.

In addition to the main parent-child sample, we construct two auxiliary samples used for the quasi-experimental analyses. The lottery sample links children to parents who experienced a lottery win during the child’s upbringing. Using complete records of all Norwegian lottery payouts from 1993 onward, we identify lottery events for parents in our main sample. For each parent, we define “big” and “small” prizes using the year-specific distribution of payouts (defined as top vs. bottom quartile). We tag children whose parents experienced a win in either category between the ages of 0 and 19. All other sample restrictions follow the main sample. Table A.6 shows descriptive statistics for our lottery sample.

The adoption sample consists of children linked to their adoptive parents through the Pop-

⁴In the robustness section, we show that our findings are robust to altering the age at which these outcomes are measured (Online Appendix Table A.3).

ulation Register. We restrict to international adoptions who immigrated to Norway by age 5. We apply the same cohort and outcome measurement rules as in the main sample, ensuring comparable definitions of income, education, and social capital outcomes. Because adoption cohorts are smaller, the resulting analysis sample is correspondingly reduced. These auxiliary samples are used exclusively in the causal analyses presented in Section 6 and are constructed to mirror the main sample wherever possible. Table A.7 contains descriptive statistics for the adoption sample.

3.3 Income Measures

Our primary economic outcome is income rank at age 35. We measure total taxable income (deflated to 2015 NOK) from the Income and Tax Registers and convert them into within-year and within-cohort percentile ranks; individuals with identical income receive the average rank. Total taxable income includes wages, self-employment income, and taxable transfers linked to the labor market status of the worker (parental leave benefits, unemployment insurance, sick leave support, and disability insurance). Because very low income may reflect limited labor-market activity within the year rather than underlying income levels, our baseline analyses restrict attention to individuals with income above one Grunnbeløp (1G).⁵ While this is a common assumption in projects using Norwegian income data (e.g., Mogstad et al., 2025; Salvanes et al., 2024), we also show results for the full unconditional sample in the Online Appendix (Table A.8). Results and conclusions are robust to using this larger sample. In addition to these age-35 measures, we track annual income from ages 18 to 40 to document how intergenerational differences unfold across the life cycle. To study distributional differences, we define indicators for being in the top 10%, 5%, and 1% of the age-specific income distribution.

3.4 Social Capital Measures

We measure social capital using six administrative proxies that capture observable aspects of individuals’ educational, occupational, organizational, corporate, and residential histories. These proxies do not aim to represent the full set of attributes sometimes associated with the term “social capital.” Instead, they summarize the dimensions of social position that can be consistently and reliably measured in nationwide administrative registers. Each proxy is defined uniformly over time and is observed annually for all individuals. We discuss each in turn below.

Elite education is defined as completion of highly selective graduate degrees that constitute the main professional entry credentials in economics, business, law, medicine, and STEM fields in Norway. These programs tend to be concentrated in a small number of institutions and fields that historically funnel graduates into influential professional, corporate, and public-sector roles

⁵The *Grunnbeløp* (G) is the base amount used to set benefit levels and thresholds in Norway’s social insurance system; 1G is roughly NOK 90,000–110,000 in our sample period (\$9,000 - 11,000).

as well as provide exposure to high-achieving peer groups and professional networks. Following [Bütikofer et al. \(2018\)](#), these programs are identified using field-of-study codes in the national education register, and individuals are classified as educational elite upon completion of one of these degrees.⁶

Elite occupation captures employment in the segment of the occupational structure that consistently commands the highest income in the Norwegian labor market. These occupations typically require substantial formal training, specialized skills, and entry into professional environments—such as law, finance, engineering, medicine, and advanced technical fields—where access is restricted and where workers are more likely to interact with other high-status professionals. To construct the measure, we use annual seven-digit occupation codes and calculate the national median income for each occupation in each year. We then rank occupations within year, and individuals are classified as occupational elite in any year in which they work in an occupation whose national median income falls in the top decile of that distribution.

Executive status captures individuals classified in the occupational system as holding organization-wide managerial or administrative authority. These roles place individuals in settings where professional networks, information flows, and organizational connections are concentrated at the upper levels of firms and public institutions. For this reason, the proxy reflects a distinct dimension of social capital that is observable in administrative data. We construct this measure using two-digit occupation codes and classify individuals as executives in any year in which their occupation is recorded under ISCO group 11 (“Chief executives, senior officials and legislators”).

Corporate elite captures individuals who hold formally recorded top-level corporate or governance positions in Norway’s largest and most economically significant firms. These positions include chief executive officer, chief financial officer, board membership, and senior managerial appointments as defined in the enterprise registry. Individuals in these roles interact regularly with a small set of other top-level actors inside and outside the firm, creating stable connections within the uppermost segment of the corporate network. For this reason, the proxy represents a separate, observable dimension of social capital. We identify C-suite roles using enterprise-level role codes and classify individuals as holding such a role in any year in which they appear as CEO, CFO, board member, or senior manager at a “top firm.” Top firms are

⁶Education is obtained from the National Education Register, which updates individuals’ highest completed education twice yearly based on reports from schools and universities to Statistics Norway. Educational attainment is coded according to the Norwegian Standard Classification of Education (NUS2000), closely aligned with ISCED-97. We define elite graduate education as degrees requiring more than four years of study—primarily master’s and doctoral programs—as well as graduate and postgraduate subjects within specific fields. Graduate business education includes advanced studies in economics (NUS2000 three-digit code 734) and business and administration (code 741). Graduate law education includes advanced legal studies (code 737). Graduate medical education includes advanced medical studies (code 763). Graduate STEM education includes advanced degrees in natural sciences and vocational and technical subjects (two-digit code 75). We exclude postgraduate coursework and shorter executive-level programs and assign graduation timing based on completion of the main graduate degree.

defined as the 100 highest profit-generating firms in the country.⁷

Elite positions in top firms identifies individuals who belong to the upper tier of roles within Norway’s largest and most economically significant companies. Employees in these positions work in the parts of the firm where interaction with senior colleagues, exposure to key internal processes, and access to influential professional networks are more common. This measure therefore reflects a distinct organisational dimension of social capital: proximity to information, opportunity, and high-status professional circles inside major firms. To construct the measure, we use the same set of top 100 firms defined for the C-suite measure. Within each firm and year, we compute the distribution of employee income and classify individuals as holding an elite position when they fall in the top decile of their firm’s income distribution. Individuals are coded as having held an elite position in any year in which this condition is met.

Elite residential tract captures the residential dimension of social capital. Living in areas where individuals with elite educational, occupational, or organizational backgrounds are concentrated reflects a form of social proximity: exposure to information flows, institutional norms, and networks that tend to circulate in high-status environments. While the administrative data do not contain interactions directly, residence in these neighborhoods provides a measurable location-based proxy for this aspect of social capital. To construct this measure, we assign each individual–year to a tract and, for every tract–year, compute leave-one-out shares of adult residents (ages 30–69) holding each elite proxy (elite education, elite occupation, executive status, corporate elite, or elite position in top firms). For each individual–year, we sum the five leave-one-out shares into a single neighborhood elite score.⁸ Within each year, we rank individuals by this score and classify those who ever live in the top decile between the ages of 30 and 69 as living in an elite residential tract.

Taken together, the six proxies discussed above capture different aspects of individuals’ educational, occupational, organizational, and residential histories. They reflect multiple channels through which people become linked to institutions, professional environments, and social settings that may shape long-run opportunities. Table A.4 reports the prevalence of each component in our main analysis sample, while Figure A.2 shows the distribution of the number of elite indicators in our sample of fathers. Over 60% of fathers have no elite indicators, while just over 20% have one and about 8% have two. Very few fathers have more than two positive elite indicators, illustrating how concentrated this dimension of advantage is in Norway.

Table 1 provides pairwise correlations across the six components, illustrating both their differences and the complementary information they provide. The limited correlations highlight an important feature of the data: although each proxy captures an elite position within Norwegian

⁷In the Online Appendix, we show that the results are robust to defining top firms based on wage bill rather than profits (Table A.9) and to expanding the definition to the top 500 firms by profit (Table A.10).

⁸An implication of this approach is that an individual who satisfies two distinct proxies contributes twice, and so on.

educational, occupational, organizational, or residential structures, they overlap only modestly. This indicates that individuals tend to reach different kinds of elite positions rather than a single unified pathway and that each component contributes distinct information to the broader construct we aim to measure. Note that our goal is not to measure the full multidimensional structure of social capital directly—something that is not possible with any dataset, much less a population-wide administrative dataset—but rather to construct an empirical proxy based on the observable, institutionally mediated positions that are consistently recorded in the registers. While not exhaustive, our measures contain detailed information on important dimensions of social advantage and families’ positions in the upper echelons of different parts of Norwegian society, which are likely strong indicators of underlying social capital.

Table 1: Correlations between social capital components

	Elite education	Elite occupation	Executive status	Corporate elite	Elite position	Elite tract
Elite education	1.00					
Elite occupation	0.22	1.00				
Executive status	0.05	0.33	1.00			
Corporate elite	0.05	0.08	0.07	1.00		
Elite position	0.10	0.21	0.02	0.11	1.00	
Elite tract	0.17	0.13	0.08	0.03	0.05	1.00

Notes: Pairwise correlations between the six binary components of our main social capital index. Elite education indicates completion of a highly selective degree program; elite occupation indicates employment in an occupation whose median income falls in the top decile; executive status indicates a senior management or public leadership role (ISCO group 11); corporate elite indicates a CEO, CFO, board, or senior management position at a top firm; elite position identifies earners in the top decile of the income distribution at a top firm; elite tract indicates residence in a census tract in the top decile of the distribution of neighborhood social capital scores. Top firms are the 100 Norwegian firms with the highest profit. Each of the components reflects the maximum observed value over the observation window (2003–2020). The sample collapses to unique fathers, subject to the main analysis sample restrictions described in Section 3. Number of observations: 131,977.

To summarize these six dimensions in a single measure, we construct an inverse-covariance-weighted index (“swindex”; Schwab et al., 2020). This approach assigns higher weight to components that contain more independent variation while downweighting components that overlap more with others, preventing double-counting of closely related domains and yielding a broad, multidimensional measure of social capital. We convert the resulting scores into percentile ranks within birth cohort to ensure comparability across generations, given that the prevalence of elite positions changes over time. Because the underlying positions represent cumulative achievements rather than short-lived states, we measure social capital as the maximum observed value of each component through 2023. This treats social capital as a stock that accumulates over the life cycle. The component weights used in constructing the index are reported in Online Appendix Table A.11, and Figure A.3 shows the distribution of the social capital index. There is a long right tail, again demonstrating that these measures of advantage are highly concentrated

in a small percentage of elite families.

Online Appendix Table A.12 reports pairwise correlations across paternal, maternal, and maximum parental income and social capital rank measures. These measures are only weakly correlated with one another, indicating that each captures substantial independent variation in family background. In particular, the correlation between parental income rank and social capital rank is modest, suggesting that social capital is not simply a transformation of income. Online Appendix Figure A.4 illustrates this relationship by plotting a binscatter of father social capital rank against income rank. While the relationship is positive, it exhibits substantial dispersion across the distribution, underscoring that the two measures capture distinct dimensions of family background. Online Appendix Figure A.5 shows social capital by father’s income ventile, while Figure A.6 shows the share with each elite indicator by father’s income ventile.⁹ Most fathers, especially those with low to middle income, have little social capital: social capital is concentrated among those who have higher income. Among higher-income fathers, there is considerable variation in social capital. That social capital is concentrated at the top of the income distribution motivates examining the joint role of income and social capital in driving top outcomes among children, as we do below.

4 Empirical Design

Our empirical strategy combines descriptive and quasi-experimental methods to examine intergenerational persistence. We begin with a descriptive framework that estimates rank–rank associations between parents and children in income and social capital. These regressions characterize the degree of persistence in each dimension and provide a common metric for comparing their relative importance.

To help interpret these associations, we incorporate two quasi-experimental designs that generate exogenous variation in parental characteristics: adoption placements and lottery prizes. Adoption placements allow us to separate variation in family environment from variation in genetic background. Parental lottery prizes generate large, unexpected income shocks that are uncorrelated with social capital, which isolates the role of financial resources. Together with the descriptive results, these designs allow us to assess the importance of social capital in shaping intergenerational outcomes and to clarify the channels through which it is transmitted.

⁹Online Appendix Table A.13 presents the data underlying Figures A.5 and A.6.

4.1 Intergenerational Framework

Our analysis begins by estimating the intergenerational persistence of social capital. To do so, we rely on the standard rank–rank framework and estimate the following equation:

$$\text{SCrank}_i^c = \alpha + \beta \text{SCrank}_i^p + \varepsilon_i, \quad (1)$$

where SCrank_i^c is the child’s percentile rank in her cohort-specific social capital distribution and SCrank_i^p is the father’s rank in the same distribution. This baseline specification provides a descriptive measure of the intergenerational association in social capital and follows directly from the mobility literature.

We then examine the extent to which this relationship reflects other parental characteristics by sequentially adding father’s income rank and ability rank (measured from mandatory military conscription tests, similar to the AFQT in the US). These horse-race specifications assess whether the persistence of social capital is simply a proxy for inherited financial resources or cognitive ability or whether it captures additional, independent factors.

After characterizing the parent–child relationship in social capital, we extend the framework to children’s long-run economic outcomes. Specifically, we estimate analogous rank–rank models where the dependent variable is the child’s income rank at age 35 and the explanatory variables include father’s social capital rank, income rank, and ability rank. These horse-race specifications both assess whether social capital reflects distinct inherited advantages beyond income and ability and allow us to compare the relative importance of each dimension in explaining children’s long-run income. In the robustness section of the paper (Section 5.6), we further add father’s wealth as well as educational attainment to this specification (Online Appendix Table A.28).

Our baseline analyses use paternal measures of family background. This reflects two features of the data and institutional context. First, cognitive ability is observed through mandatory military testing and is available only for men in the cohorts we study. Second, in these cohorts maternal labor-force participation and income were considerably lower than what they are today, making paternal income a closer proxy for overall family economic resources. In the Online Appendix, we show that the core results are robust to alternatively using maternal income rank and social capital rank, as well as the maximum income rank and social capital rank across parents (Tables A.1 and A.2).

In addition to income ranks, we examine a broader set of distributional outcomes, including indicators for being in the top decile or top ventile of the income distribution. These outcomes allow us to assess whether social capital and income matter differently at various points of the distribution and to capture nonlinearities that are not visible in mean-rank associations.

Finally, because the administrative data track individuals annually from adolescence through adulthood, we complement these point-in-time regressions with life-cycle profiles: we plot mean

outcomes by age from 18 to 40. These nonparametric profiles describe how intergenerational differences emerge and accumulate over the career and help contextualize the age-35 outcomes within the broader life-cycle trajectory.

4.2 Adoption Placements

To isolate the role of the family environment, we draw on a quasi-experimental design based on adoption placements. Using nationwide records linking foreign adoptees to their adoptive parents, we exploit the fact that adoptees share no genetic traits with their adoptive parents but are raised in the environments they provide, allowing us to assess the role of environmental transmission in intergenerational persistence.

We construct a sample of foreign adoptees born before 1988 who were adopted in Norway by age 5. Outcomes for adoptees are measured at age 35, mirroring the definitions used in the main sample. The resulting dataset is smaller than the full population but provides a clean setting for probing environmental mechanisms.

We estimate regressions of the form

$$\text{Rank}_i^c = \alpha + \phi_1 \text{SCrank}_i^a + \phi_2 \text{Incomerank}_i^a + \phi_3 \text{Abilityrank}_i^a + X_i\delta + \varepsilon_i, \quad (2)$$

where Rank_i^c is the adoptee’s income rank at age 35, and SCrank_i^a , Incomerank_i^a , and Abilityrank_i^a denote the adoptive parent’s social-capital rank, income rank, and cognitive-ability rank, respectively. The specification mirrors the structure used in the main sample but replaces biological-parent characteristics with those of the adoptive parents. The coefficients ϕ_1 , ϕ_2 , and ϕ_3 capture the degree to which adoptive-parent social capital, income, and ability are associated with children’s long-run outcomes and therefore provide evidence on environmental transmission.

The intuition behind this approach is straightforward: If the intergenerational associations documented in the population reflect genetic transmission, then adoptive-parent characteristics should have no predictive power for adoptees, as adoptees share no genetic material with their adoptive parents. In contrast, any systematic association between adoptee outcomes and the social-capital rank, income rank, or ability rank of the adoptive parents must reflect environmental transmission. The coefficients ϕ_1 , ϕ_2 , and ϕ_3 therefore recover the extent to which the intergenerational patterns observed in the descriptive analysis arise through the environments that parents create.

This analysis relies on the assumption that adoption placements are not systematically sorted on unobserved child characteristics correlated with adoptive-parent income, social capital, or ability. Norway’s centralized and formal adoption system makes such sorting unlikely, as placements are governed by standardized procedures rather than parental choice. To further address this concern, we control for place of birth to ensure comparability across children and assess balance on the limited set of predetermined characteristics observed in the data (Online

Appendix Tables [A.14](#) and [A.15](#)).

4.3 Parental Lottery Shocks

To assess whether the association between parental social capital and children’s outcomes reflects financial resources, we exploit exogenous variation in parental income generated by large lottery winnings. Parental lottery prizes create substantial income shocks without directly altering families’ social position, networks, or institutional affiliations. This provides a setting in which financial resources vary independently of social capital. If parental social capital were primarily capturing differences in permanent income, such shocks should translate into improvements in children’s long-run outcomes and attenuate the relationship between parental social capital and children’s outcomes. Norway’s national lottery system records the full universe of major prizes from 1993 onward, including the payout amount, the date of the draw, and the identity of the winner. Conditional on participation, the size of the payout is as-good-as-random, providing a source of external variation in parental income unrelated to underlying parental or child characteristics.¹⁰

We link lottery winners to their children and restrict attention to parents whose children were below age 19 at the time of the win, ensuring that the shock occurs during the period in which the child lived at home with the parent and can reasonably be assumed to also have been impacted by it. We classify prizes into “large” (top quartile) and “small” (bottom quartile) based on the year-specific distribution of payouts and compare long-run outcomes of children whose parents won larger versus smaller prizes within the same set of lottery participants.

We estimate regressions of the form

$$\begin{aligned} \text{Rank}_i^c = & \alpha + \lambda \text{LargeWin}_i^p + \beta_1 \text{Incomerank}_i^p \\ & + \beta_2 \text{SCrank}_i^p + \beta_3 \text{Abilityrank}_i^p + X_i^p \delta + \varepsilon_i, \end{aligned} \quad (3)$$

where Rank_i^c denotes the child’s income rank at age 35; LargeWin_i^p indicates whether either of their parents won a large prize; and Incomerank_i^p , SCrank_i^p , and Abilityrank_i^p refer to the father’s income rank, social-capital rank, and cognitive-ability rank. The remaining controls, X_i^p , include the demographic covariates used throughout the analysis. The coefficient λ captures the effect of a substantial, unanticipated increase in parental income on children’s long-run outcomes.

Because the comparison is restricted to lottery participants, the design is not affected by

¹⁰A potential concern is that lottery prizes may mechanically affect our measures of fathers’ social capital and income rank, since both are constructed over the life cycle. This introduces post-treatment contamination. Importantly, this would push our estimates toward finding effects of lottery prizes—by mechanically increasing measured social capital and income among winners. The fact that we do not find effects of lottery prizes on children’s outcomes, and that the estimated relationship between social capital and children’s outcomes is unchanged, strengthens the conclusion that social capital is not simply proxying for financial resources.

selection into playing. The identifying assumption is that, conditional on participation and lottery-year fixed effects, the size of the prize is independent of unobserved determinants of child outcomes. We view this as reasonable given the mechanical nature of the draw and the lack of information available to participants. Online Appendix Table A.16 confirms that big and small lottery winners are similar on predetermined characteristics. While internal validity is not affected by lottery participation, it could affect external validity. We thus replicate our main descriptive rank–rank patterns within this sample to ensure that the results do not rely on a highly selective or materially different subset of observations (Online Appendix Table A.17).¹¹

5 Results

We organize the results into six parts. We begin by documenting the intergenerational persistence of social capital and assessing the extent to which this persistence reflects other inherited advantages. We then turn to children’s economic outcomes, examining whether parental social capital predicts long-run income and how its inclusion alters standard measures of income-based mobility. Next, we use full income histories to study how inherited advantages evolve over the life cycle and consider the joint role of social and financial capital. We then turn to a set of distributional and elite-outcome analyses that highlight nonlinearities and differences across channels, followed by an analysis of assortative matching. The section concludes by examining the contribution of each component of the social capital index and assessing robustness.

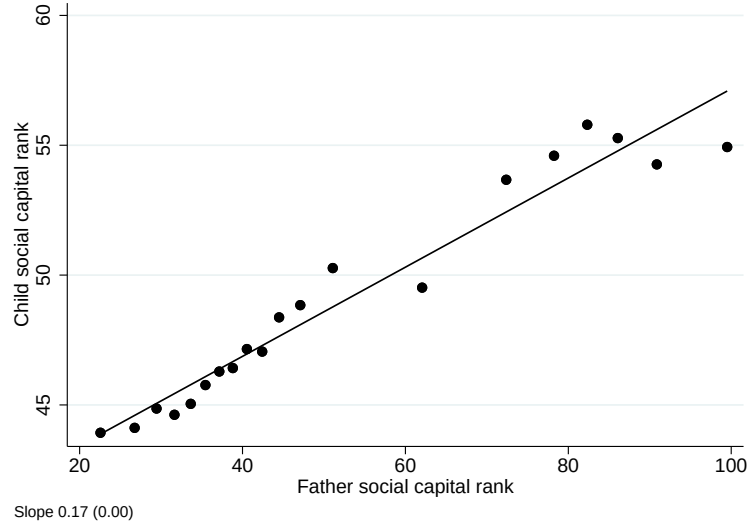
5.1 Intergenerational Persistence of Social Capital

Social capital is strongly inherited. We begin by estimating the intergenerational association in social capital ranks. Figure 1 plots children’s social capital rank against their fathers’ social capital rank, conditioning on paternal income rank, cognitive ability, and demographic controls. The relationship is approximately linear, with a rank–rank slope of 0.17. For comparison, intergenerational income rank–rank correlations in Norway are typically in the range of 0.20–0.25 (e.g., Nilsen et al., 2012; Ahrsjö et al., 2025). Without controls, the social capital rank–rank correlation is 0.22 (Table 2, column 1). This implies that social capital captures a meaningful and persistent intergenerational component of advantage.

Persistence is distinct from other transmission channels. Figure 1 shows that the intergenerational association in social capital remains strong even after conditioning on parental income, cognitive ability, and demographics. Table 2 formalizes and extends this comparison. Column (1) reports the unconditional rank–rank coefficient of 0.22. Columns (2) and (3)

¹¹Online Appendix Table A.18 shows the characteristics of those who play and do not play the lottery. There are slight differences, with lottery players coming from somewhat lower income and social capital households. Overall, however, lottery players are representative of the broader Norwegian population, supporting the external validity of our findings.

Figure 1: Intergenerational social capital rank relationship



Notes: Binned scatterplot. Child social capital rank is the child’s percentile rank in their cohort-specific social capital distribution. Father social capital rank is the father’s percentile rank in his cohort-specific social capital distribution. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The slope coefficient (standard error) from the corresponding OLS regression is reported in the figure. The sample is subject to the main analysis sample restrictions described in Section 3.

document that parental income rank and parental cognitive ability are each positively associated with children’s social capital, with coefficients of 0.13 and 0.16, respectively.

Columns (4)–(6) then estimate horse-race specifications that include these dimensions jointly. The coefficient on parental social capital declines from 0.22 to 0.17 but remains large and statistically significant, indicating that a substantial portion of social capital persistence is not explained by income or ability. At the same time, including social capital meaningfully reduces the coefficients on income and cognitive ability (to 0.05 and 0.10, respectively), highlighting its distinct contribution. Controlling for demographic characteristics in column (6) has no impact on the estimates. These results suggest that the forms of positional advantage captured by our index are not well approximated by parental income or cognitive ability and that social capital contributes information about intergenerational status not captured by standard socioeconomic variables.

5.2 Social Capital and Children’s Economic Success

Social capital predicts children’s long-run income. After having documented that social capital is transmitted across generations and that this correlation is not accounted for by more conventional measures of intergenerational transmission such as parental income or cognitive

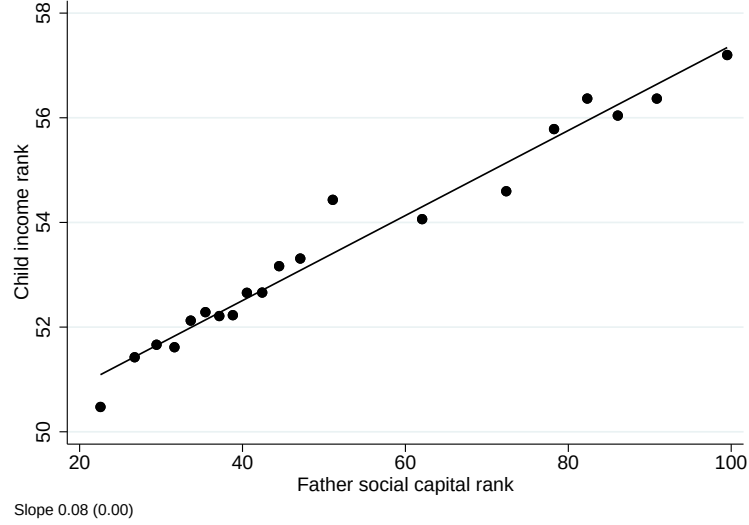
Table 2: Intergenerational persistence of social capital

	(1)	(2)	(3)	(4)	(5)	(6)
Father social capital rank	0.22*** (0.00)			0.20*** (0.00)	0.17*** (0.00)	0.17*** (0.00)
Father income rank		0.13*** (0.00)		0.08*** (0.00)	0.05*** (0.00)	0.05*** (0.00)
Father cognitive ability rank			0.16*** (0.00)		0.10*** (0.00)	0.10*** (0.00)
Demographic controls						X
R^2	0.047	0.017	0.031	0.052	0.064	0.070

Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable is the child's percentile rank in their cohort-specific social capital distribution. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 210,022. Mean of the dependent variable: 49.04. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

ability, we next examine whether it is related to children’s economic outcomes. Figure 2 plots children’s income rank at age 35 against parental social capital rank, conditioning on paternal income rank, cognitive ability, and demographic controls. The relationship is strongly positive and close to linear, with a slope of 0.08.

Figure 2: Intergenerational social capital-income rank relationship



Notes: Binned scatterplot. Child social capital rank is the child’s percentile rank in their cohort-specific social capital distribution. Father income rank is the father’s percentile rank in his cohort-specific income distribution at age 35. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The slope coefficient (standard error) from the corresponding OLS regression is reported in the figure. The sample is subject to the main analysis sample restrictions described in Section 3.

To quantify this pattern, we estimate rank–rank regressions of children’s income rank on parental social capital. The results from this exercise are shown in Table 3. Column (1) shows that the unconditional correlation coefficient is 0.14, indicating that parental social capital is an important predictor of long-run income. For comparison, Columns (2) and (3) of Table 3 report the corresponding estimates for parental income rank and parental cognitive-ability rank, which yield coefficients of 0.16 and 0.14 respectively - similar in magnitude to the estimate for social capital. These comparisons place parental social capital on the same scale as income and cognitive ability in shaping children’s long-run economic position.

The relationship remains after conditioning on other transmission channels. To examine whether the association between parental social capital and children’s income reflects other inherited advantages, we sequentially add additional parental characteristics to the rank–rank specification. Column (4) of Table 3 shows that controlling for parental income rank reduces the coefficient on social capital from 0.14 to 0.11. Adding parental cognitive

ability rank in Column (5) leads to a further decline to 0.08. Finally, Column (6) includes a detailed set of demographic controls; these have no effect on the estimate (conditional on the other controls). The overall pattern indicates that while part of the raw association reflects correlations with parental income and ability, a substantial independent relationship remains. Parental social capital therefore carries independent predictive content for children’s long-run income that is not accounted for by standard intergenerational channels.

Accounting for social capital alters income-based mobility. The inclusion of social capital also changes the estimated degree of intergenerational income persistence. In the baseline specification without social capital, the parent–child income rank–rank coefficient is 0.16. When parental social capital is added to the regression, the income coefficient falls to 0.13—a reduction of around 20 percent. Because our measure is a proxy for an underlying latent structure of social position, this adjustment should be viewed as a lower bound: richer or more detailed measures of social capital likely would account for an even larger share of the income-based association. The results therefore indicate that part of what is typically attributed to inherited financial resources reflects differences in social position, highlighting the importance of incorporating this additional dimension of family background into assessments of intergenerational mobility.

Table 3: Intergenerational persistence of income

	(1)	(2)	(3)	(4)	(5)	(6)
Father social capital rank	0.14*** (0.00)			0.11*** (0.00)	0.08*** (0.00)	0.08*** (0.00)
Father income rank		0.16*** (0.00)		0.13*** (0.00)	0.10*** (0.00)	0.10*** (0.00)
Father cognitive ability rank			0.14*** (0.00)		0.10*** (0.00)	0.10*** (0.00)
Demographic controls						X
R^2	0.016	0.019	0.020	0.027	0.035	0.149

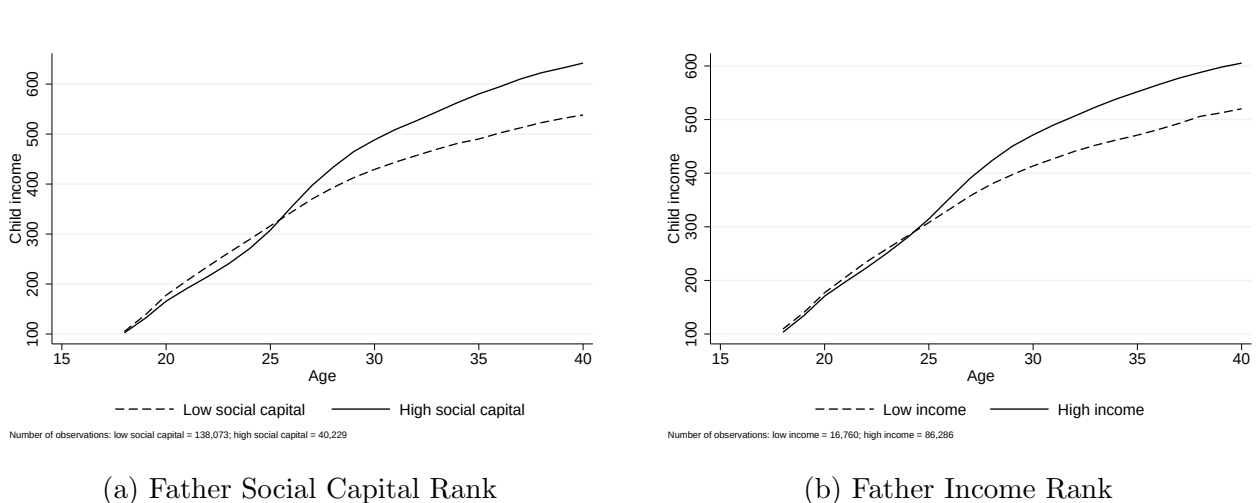
Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable is the child’s percentile rank in their cohort-specific income distribution at age 35. Father social capital rank is the father’s percentile rank in his cohort-specific social capital distribution. Father income rank is the father’s percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father’s percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 210,023. Mean of the dependent variable: 53.53. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

5.3 Life-Cycle Evolution of Inherited Advantages

A distinctive feature of our data is the ability to follow entire cohorts from their late teens into their early-forties and observe complete annual income histories. This allows us to examine how inherited advantages evolve over the course of a career, rather than relying solely on single-year snapshots or outcomes at a particular age.

Inherited advantages widen over the life cycle. Figure 3 shows income trajectories from age 18 to 40 for individuals whose father falls in the top versus bottom quartile of the social capital distribution (Panel A) and the income distribution (Panel B). We focus on a top–bottom quartile comparison because it provides a clear visualization of the magnitude and timing of inherited advantages while avoiding the noise that can arise when plotting many finer-grained groups. The resulting profiles capture the main contrasts in income growth associated with different parental backgrounds.

Figure 3: Life-cycle income trajectories



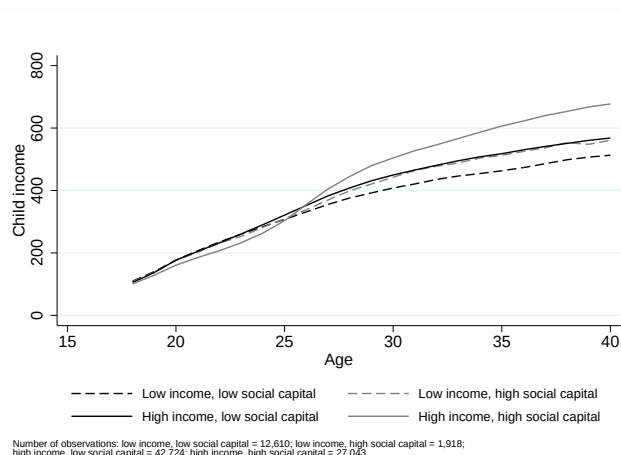
Notes: Mean child income (1,000 NOK) from age 18 to 40. Panel A stratifies children by father social capital rank: father’s percentile rank in his cohort-specific social capital distribution. Panel B stratifies children by father income rank: the father’s percentile rank in his cohort-specific income distribution at age 35. The dashed lines plot children whose fathers rank in the bottom quartile of the relevant distribution, while the solid lines plot children whose fathers rank in the top quartile. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. The sample is subject to the main analysis sample restrictions described in Section 3.

The two panels display strikingly similar patterns. Individuals from higher-status families earn slightly less in their early twenties—reflecting longer schooling and later labor-market entry—but their incomes rise more quickly after age 25. As cohorts move through their late twenties and thirties, the gaps between the top and bottom parental groups widen steadily. By forty, the difference is substantial: individuals from the top parental quartile earn roughly 15-20 percent more than those from the bottom quartile. These profiles show that inherited

advantages accumulate gradually over the career, implying that the inequality associated with parental background becomes more pronounced over time. They also highlight the importance of timing: measuring children’s outcomes early in their careers understates the full extent of intergenerational differences that emerge later in adulthood.

Joint role of social and financial capital. To examine how parental social capital and parental income operate jointly, Figure 4 divides individuals into four groups defined by whether their parents fall in the top or bottom quartile of each of the two parental background measures. This yields four combinations of inherited advantage: low social capital and low income, low social capital and high income, high social capital and low income, and high social capital and high income. Using this 2×2 structure keeps the comparisons straightforward, avoids imposing functional-form assumptions, and allows the separate and combined contributions of social and financial capital to be seen clearly in the life-cycle profiles.

Figure 4: Life-cycle income trajectories



Notes: Mean child income (1,000 NOK) from age 18 to 40. Children are stratified into four groups by father social capital and income ranks: the father’s percentile rank in his cohort-specific social capital and income distributions respectively. Father income rank is measured at age 35. The black dashed line plots children whose fathers rank in the bottom quartile of both distributions; the gray dashed line plots children whose fathers rank in the bottom income quartile but the top social capital quartile; the black solid line plots children whose fathers rank in the top income quartile but the bottom social capital quartile; the gray solid line plots children whose fathers rank in the top quartile of both distributions. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. The sample is subject to the main analysis sample restrictions described in Section 3.

The resulting income profiles reveal two clear patterns. First, having either high parental social capital or high parental income is associated with substantially higher income across the life cycle relative to having neither. Individuals in the mixed groups—high income but low social capital, or high social capital but low income—follow trajectories that lie well above the low–low group and are broadly similar to one another in magnitude. The similar trajectories of the two mixed groups suggest that high social capital and high income are to some extent

interchangeable: inheriting more of one can offset inheriting less of the other, at least in terms of mean outcomes. Second, the combination of both advantages matters. The high-high group displays incomes that are consistently above those of the mixed groups, with the gaps widening gradually as individuals progress through their careers. By mid-career, the cumulative difference between the high-high group and all others is pronounced. These patterns suggest that the contributions of social capital and income are largely additive: each dimension independently shifts income upward, but the full effect is realized only when both advantages are inherited together. In particular, the mixed groups show that high parental income alone is not sufficient for reaching the very top of the income distribution; without inherited social capital, the trajectory falls well short of the high-high group.

5.4 Distributional and Elite Outcomes

Taken together, the life-cycle profiles and the joint patterns for social capital and income show that inherited advantages accumulate gradually and that the combination of the two dimensions is particularly important for reaching the highest observed income levels. These findings motivate a closer examination of how parental background shapes distributional outcomes, including upward mobility relative to parents and the likelihood of being in the top or bottom of the income distribution. We therefore now turn to a set of distributional analyses that trace how social capital and income relate to mobility and tail income probabilities.

Effects are strongest at the top of the distribution. A natural starting point for understanding distributional patterns is to ask how parental background influences children’s chances of entering the upper tail of the income distribution. Because the upper tail represents a sparse and highly variable part of the income distribution, and because outcomes in this segment account for a disproportionate share of overall inequality, it provides an informative setting for assessing how inherited advantages relate to extreme economic outcomes.

Table 4 reports horse-race specifications for children’s probability of reaching the top decile (Panel A) and top ventile (Panel B) of the income rank distribution as a function of parental social capital, parental income rank, and parental cognitive ability. In the raw specifications, each dimension of parental advantage strongly predicts children’s likelihood of reaching the upper tail. Controlling for all dimensions simultaneously attenuates the magnitudes but preserves the overall structure: parental social capital and parental income remain large and of comparable size. Including parent demographic controls has no impact on the estimates.

Across both cutoffs, social capital remains a strong predictor of upper-tail attainment conditional on parental income and cognitive ability. A one-percentile increase in parental social capital is associated with a 0.09 percentage point increase in the likelihood of being in the top 10% of the income distribution and a 0.06 percentage point increase in the likelihood of being in the top 5%. Relative to baseline rates of 11% and 5.5%, these correspond to increases of

approximately 0.8% and 1.1%, respectively. These estimates are similar in magnitude to those for parental income and cognitive ability, indicating that each captures a distinct dimension of advantage. Taken together, these patterns indicate that inherited social advantage and financial resources operate as complementary determinants of who reaches the top of the income distribution.

Table 4: Top-tail income attainment

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: Child top 10% income</i>						
Father social capital rank	0.14*** (0.00)			0.11*** (0.00)	0.09*** (0.00)	0.09*** (0.00)
Father income rank		0.13*** (0.00)		0.10*** (0.00)	0.09*** (0.00)	0.09*** (0.00)
Father cognitive ability rank			0.11*** (0.00)		0.06*** (0.00)	0.06*** (0.00)
Demographic controls						X
R^2	0.012	0.011	0.009	0.018	0.021	0.064
<i>Panel B: Child top 5% income</i>						
Father social capital rank	0.08*** (0.00)			0.07*** (0.00)	0.06*** (0.00)	0.06*** (0.00)
Father income rank		0.08*** (0.00)		0.06*** (0.00)	0.05*** (0.00)	0.05*** (0.00)
Father cognitive ability rank			0.06*** (0.00)		0.03*** (0.00)	0.03*** (0.00)
Demographic controls						X
R^2	0.008	0.007	0.005	0.011	0.013	0.037

Notes: OLS estimates of linear probability regressions. The dependent variable in Panel A is a binary indicator equal to 1 if the child's income falls in the top decile of their cohort-specific income distribution at age 35, scaled by 100. The dependent variable in Panel B is defined analogously for the top ventile. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest total profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 210,023. Mean of the dependent variable: 11.14 in Panel A, 5.52 in Panel B. Standard errors in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Top social capital rank and top income rank are similarly predictive of upper-

tail outcomes. When parental advantage is defined using upper-tail thresholds, both inherited social capital and inherited income remain strongly predictive along two dimensions. Online Appendix Table A.19 shows that having a parent in the top decile or top vigintile of either the social capital or income distribution substantially raises children’s income rank, with social capital and income exhibiting similar magnitudes in joint specifications. The estimates change little after controlling for parental cognitive ability. Online Appendix Table A.20 further shows that these top parental positions substantially increase children’s probability of reaching the upper tail of the income distribution, again with comparable contributions from social capital and income across alternative cutoffs. Taken together, these results show that top parental social capital and top parental income are similarly predictive of both children’s income rank and their probability of reaching the upper tail of the income distribution.

Social capital increases upward mobility relative to parents; income does the opposite. While upper-tail attainment captures one margin of mobility, an equally important dimension is relative mobility—whether children surpass their parents. We therefore examine how social capital and income relate to that margin as well.

In Table 5, we estimate the probability that a child’s income rank at age 35 exceeds that of their parents. The results show a clear asymmetry across dimensions of inherited advantage. Higher parental social capital rank is associated with a greater likelihood of upward mobility (conditional on income rank). In contrast, higher parental income rank is associated with a lower likelihood of relative upward mobility, anchoring children more tightly to their parents’ position in the distribution. The negative effect for income could be driven by mean reversion in income, and it is notable that the same mean reversion is not evident for social capital.¹² These estimates indicate that inheriting social capital tends to push children upward relative to their parents, whereas inheriting high income tends to reduce relative mobility, even as both dimensions raise children’s absolute outcomes.

Life-Cycle Dynamics of Extreme Outcomes. The results above document large and systematic differences in distributional outcomes measured at age 35 as a function of parent social capital and income. While these snapshots clarify who ultimately reaches the top of the income distribution and who surpasses their parents, they do not reveal when these gaps emerge or how they evolve over time. In particular, they leave open whether differences in tail outcomes reflect early sorting at labor-market entry or gradual divergence over the career.

To address this question, we examine how the probability of reaching the top of the income distribution evolves over the life cycle. Figure 5 plots age-specific probabilities of extreme outcomes for the four parental background groups defined by social capital and income used earlier (top versus bottom quartile of the distributions, respectively). Panels A and B show the

¹²Online Appendix Table A.21 shows similar estimates for whether a child’s social capital rank is higher than his father’s. Higher father income and cognitive ability increase the likelihood that a child’s social capital rank is higher than their father’s, while higher father social capital reduces the likelihood that his child outranks him. This result likely is driven by mean reversion.

Table 5: Relative upward mobility in income

	(1)	(2)	(3)	(4)	(5)	(6)
Father social capital rank	-0.15*** (0.00)			0.10*** (0.00)	0.07*** (0.00)	0.07*** (0.00)
Father income rank		-0.86*** (0.00)		-0.89*** (0.00)	-0.92*** (0.00)	-0.92*** (0.00)
Father cognitive ability rank			-0.11*** (0.00)		0.10*** (0.00)	0.10*** (0.00)
Demographic controls						X
R^2	0.006	0.196	0.004	0.198	0.201	0.259

Notes: OLS estimates of linear probability regressions. The dependent variable is a binary indicator equal to 1 if the child's percentile rank in their cohort-specific income distribution at age 35 exceeds the father's rank, scaled by 100. The outranking indicator is constructed using unrestricted income ranks for both child and father. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35, conditional on earning above 1G. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest total profit. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 210,023. Mean of the dependent variable: 34.21. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

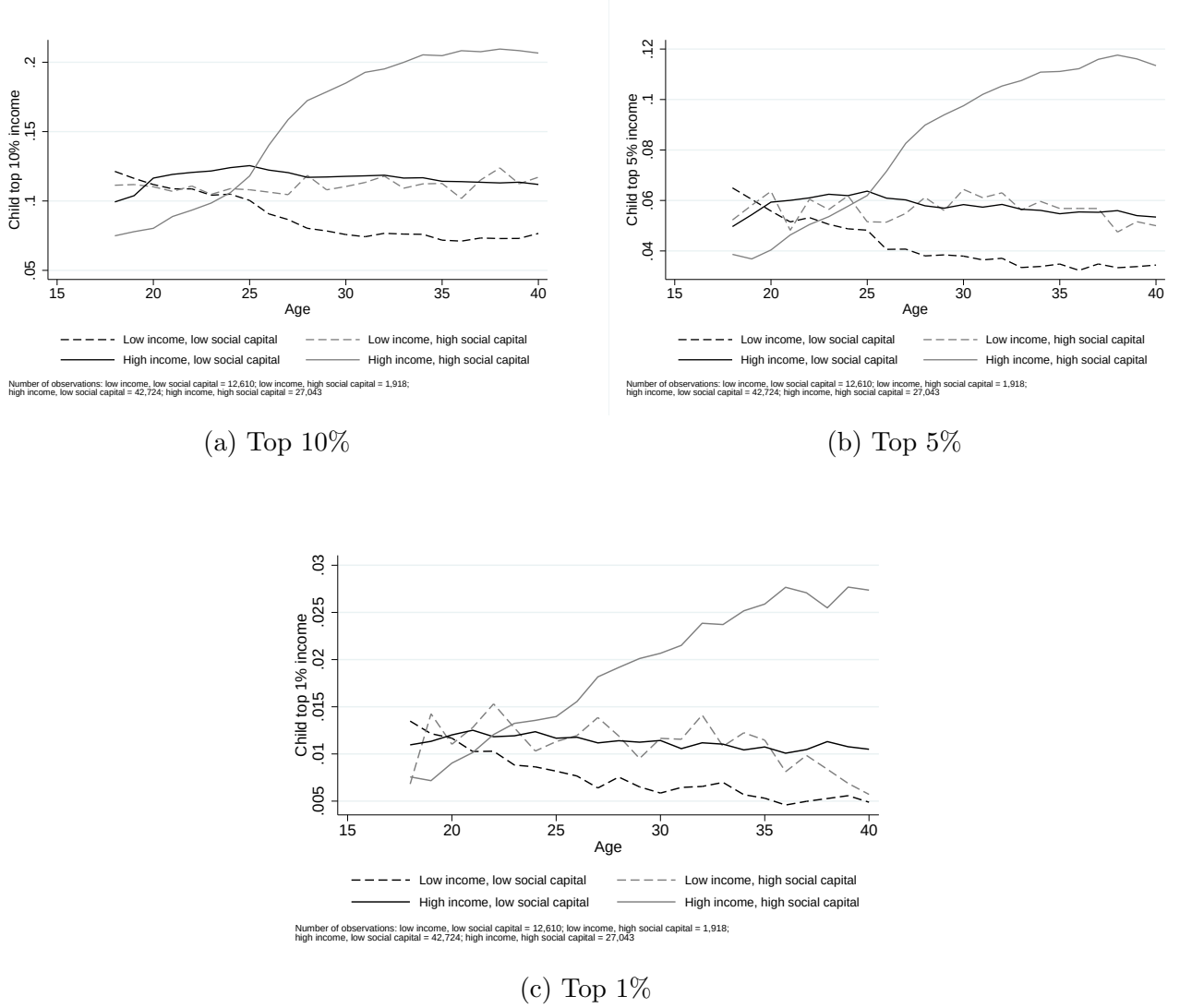
probability of reaching the top decile and top ventile of the income distribution. The life-cycle profiles reveal sharp differences in timing across outcomes. The high-high group is less likely to be in the top decile or ventile of the income distribution in their early 20s, consistent with prolonged schooling and later labor-market entry. This reverses quickly as they enter the labor market: by around age 30, the probability of being in the top decile is roughly 0.18 for the high-high group, compared to about 0.08 for the low-low group, and the gap persists thereafter. Unlike with rank outcomes, there is an apparent complementarity between parent income and social capital in the production of top outcomes: the likelihood of reaching the top is higher among the top-top group than for the sum of both of the top-bottom groups.

Panel C examines an even more extreme outcome by tracing the life-cycle probability of reaching the top 1 percent of the income distribution. While absolute probabilities are small for all groups, differences by parental background widen markedly at this margin. Children with parents in the top quartile of both social capital and income reach the top 1 percent with a probability of around 3 percent, compared to roughly 1 percent for each of the other parental background groups. Thus, the joint inheritance of high social capital and high income is associated with a roughly threefold increase in the likelihood of reaching the very top of the income distribution. This contrast is substantially sharper than for top-decile or top-ventile outcomes (a twofold increase).

While the life-cycle profiles describe when gaps emerge and how they evolve over time, they do not reveal how these differences vary across the income distribution. In particular, the patterns above leave open whether social capital shifts outcomes uniformly or whether its effects depend on parental income. To examine this question, Figure 6 plots the probability that children reach the top 10%, 5%, and 1% of the income distribution against father income rank, separately by parental social capital groups. Across all panels, children from higher-social capital families are more likely to reach the upper tail at any given level of parental income. These gaps widen with parental income rank and are most pronounced at the top of the distribution. We reject equality of slopes in each case, indicating that social capital not only shifts the level of attainment but also increases the return to parental income. This findings aligns with the patterns shown in Figure 5 that parent income and social capital are complements in the production of top child earning outcomes.

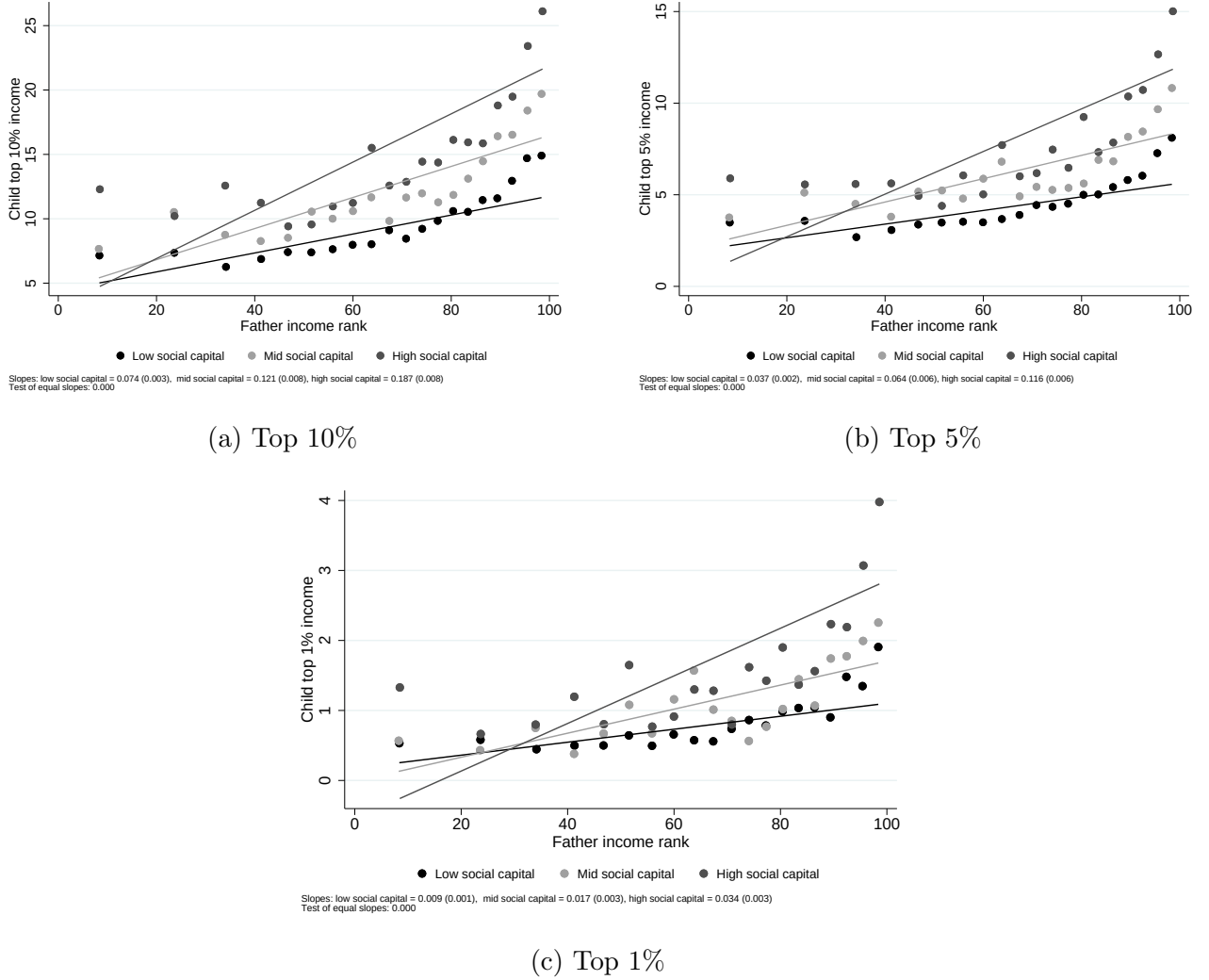
Online Appendix Figure A.7 shows similar patterns for average income rank of the child. Child income rank is increasing in father income rank across the father income distribution, and the correlation is stronger when social capital is higher. The three lines are near-parallel, indicating that social capital and income are substitutes across most of the joint income and social capital distribution. The exception is for those from the highest social capital families, where there is a non-linear increase in child income at the top of the father income distribution. This finding is aligned with social capital and income being substitutes throughout most of the distribution but being complements for the production of top incomes.

Figure 5: Life-cycle top-tail income trajectories



Notes: Probability of top-tail income from age 18 to 40. Panels A through C show the probability that the child ranks in the top 10%, 5%, and 1% of their cohort-specific income distributions. Children are stratified into four groups by father social capital and income ranks: the father's percentile rank in his cohort-specific social capital and income distributions respectively. Father income rank is measured at age 35. The black dashed line plots children whose fathers rank in the bottom quartile of both distributions; the gray dashed line plots children whose fathers rank in the bottom income quartile but the top social capital quartile; the black solid line plots children whose fathers rank in the top income quartile but the bottom social capital quartile; the gray solid line plots children whose fathers rank in the top quartile of both distributions. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. The sample is subject to the main analysis sample restrictions described in Section 3.

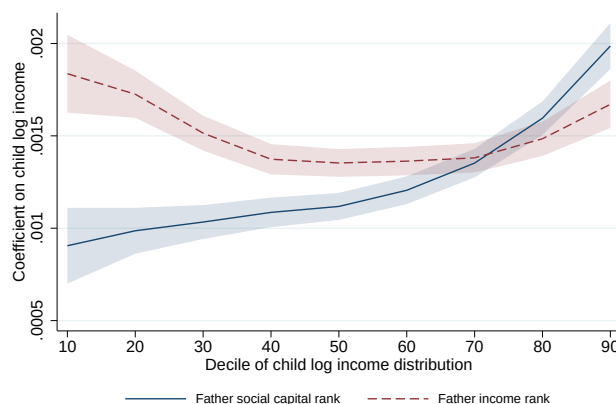
Figure 6: Top-tail income attainment



Notes: Binned scatter plot of the probability of child top-tail income against father income rank, separately by father social capital group. Panels A through C show the probability that the child ranks in the top 10%, 5%, and 1% of their cohort-specific income distribution, scaled by 100. Father social capital rank is the father's percentile rank in his cohort-specific income social capital distribution. Low social capital corresponds to fathers in the bottom quartile of the social capital distribution (Q1); mid social capital to the middle two quartiles (Q2–Q3); high social capital to the top quartile (Q4). Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. Slope coefficients (standard errors) are from separate OLS regressions within social capital group, printed alongside p-values testing the null hypothesis that the slopes are equal across groups based on a joint test of the interaction terms between father income rank and social capital group indicators. The sample is subject to the main analysis sample restrictions described in Section 3.

Figure 7 further examines these relationships by showing how father’s income and social capital affect the distribution of child income. The figure presents coefficients and standard error bands from regressions of child log income at age 35 on father social capital rank and father income rank, estimated separately at each decile of the child log income distribution. Father income is much more strongly correlated with child income lower in the income distribution and exhibits a U-shaped pattern. In contrast, the association between father social capital and child income grows over the income distribution. Social capital overtakes income at the 70th percentile, after which both correlations become stronger. This figure reinforces the importance of social capital for top child outcomes as well as the complementarity of income and social capital in the production of high income for children.

Figure 7: Intergenerational transmission across the income distribution



Notes: Coefficients and 95% confidence bands from regressions of child log income at age 35 on father social capital (solid) and income (dashed) ranks, estimated separately at each decile of the child log income distribution. Father social capital rank is the father’s percentile rank in his cohort-specific social capital distribution. Father income rank is the father’s percentile rank in his cohort-specific income distribution. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G at age 35. Controls include a binary indicator for marriage or cohabitation at age 35, country of origin, number of children at age 35, and cognitive ability rank - all measured for the father, and child gender and year-of-birth. The sample is subject to the main analysis sample restrictions described in Section 3.

5.5 Assortative Matching

Our focus in this paper is on individual outcomes, but examining individuals understates intergenerational transmission of advantage if there is assortative matching. Online Appendix Table A.22 examines how parental social capital, income, and cognitive ability ranks correlate with whether someone has a formal spouse at age 35. A ten percentile rank increase in any of the parental measures is associated with a 3-5 percentage point increase in the likelihood of having a formal spouse. This is around 10% relative to the baseline of 42.6%. Hence, part of

the way through which parental advantage affects children’s long-run outcomes is to increase the likelihood that they are married or cohabiting.

Are higher social capital people more likely to match with one another? Table 6 shows correlations between the focal individual’s father’s rank and their spouse’s father’s social capital rank (Panel A) and income rank (Panel B). For both outcome measures, there is strong evidence of assortative matching: those with higher social capital or higher income fathers are more likely to match with those whose fathers also have higher social capital and income ranks. These spouse-based rank-rank correlations are of a similar magnitude to our main estimates, suggesting that intergenerational transmission of advantage is even stronger from the perspective of the family than from the perspective of the individual.¹³

5.6 Components, Robustness, and Interpretation

Each component of the social capital index matters. To assess whether the association between parental social capital and children’s income is concentrated in a single component of the index, we estimate the association between each component of parental social capital and children’s income. The results of this exercise are shown in Online Appendix Table A.25 and demonstrate that each component—elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract—predicts higher income for children, even after controlling for parental income rank. The coefficients differ somewhat in size across the various components, with elite education and C-suite roles tending to be larger, but no component absorbs the full relationship. In a fully saturated model that includes all six components jointly, together with parental income and cognitive ability ranks, each component retains independent explanatory power (Online Appendix Table A.26). The composite index therefore captures a set of distinct institutional and occupational channels rather than reflecting a single underlying feature of parental background.¹⁴

Social capital is not a proxy for wealth or education. An alternative interpretation of our findings is that the social capital index may simply reflect conventional forms of family advantage—such as parental wealth or educational attainment—rather than a distinct dimension of inherited social position. Both are natural candidates: they have been shown to

¹³A natural question arising out of this analysis is whether transmission rates differ by gender. Table A.23 shows rank-rank correlations for child social capital by gender, while Table A.24 shows estimates for child income by gender. There is little gender-specific heterogeneity for the transmission of any parental measures to child social capital. Father’s income and cognitive ability are more strongly correlated with income for sons relative to daughters, but social capital is similarly correlated with adult income rank for boys and girls. These results indicate that boys and girls are similarly affected by parents’ social capital.

¹⁴To further assess whether the social capital effect is driven by a particular elite channel, we re-estimate the main specification while sequentially dropping each component from the index. Online Appendix Table A.27 shows that the coefficient on parental social capital remains stable across all model specifications. No single dimension—elite education, elite occupation, executive status, corporate elite, elite position in top firms or elite residential tract—accounts for the results on its own, confirming that the index captures a broad, multidimensional form of inherited advantage.

Table 6: Assortative matching

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: Spouse's father social capital rank</i>						
Father social capital rank	0.12*** (0.00)			0.10*** (0.00)	0.09*** (0.00)	0.09*** (0.00)
Father income rank		0.09*** (0.00)		0.06*** (0.00)	0.05*** (0.00)	0.05*** (0.00)
Father cognitive ability rank			0.09*** (0.00)		0.06*** (0.00)	0.06*** (0.00)
Demographic controls						X
R^2	0.015	0.008	0.011	0.019	0.023	0.023
<i>Panel B: Spouse's father income rank</i>						
Father social capital rank	0.08*** (0.00)			0.06*** (0.00)	0.05*** (0.00)	0.05*** (0.00)
Father income rank		0.09*** (0.00)		0.08*** (0.00)	0.07*** (0.01)	0.07*** (0.01)
Father cognitive ability rank			0.07*** (0.00)		0.04*** (0.00)	0.04*** (0.00)
Demographic controls						X
R^2	0.007	0.009	0.006	0.012	0.015	0.015

Notes: OLS estimates of rank-rank regressions. The dependent variable in Panel A is the percentile rank of the spouse's father in his cohort-specific social capital distribution. The dependent variable in Panel B is defined analogously for the spouse's father's earnings distribution at age 35. Spouses are identified as the formal spouse at age 35, available until 2019; children born after 1983 are therefore excluded. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest total profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 46,680 in Panel A, 43,749 in Panel B. Mean of the dependent variable: 52.57 in Panel A, 65.54 in Panel B. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

be persistent across generations, correlated with residential and occupational status, and can directly shape children’s early-life investments and opportunities.

To assess this possibility, we augment the fully saturated specification with paternal wealth rank and paternal education rank, allowing these dimensions to enter jointly with social capital (Online Appendix Table A.28). Wealth and education each is strongly associated with children’s income when included on its own. However, including either has virtually no effect on the coefficient for paternal social capital. The magnitude and statistical significance of the social capital term remain stable across specifications.

These results indicate that the index is not capturing paternal wealth or educational attainment.¹⁵ Instead, it reflects an independent dimension of inherited advantage that operates alongside—rather than through—standard economic and human-capital measures.

Compositional differences do not explain our results. While the preceding analyses show that social capital is not a proxy for wealth or education, the observed gradient still could reflect systematic differences in family characteristics correlated with social capital. In particular, high-social capital families may differ from low-social capital families along observable dimensions—such as fertility, parental age, immigration background, or geography—that themselves influence children’s outcomes.

To assess this concern, we implement an entropy-reweighting regression that forces the distribution of key demographic characteristics among high-social capital parents to match that of low-social capital parents. The reweighting is based on child year of birth, gender, number of siblings, parental age at birth, immigration background, and county of birth. As shown in Online Appendix Table A.29, the estimated correlations are not meaningfully affected by this procedure. Hence, the results are not driven by demographic composition as defined above. Social capital captures differences that persist even after aligning families on a broad set of observable characteristics.

Robustness to Parental Background Definitions. A potential concern is that our baseline results may depend on how parental characteristics are defined, given that we primarily use paternal income, cognitive ability, and social capital ranks. This choice reflects the availability of standardized cognitive test scores only for men and lower maternal labor-force participation in the cohorts we study. To ensure that the findings are not driven by this definition, we replicate the main specifications, with the exception of the cognitive ability rank (unavailable for the majority of mothers) using maternal ranks and the maximum rank across parents.

The estimated effects of parental social capital and parental income remain highly similar across definitions (Online Appendix Tables A.1 and A.2). These results indicate that the

¹⁵Appendix Figure A.8 reinforces this conclusion, showing lifecycle child income patterns by parent social capital and wealth. Parent wealth has only a small interaction with social capital, suggesting that social capital is more important for determining child income over the lifecycle than is parental wealth.

intergenerational associations we document are not sensitive to whether parental background is measured using fathers, mothers, or the highest-ranked parent, implying that the role of social capital and income reflects family-level environments rather than the labor-market position of a particular parent.

Robustness to Alternative Measurement Choices. Our results rely on several empirical constructions—most importantly, how social capital is measured, but also how top firms are defined, how long-run income is summarized, and how treatment thresholds are set in the quasi-experimental analysis. Because the social capital index is central to our contribution, we first examine robustness to its construction. We then assess whether the results are sensitive to other key measurement choices.

Alternative measurement of social capital. Our baseline measure of social capital is an inverse-covariance-weighted index constructed from six binary indicators capturing entry into elite educational, occupational, organizational, corporate, and residential positions. While this approach emphasizes access to distinct high-status domains and avoids double counting (by weighting components according to the extent of independent variation they contain), it relies on (i) binary thresholds and (ii) a particular weighting scheme.

Online Appendix Table A.30 replaces the baseline index with a fully continuous social capital measure. In this specification, the father’s social capital rank is defined as his percentile rank in the cohort-specific distribution of a standardized weighted index constructed from four continuous components: (i) education rank, defined using the average income rank at age 35 associated with the degree; (ii) occupation rank, defined by the occupation’s national median wage; (iii) wage rank within firm, restricting to firms with at least 10 workers; and (iv) neighborhood rank, based on the leave-one-out neighborhood elite exposure score described in Section 3.4. These four continuous inputs are standardized and combined into a single index, which is then converted into cohort-specific percentile ranks.¹⁶ The estimated coefficient on parental social capital is virtually unchanged relative to the baseline specification, indicating that the results do not depend on discretizing elite exposure into top-decile indicators or on the inclusion of purely binary components.

Online Appendix Table A.31 measures parental social capital using positions attained by age 50 rather than over the full career. This addresses the concern that defining paternal social capital using lifetime maxima could incorporate elite positions attained after the child’s adult outcomes are already realized. Restricting measurement to status achieved by age 50 ensures that parental social capital reflects positions plausibly relevant during the child’s formative and early-career years. The estimates are not economically significantly different from the baseline estimates. This is consistent with our interpretation of social capital as an underlying latent

¹⁶The remaining two components in the baseline index—executive status (ISCO group 11) and C-suite or board membership in top firms—do not have meaningful continuous analogues in the data, as they reflect discrete institutional positions rather than ordered exposure margins. For this exercise, they therefore are excluded.

attribute rather than a state that jumps at the moment of attainment: ever reaching an elite position reflects a level of social standing that was already present, not just achieved at the point of appointment. As such, positions attained later in the career are indicators of the same underlying social capital that shaped the child’s environment during their formative years.

Online Appendix Tables A.32 and A.33 construct the index as the simple sum and mean of the six components, respectively, removing the inverse-covariance weighting structure. Online Appendix Table A.34 applies GLS weights across components (Anderson, 2008). Across all specifications, the magnitude and statistical significance of the social capital coefficient remain remarkably similar.

Finally, because the social capital index aggregates multiple components, a concern is that the results could be driven primarily by one particular dimension rather than the broader construct. While the above exercises give no suggestion of this being the case, we sequentially drop each component from the index and re-estimate the baseline specification. The resulting estimates are robust to dropping any one of the specific components, indicating that no individual component fully accounts for the findings (Online Appendix Table A.27).¹⁷

These exercises demonstrate that the central findings are not sensitive to binary thresholding, the weighting scheme, the career window over which social capital is measured, or the specific aggregation rule. The intergenerational associations we document reflect a robust, multidimensional construct rather than an artifact of a particular index definition or measurement decision.

Alternative definitions of firms and income Beyond the construction of the social capital index, our analysis relies on several additional empirical choices that could, in principle, affect the results.

First, our construction of corporate elite exposure requires choosing how top firms are identified and how many firms are included, raising the possibility that the results could depend on these definitional choices. To assess this concern, we redefine top firms using wage bill rather than profits and expand the firm set from the top 100 to the top 500. The resulting estimates are nearly identical to the baseline (Online Appendix Tables A.9 and A.10).

Second, our analysis requires selecting a specific age at which to summarize long-run income and deciding whether to focus on individuals with meaningful labor-market attachment, raising the possibility that the results could depend on lifecycle timing or the treatment of very low income observations. To address this concern, we re-estimate the specifications using alternative age windows (ages 33–37 instead of age 35) and include the full unconditional income distribution rather than restricting to income above 1G. The estimated coefficients remain essentially unchanged (Online Appendix Tables A.3 and A.8). These robustness exercises demonstrate

¹⁷Online Appendix Table A.35 reports intergenerational correlations for each binary component separately. All components exhibit positive and economically meaningful parent–child persistence, providing further support for the claim that the aggregate index is not driven by a single dimension.

that the central findings are not sensitive to how firms or income are defined or how treatment thresholds are set.

6 Evidence on Mechanisms

The results presented above document substantial intergenerational persistence in both income and social capital, but these correlations do not by themselves reveal how to interpret the independent association between parental social capital and children’s outcomes. Are the transmissions we document driven by higher human capital or by better access to networks? Do these associations reflect environmental transmission, or instead arise because social capital proxies for persistent differences in financial resources or inherited traits? We first examine correlational evidence related to the human capital and network transmission mechanisms, followed by quasi-experimental assessments of the role of financial resources and inherited traits.

6.1 Correlational Evidence

Both parental income and social capital could lead to better income and social capital outcomes among children because they increase human capital accumulation, or they could provide access to valuable networks for children that give them more lucrative job opportunities. In contrast, parent cognitive ability should operate mainly through human capital.

Table 7 shows descriptive evidence suggesting that both forces are relevant in the transmission of parent income and social capital. We estimate models with the following dependent variables: middle school GPA, high school GPA, whether the student followed an academic track, educational attainment by age 35, and firm quality by age 35. The firm quality measure comes from the establishment fixed effect from an Abowd, Kramarz, and Margolis (AKM) decomposition (Abowd et al., 1999) of an individual’s dominant employer at age 35. We argue that the first four measures more closely align with the human capital mechanism, while firm quality is more strongly correlated with network access.

Columns (1) through (4) of Table 7 shows that parent social capital and income rank are positively but weakly correlated with schooling outcomes. The estimates for income and social capital rank are similarly-sized and indicate that higher human capital accumulation plays at most a modest role in driving the intergenerational transmission of these dimensions of parental advantage. Fathers’ ability rank, however, is much more strongly associated with these human capital measures. Column (5) shows that parent income and social capital have a higher correlation with firm quality than with the educational achievement measures. This is suggestive evidence that parent social capital and income provide access to valuable networks, allowing children to sort into firms that pay higher wage premiums. Hence, both human capital and parental networks are important mechanisms for the transmission of social advantage.

Table 7: Human capital vs. access channels

	(1)	(2)	(3)	(4)	(5)
	MS GPA	HS GPA	Academic track (pp)	Education level	Firm quality
Father social capital rank	0.0833*** (0.0045)	0.0504*** (0.0041)	0.1545*** (0.0044)	0.0059*** (0.0001)	0.0677*** (0.0029)
Father income rank	0.0569*** (0.0048)	0.0153*** (0.0042)	0.1263*** (0.0046)	0.0047*** (0.0001)	0.1056*** (0.0030)
Father cognitive ability rank	0.3078*** (0.0042)	0.1972*** (0.0037)	0.3873*** (0.0040)	0.0147*** (0.0001)	0.0598*** (0.0026)
Demographic controls	X	X	X	X	X
Observations	54315	79975	200411	209878	161411
R^2	0.204	0.071	0.109	0.142	0.101
Mean of dep. var.	51.96	52.19	59.94	4.82	51.64

Notes: OLS estimates. Columns (1), (2), and (5) are rank-rank regressions: the dependent variable is the child's percentile rank in their cohort-specific distribution of the indicated outcome. MS GPA rank is the child's grade point average in middle school. HS GPA rank is the child's average grade across high school subjects. Firm quality is measured by the AKM establishment fixed effect of an individual's dominant employer at age 35. The dependent variable in Column (3) is a binary indicator equal to 1 if the child completed at least 1 course in an academic high school track and equal to 0 if they completed only vocational courses, scaled by 100. The dependent variable in Column (4) is broad education level (NUS2000 first-digit) at age 35. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest total profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. The number of observations varies across columns due to differences in data availability. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

6.2 Quasi-Experimental Evidence

To distinguish between the role of financial resources and inherited traits, we draw on two complementary sources of variation: adoption placements and parental lottery prizes. Adoption placements provide a setting close to an ideal experiment in which children are exposed to different family environments independently of their genetic background. In this setting, any association between adoptive-parent characteristics and children’s outcomes reflects environmental transmission rather than inherited traits. In contrast, parental lottery prizes generate large, exogenous changes in financial resources without directly altering families’ social position, networks, or institutional affiliations. This setting isolates the role of financial resources. If the association between parental social capital and children’s outcomes were driven by differences in income, such shocks should affect children’s social capital rank and moderate the intergenerational transmission of social capital.

These designs, taken together, allow us to assess whether the patterns we document are more consistent with environmental transmission, financial resources, or inherited traits.

Adoption Placements. We begin with the adoption analysis, which speaks to whether the intergenerational associations we document reflect environmental transmission rather than inherited traits. Adoption placements provide a clean way to separate these channels, as adoptees share the environments created by their adoptive parents but not their genetic traits. With this structure, the adoption analysis allows us to assess the environmental component of the persistence patterns observed above.

To distinguish environmental mechanisms from genetic transmission, we estimate the same rank–rank specifications as in the main analysis using the sample of adoptees. The idea behind this approach is that adoptees share no genetic material with their adoptive parents but are raised in the family environment they provide. If children’s long-run outcomes systematically differ when they are placed into families with different levels of social capital and income rank, it would provide evidence on environmental transmission. The adoption sample includes roughly 1,300 individuals, which makes the analysis demanding. The core assumption is that placement decisions are not strongly correlated with unobserved child characteristics that are themselves related to parental social capital or income rank. This assumption cannot be tested directly, but the highly centralized, state-controlled adoption process in Norway reduces the scope for differential placement along such unobservables. We further assess this assumption by examining balance on predetermined characteristics (Online Appendix Tables [A.14](#) and [A.15](#)), which show no systematic differences across adoptive families, and by controlling for country of origin to ensure comparability across children. [Fagereng et al. \(2021\)](#) also employ this assumption in their analysis of intergenerational income transmission among adoptees in Norway.

Despite the small sample, the estimates align closely with the patterns observed in the full sample. Table [8](#) shows that adoptive-parent income rank and adoptive-parent social capital

rank both have strong and statistically significant associations with adoptees’ adult income rank, with magnitudes similar to those in the main analysis. These results imply that the parental environment—rather than genetic transmission—is central to the intergenerational relationships we document. Because adoptees do not inherit biological traits from their adoptive parents, the predictive power of adoptive-parent characteristics points to environmental channels such as networks, expectations, access to information, and institutional connections.

Table 8: Intergenerational persistence of income among adoptees, adoptions

	(1)	(2)	(3)	(4)	(5)	(6)
Father social capital rank	0.11*** (0.03)			0.09*** (0.03)	0.10*** (0.03)	0.08** (0.03)
Father income rank		0.11*** (0.03)		0.07** (0.04)	0.08** (0.04)	0.06* (0.04)
Father cognitive ability rank			0.03 (0.03)		-0.03 (0.03)	-0.04 (0.03)
Demographic controls						X
R^2	0.012	0.009	0.001	0.015	0.015	0.056

Notes: OLS estimates of rank-rank regressions between adopting father and adopted child. The dependent variable is the child’s percentile rank in their cohort-specific income distribution at age 35. Father social capital rank is the father’s percentile rank in his cohort-specific social capital distribution. Father income rank is the father’s percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father’s percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. Demographic controls include child gender and country of origin. The sample is subject to the adoption analysis sample restrictions described in Section 3. Number of observations: 1,291. Mean of the dependent variable: 49.30. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Lottery shocks isolate financial-resource effects. We next exploit parental lottery prizes, which generate large, exogenous changes in financial resources without directly altering families’ social position, networks, or institutional affiliations. This setting isolates the role of financial resources. If the association between parental social capital and children’s outcomes were driven by differences in income or by the ability of higher-income families to invest more in their children, such shocks should translate into improvements in children’s long-run outcomes. We examine this mechanism using large, unexpected lottery winnings, which provide substantial income shocks that are unrelated to underlying family characteristics.

We compare children whose parents won large prizes to those whose parents won small prizes, conditioning on lottery participation. This comparison removes selection into playing the lottery and isolates the effect of the prize amount itself. Table A.36 documents the distribution of prizes and shows that a “large” prize corresponds to an average payout of 664,000 NOK

(\$67,000), equivalent to approximately 1.7 times average annual father income. In contrast, a “small” prize is on average 20,000 NOK (\$2,000). A large prize would move a father at the median of the income distribution to approximately the 99th percentile, while a small prize would only increase his rank by about 7 points. Hence, the lottery prizes we examine generate immediate and substantial increases in parental income.

Table 9 shows the results from including a large lottery prize indicator in our intergenerational transmission model. There are two important takeaways from this table. First, including large lottery prizes does not alter the relationship between father social capital or income and child outcomes, indicating that exogenous increases in financial resources do not account for the intergenerational associations documented earlier. Second, despite the magnitude of these income shocks, there is no evidence that they improve children’s long-run outcomes.¹⁸ The indicators for large parental lottery prizes are small and only are significant at even the 10% level in one specification (out of 14). This finding is particularly notable for child social capital outcomes: that large lottery prizes during childhood do not influence long-run social capital underscores that social capital is not just a proxy for income. Put differently, social capital is not causally downstream from parent income but rather is generated by non-financial channels that are correlated with income. A further exploration of what these channels are is outside of the scope of this study, but it is a fruitful area for future research.

Because lottery participants may differ from the full population, we replicate the baseline rank–rank regressions within the lottery sample itself. Online Appendix Table A.17 shows that the intergenerational relationships in income and social capital closely mirror those in the main sample.

The results presented in this section suggest that large, exogenous financial shocks experienced when young do not meaningfully alter children’s trajectories. Hence, the intergenerational persistence of social capital documented above is unlikely to be driven by the causal effect of family financial resources.

The adoption and lottery analyses together indicate that the intergenerational associations we document are not easily explained by financial variation or by genetic transmission, pointing instead toward the broader environments and experiences parents provide to their children.

¹⁸Online Appendix Table A.37 shows estimates using the 90th percentile of lottery prizes as a “large” win. The effect on child income is larger, as expected, but the coefficients on parental social capital are unaffected by the largest lottery prizes, nor is there any relationship between these prizes and child social capital. Online Appendix Table A.38 shows estimates using above and below mean lottery prizes. The results are unchanged from baseline.

Table 9: Intergenerational persistence of social capital and income under lottery shocks

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A: Child social capital rank</i>							
Large prize	-0.03 (0.83)	0.02 (0.81)	-0.08 (0.83)	-0.02 (0.82)	-0.01 (0.80)	-0.01 (0.80)	-0.06 (0.80)
Father social capital rank		0.25*** (0.02)			0.23*** (0.02)	0.21*** (0.02)	0.21*** (0.02)
Father income rank			0.13*** (0.02)		0.07*** (0.02)	0.05*** (0.02)	0.06*** (0.02)
Father cognitive ability rank				0.14*** (0.01)		0.08*** (0.02)	0.08*** (0.02)
Demographic controls							X
R^2	0.000	0.061	0.017	0.024	0.065	0.072	0.080
<i>Panel B: Child income rank</i>							
Large prize	1.05 (0.93)	1.08 (0.92)	0.97 (0.92)	1.05 (0.92)	1.01 (0.91)	1.02 (0.91)	1.60* (0.87)
Father social capital rank		0.16*** (0.02)			0.13*** (0.02)	0.11*** (0.02)	0.11*** (0.02)
Father income rank			0.17*** (0.02)		0.14*** (0.02)	0.12*** (0.02)	0.11*** (0.02)
Father cognitive ability rank				0.14*** (0.02)		0.08*** (0.02)	0.08*** (0.02)
Demographic controls							X
R^2	0.000	0.022	0.025	0.018	0.037	0.042	0.140

Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable in Panel A is the child's percentile rank in their cohort-specific social capital distribution. The dependent variable in Panel B is defined analogously for the child's cohort-specific income distribution at age 35. Large prize is a binary indicator equal to 1 if either parent won a lottery prize above the 75th percentile of the year-specific distribution of prizes while the child was aged 0-18. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest total profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the lottery analysis sample restrictions described in Section 3. Number of observations: 3,628 in Panel A, 3,628 in Panel B. Mean of the dependent variable: 48.77 in Panel A, 54.39 in Panel B. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

7 Discussion

This paper introduces a population-wide measure of dynastic social capital and shows that it constitutes a distinct and independently transmitted dimension of inherited advantage. Using comprehensive Norwegian administrative data, we document that social capital—capturing families’ embeddedness in elite educational institutions, occupations, corporate leadership, organizational hierarchies, and high-status neighborhoods—is strongly transmitted across generations and is a powerful predictor of children’s long-run income and access to elite positions.

Parental social capital predicts children’s economic outcomes to a degree comparable to parental income and cognitive ability and remains quantitatively important when these conventional measures of family background are included simultaneously. These results indicate that families differ along an additional dimension of advantage that is not captured by standard measures of income, education, or ability. Social capital therefore provides independent information about children’s long-run outcomes and reflects a form of inherited advantage that operates alongside, rather than through, traditional channels.

At the same time, incorporating social capital into standard intergenerational regressions alters the interpretation of income-based mobility. Including social capital reduces the parent–child income relationship by more than twenty percent, indicating that part of what is typically attributed to inherited financial resources reflects correlated differences in social position. This pattern suggests that conventional measures of income persistence partly capture the transmission of access to networks, institutions, and high-status environments that shape opportunities over the life cycle.

While these adjustments matter for interpretation, it is interesting to note that social capital contributes only modestly in terms of partial explanatory power when added to specifications that already include parental income and cognitive ability. This reflects that the remaining variation in children’s outcomes—after accounting for these factors—is limited. The partial R-squared therefore captures only the incremental contribution of social capital within this residual variation, rather than its overall importance. Its role instead lies in identifying a distinct dimension of inherited advantage that is not reflected in standard measures of parental background but is central for understanding who becomes a top earner.

The role of social capital is particularly pronounced at the top of the distribution. While parental income and social capital each independently are associated with better long-run outcomes, neither is sufficient on its own for reaching the highest income ranks. Entry into the top of the income distribution is concentrated among individuals who inherit both high parental income and high parental social capital. Moreover, social capital amplifies the returns to parental income: children from high–social capital families are more likely to reach the upper tail at any given level of parental income, and these differences widen toward the top. These patterns demonstrate that financial and social advantages operate as complementary inputs in the pro-

duction of top economic outcomes.

Our evidence also provides insight into the mechanisms through which social capital determines long-run outcomes. Children from high-social-capital families exhibit advantages both in educational attainment and in the types of firms in which they work as adults. These patterns are consistent with roles for both human capital accumulation and access to professional networks in transmitting social advantage. Rather than operating through a single channel, social capital appears to influence opportunities throughout the life course—from educational pathways to labor-market sorting into higher-paying firms.

Our quasi-experimental analyses help interpret the nature of these intergenerational relationships. Large, exogenous income shocks from parental lottery winnings do not affect children’s long-run income or social capital, indicating that financial resources alone do not account for the persistence we document. In contrast, adoptive parents’ income and social capital strongly predict adoptees’ adult outcomes, pointing to environmental transmission. Taken together, these findings suggest that the intergenerational patterns we identify are not driven by short-run financial inputs or genetic inheritance, but instead reflect durable features of the family environment, including access to networks, institutions, and high-status social settings.

These results have important implications for how we understand inequality and intergenerational mobility. A large literature has emphasized the roles of income, education, wealth, and human capital in shaping opportunity. At the same time, an emerging literature has examined how peer networks, institutional environments, and elite pathways influence long-run outcomes. Our contribution is to bring these perspectives together within a unified empirical framework by constructing a population-wide measure of social capital and tracing its transmission across generations. More broadly, our findings suggest that conventional measures of parental background do not span the full set of inherited advantages that help determine children’s long-run outcomes. By showing that social capital can be measured systematically using administrative data and incorporated into standard empirical analyses of intergenerational mobility, our paper provides a broader framework for studying the persistence of economic advantage.

An important implication of our work is that this form of inherited advantage may be less responsive to conventional redistribution policies than financial resources. Unlike income or wealth, social position cannot be directly taxed or transferred, and our lottery evidence suggests that it is not mechanically altered by large increases in parental financial resources. Our findings indicate that inherited advantage operates not only through financial resources but also through durable social environments, institutions, and networks. This perspective may help explain why intergenerational mobility remains limited even in settings with compressed income distributions and substantial public investment in equalizing opportunities.

Our results suggest that understanding—and ultimately addressing—intergenerational inequality requires moving beyond financial and human capital alone. Durable social embeddedness—families’ positions within institutions, organizations, firms, and neighborhoods—constitutes

a distinct and independently transmitted dimension of inherited advantage that is not captured by conventional measures of parental background. Measuring this dimension alongside traditional indicators of family environments provides a more complete account of how opportunity is allocated and why economic advantage persists across generations.

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Appendix

A Online Appendix: Supplemental Results

Table A.1: Intergenerational persistence of income, maternal inputs

	(1)	(2)	(3)	(4)	(5)	(6)
Mother social capital rank	0.11*** (0.00)			0.09*** (0.00)	0.07*** (0.00)	0.06*** (0.00)
Mother income rank		0.11*** (0.00)		0.10*** (0.00)	0.08*** (0.00)	0.09*** (0.00)
Father cognitive ability rank			0.14*** (0.00)		0.13*** (0.00)	0.12*** (0.00)
Demographic controls						X
R^2	0.006	0.007	0.020	0.011	0.027	0.139

Notes: OLS estimates of rank-rank regressions between mother and child. The dependent variable is the child's percentile rank in their cohort-specific income distribution at age 35. Mother social capital rank is the mother's percentile rank in her cohort-specific social capital distribution. Mother income rank is the mother's percentile rank in her cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest total profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the mother, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 151,727. Mean of the dependent variable: 54.52. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.2: Intergenerational persistence of income, parental inputs

	(1)	(2)	(3)	(4)	(5)	(6)
Parent social capital rank	0.13*** (0.00)			0.09*** (0.00)	0.07*** (0.00)	0.07*** (0.00)
Parent income rank		0.18*** (0.00)		0.15*** (0.00)	0.13*** (0.00)	0.12*** (0.00)
Father cognitive ability rank			0.14*** (0.00)		0.10*** (0.00)	0.09*** (0.00)
Demographic controls						X
R^2	0.014	0.022	0.020	0.029	0.036	0.152

Notes: OLS estimates of rank-rank regressions between parent and child. The dependent variable is the child's percentile rank in their cohort-specific income distribution at age 35. Parent social capital rank is the percentile rank of the parent who ranks highest in their cohort-specific social capital distribution. Parent income rank is the percentile rank of the parent who ranks highest in their cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest total profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all included for both parents, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 199,590. Mean of the dependent variable: 53.55. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.3: Intergenerational persistence of income, alternative measurement window

	(1)	(2)	(3)	(4)	(5)	(6)
Father social capital rank	0.14*** (0.00)			0.10*** (0.00)	0.08*** (0.00)	0.08*** (0.00)
Father income rank		0.19*** (0.00)		0.16*** (0.00)	0.13*** (0.00)	0.12*** (0.00)
Father cognitive ability rank			0.14*** (0.00)		0.09*** (0.00)	0.09*** (0.00)
Demographic controls						X
R^2	0.017	0.024	0.022	0.032	0.040	0.164

Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable is the child's percentile rank in their cohort-specific income distribution averaged over ages 33 to 37. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution averaged over ages 33 to 37. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 210,023. Mean of the dependent variable: 56.01. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.4: Descriptive statistics

	Mean	SD	Min	Max	N
Child Level					
Year of birth	1981.67	3.52	1965.00	1986.00	210,023
Female	0.49	—	0.00	1.00	210,023
Income	513	282	75	41,294	210,023
Social capital	0.10	1.06	−0.45	22.13	210,022
Elite education	0.07	—	0.00	1.00	210,022
Elite occupation	0.09	—	0.00	1.00	210,022
Executive status	0.05	—	0.00	1.00	210,022
Corporate elite	0.00	—	0.00	1.00	210,022
Elite position	0.02	—	0.00	1.00	210,022
Elite tract	0.19	—	0.00	1.00	210,012
Cognitive ability	5.08	1.67	0.00	9.00	104,125
Education	4.82	1.61	1.00	8.00	209,878
Wealth	−570	4,946	−28,002	1,434,542	210,023
Married or cohabiting	0.48	—	0.00	1.00	210,023
Country of origin	0.02	0.17	0.00	2.00	210,023
Number of children	1.45	1.11	0.00	9.00	210,023
Father Level					
Year of birth	1955.91	3.23	1952.00	1970.00	210,023
Income	384	185	55	15,981	210,023
Social capital	0.26	1.50	−0.45	23.92	210,023
Elite education	0.04	—	0.00	1.00	210,023
Elite occupation	0.16	—	0.00	1.00	210,023
Executive status	0.12	—	0.00	1.00	210,023
Corporate elite	0.00	—	0.00	1.00	210,023
Elite position	0.03	—	0.00	1.00	210,023
Elite tract	0.16	—	0.00	1.00	210,023
Cognitive ability	5.76	1.70	0.00	9.00	210,023
Education	3.76	1.54	1.00	8.00	209,170
Wealth	26	5,688	−77,932	1,553,061	208,018
Married or cohabiting	0.93	—	0.00	1.00	210,023
Country of origin	0.03	0.21	0.00	2.00	210,023
Number of children	2.36	0.92	0.00	12.00	210,023

Notes: Summary statistics for the main analysis sample. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Each of the elite indicators reflects the maximum observed value over the 2003–2020 observation window. The remaining variables are measured at age 35, with the exception of wealth, which is measured at age 50 for fathers. Income is total taxable income above 1G in 1000s NOK. Cognitive ability is the score from the military conscription test. Education is the highest completed broad education level. Wealth is gross assets minus total liabilities in 1000s NOK. Country of origin equals 0 for Norwegian citizens, 1 for Nordic, EU/EFTA, UK, US, Canadian, Australian, or New Zealand nationals, and 2 for all others. The sample is subject to the main analysis sample restrictions described in Section 3.

Table A.5: Sample construction

	N	Dropped	% of full sample	% of prev. row	Mean child income rank	Mean father income rank	Share female
Full cross-section	6,520,901	—	100.0	—	50.00	63.93	0.49
+ Child born 1932–1988	4,112,839	2,408,062	63.1	63.1	50.00	64.15	0.48
+ Father born 1950–1970	533,701	3,579,138	8.2	13.0	52.53	64.12	0.49
+ Child income rank	391,492	142,209	6.0	73.4	52.53	64.29	0.49
+ Father social capital rank	377,342	14,150	5.8	96.4	52.73	64.43	0.49
+ Father income rank	350,244	27,098	5.4	92.8	53.27	64.43	0.49
+ Father cognitive ability rank	274,620	75,624	4.2	78.4	53.68	65.29	0.49
+ Demographic controls	210,023	64,597	3.2	76.5	53.53	65.05	0.49

Notes: Each row applies the listed restriction cumulatively. % of full sample reports the share of Row 1 retained; % of prev. row reports the share of the preceding row retained. Mean child and father income ranks are computed over non-missing observations at each step. Share female is computed over non-missing observations of the gender indicator.

Table A.6: Descriptive statistics, lottery winners

	Mean	SD	Min	Max	N
Child Level					
Year of birth	1983.20	2.52	1975.00	1986.00	3,628
Female	0.48	—	0.00	1.00	3,628
Income	523	257	98	5,426	3,628
Social capital	0.08	1.01	−0.45	17.78	3,628
Elite education	0.07	—	0.00	1.00	3,628
Elite occupation	0.08	—	0.00	1.00	3,628
Executive status	0.05	—	0.00	1.00	3,628
Corporate elite	0.00	—	0.00	1.00	3,628
Elite position	0.02	—	0.00	1.00	3,628
Elite tract	0.18	—	0.00	1.00	3,628
Cognitive ability	5.12	1.65	0.00	9.00	1,802
Education	4.83	1.64	2.00	8.00	3,625
Wealth	−601	2,128	−10,172	46,885	3,628
Married or cohabiting	0.36	—	0.00	1.00	3,628
Country of origin	0.01	0.15	0.00	2.00	3,628
Number of children	1.38	1.10	0.00	7.00	3,628
Father Level					
Year of birth	1956.47	3.30	1952.00	1968.00	3,628
Income	386	177	59	2,816	3,628
Social capital	0.25	1.51	−0.45	22.13	3,628
Elite education	0.03	—	0.00	1.00	3,628
Elite occupation	0.15	—	0.00	1.00	3,628
Executive status	0.13	—	0.00	1.00	3,628
Corporate elite	0.00	—	0.00	1.00	3,628
Elite position	0.03	—	0.00	1.00	3,628
Elite tract	0.17	—	0.00	1.00	3,628
Cognitive ability	5.75	1.69	1.00	9.00	3,628
Education	3.71	1.51	1.00	8.00	3,620
Wealth	111	3,856	−23,001	127,870	3,597
Married or cohabiting	0.90	—	0.00	1.00	3,628
Country of origin	0.03	0.20	0.00	2.00	3,628
Number of children	2.30	0.84	0.00	7.00	3,628
Lottery					
Large prize	0.53	—	0.00	1.00	3,628
Prize if large	648	1,313	98	14,403	1,914
Prize if small	20	17	0	430	1,714

Notes: Summary statistics for the lottery analysis sample. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Each of the elite indicators reflects the maximum observed value over the 2003–2020 observation window. The remaining variables are measured at age 35, with the exception of wealth, which is measured at age 50 for fathers. Income is total taxable income above 1G in 1000s NOK. Cognitive ability is the score from the military conscription test. Education is the highest completed broad education level. Wealth is gross assets minus total liabilities in 1000s NOK. Country of origin equals 0 for Norwegian citizens, 1 for Nordic, EU/EFTA, UK, US, Canadian, Australian, or New Zealand nationals, and 2 for all others. Large prizes are those above the 75th percentile of the year-specific distribution of prizes. Small prizes are those at or below the 25th percentile of the year-specific distribution of prizes.

Table A.7: Descriptive statistics, adoptions

	Mean	SD	Min	Max	N
Child Level					
Year of birth	1982.57	3.14	1968.00	1986.00	1,291
Female	0.53	—	0.00	1.00	1,291
Income	490	269	91	4,765	1,291
Social capital	0.22	1.09	−0.45	6.39	1,291
Elite education	0.08	—	0.00	1.00	1,291
Elite occupation	0.08	—	0.00	1.00	1,291
Executive status	0.05	—	0.00	1.00	1,291
Corporate elite	0.00	—	0.00	0.00	1,291
Elite position	0.02	—	0.00	1.00	1,291
Elite tract	0.29	—	0.00	1.00	1,291
Cognitive ability	4.76	1.80	0.00	9.00	574
Education	4.93	1.72	2.00	8.00	1,289
Wealth	−240	8,221	−9,672	283,877	1,291
Married or cohabiting	0.37	—	0.00	1.00	1,291
Country of origin	1.81	0.39	1.00	2.00	1,291
Number of children	1.11	1.12	0.00	6.00	1,291
Father Level					
Year of birth	1952.87	2.54	1950.00	1965.00	1,291
Income	432	208	57	2,176	1,291
Social capital	0.70	2.05	−0.45	23.92	1,291
Elite education	0.13	—	0.00	1.00	1,291
Elite occupation	0.24	—	0.00	1.00	1,291
Executive status	0.15	—	0.00	1.00	1,291
Corporate elite	0.00	—	0.00	1.00	1,291
Elite position	0.04	—	0.00	1.00	1,291
Elite tract	0.25	—	0.00	1.00	1,291
Cognitive ability	6.55	1.67	1.00	9.00	1,291
Education	4.66	1.80	1.00	8.00	1,287
Wealth	363	4,244	−14,887	67,266	1,274
Married or cohabiting	0.97	—	0.00	1.00	839
Country of origin	0.06	0.32	0.00	2.00	1,291
Number of children	1.74	0.89	0.00	6.00	1,291

Notes: Summary statistics for the adoption analysis sample. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Each of the elite indicators reflects the maximum observed value over the 2003–2020 observation window. The remaining variables are measured at age 35, with the exception of wealth, which is measured at age 50 for fathers. Income is total taxable income above 1G in 1000s NOK. Cognitive ability is the score from the military conscription test. Education is the highest completed broad education level. Wealth is gross assets minus total liabilities in 1000s NOK. Country of origin equals 0 for Norwegian citizens, 1 for Nordic, EU/EFTA, UK, US, Canadian, Australian, or New Zealand nationals, and 2 for all others. The sample is subject to the adoption analysis sample restrictions described in Section 3.

Table A.8: Intergenerational persistence of income dropping the 1G minimum income restriction

	(1)	(2)	(3)	(4)	(5)	(6)
Father social capital rank	0.13*** (0.00)			0.09*** (0.00)	0.07*** (0.00)	0.07*** (0.00)
Father income rank		0.17*** (0.00)		0.15*** (0.00)	0.12*** (0.00)	0.11*** (0.00)
Father cognitive ability rank			0.14*** (0.00)		0.09*** (0.00)	0.09*** (0.00)
Demographic controls						X
R^2	0.014	0.023	0.020	0.029	0.037	0.130

Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable is the child's percentile rank in their cohort-specific income distribution at age 35. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3 with the exception of the 1G minimum earnings restriction. Number of observations: 229,996. Mean of the dependent variable: 55.33. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.9: Intergenerational persistence of income, measuring top-100 firms by wagebill

	(1)	(2)	(3)	(4)	(5)	(6)
Father social capital rank	0.14*** (0.00)			0.11*** (0.00)	0.08*** (0.00)	0.08*** (0.00)
Father income rank		0.16*** (0.00)		0.13*** (0.00)	0.10*** (0.00)	0.10*** (0.00)
Father cognitive ability rank			0.14*** (0.00)		0.10*** (0.00)	0.09*** (0.00)
Demographic controls						X
R^2	0.017	0.019	0.020	0.028	0.036	0.149

Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable is the child's percentile rank in their cohort-specific income distribution at age 35. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest wagebill. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 210,023. Mean of the dependent variable: 53.53. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.10: Intergenerational persistence of income, measuring top-500 firms by profit

	(1)	(2)	(3)	(4)	(5)	(6)
Father social capital rank	0.14*** (0.00)			0.10*** (0.00)	0.08*** (0.00)	0.08*** (0.00)
Father income rank		0.16*** (0.00)		0.13*** (0.00)	0.10*** (0.00)	0.10*** (0.00)
Father cognitive ability rank			0.14*** (0.00)		0.10*** (0.00)	0.10*** (0.00)
Demographic controls						X
R^2	0.016	0.019	0.020	0.027	0.035	0.148

Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable is the child's percentile rank in their cohort-specific income distribution at age 35. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 500 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 210,023. Mean of the dependent variable: 53.53. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.11: Proportional Weights

	Weight
Elite education	0.178
Elite occupation	0.068
Executive status	0.183
Corporate elite	0.181
Elite position	0.174
Elite tract	0.216

Notes: Proportional weights from the swindex procedure of Anderson (2008), used to construct the social capital index. The six binary elite indicators are standardized and aggregated using weights that are inversely proportional to the generalized variance of the indicators, assigning less weight to components which display a higher degree of collinearity. Weights sum to 1. The index is constructed using the maximum observed value of each indicator over the 2003–2020 observation window. The sample is subject to the main analysis sample restrictions described in Section 3.

Table A.12: Correlations across parental rank measures

	Father social capital rank	Mother social capital rank	Parental social capital rank	Father income rank	Mother income rank	Parental income rank
Father social capital rank	1.00					
Mother social capital rank	0.36	1.00				
Parent social capital rank	0.88	0.63	1.00			
Father income rank	0.28	0.10	0.24	1.00		
Mother income rank	0.09	0.20	0.15	0.06	1.00	
Parent income rank	0.29	0.13	0.27	0.96	0.21	1.00

Notes: Pairwise correlations across paternal, maternal, and maximum parental rank measures for income and social capital. Social capital rank is the percentile rank in the cohort-specific distribution of the social capital index. Income rank is the percentile rank in the cohort-specific distribution of income above 1G. Parental rank is the rank of the higher ranking parent. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 199,590.

Table A.13: The joint distribution of social capital and income

Income ventile	Mean SC index	SD SC index	Share with indicator (%)						<i>N</i>
			Elite education	Elite occupation	Executive status	Corporate elite	Elite position	Elite tract	
p1–p5	−0.02	0.91	1.4	6.4	9.1	0.0	0.6	15.2	6,599
p6–p10	−0.04	0.90	0.8	7.2	9.5	0.0	0.6	13.5	6,599
p11–p15	−0.11	0.86	0.8	5.6	7.2	0.0	0.8	11.5	6,599
p16–p20	−0.14	0.79	0.4	5.8	7.2	0.0	0.5	10.2	6,607
p21–p25	−0.13	0.91	0.4	5.5	6.6	0.1	0.7	10.5	6,598
p26–p30	−0.11	0.89	0.6	6.4	6.7	0.1	0.9	11.1	6,594
p31–p35	−0.10	0.94	0.6	6.8	7.6	0.1	1.1	9.9	6,606
p36–p40	−0.07	0.88	1.0	7.6	7.6	0.0	1.4	11.6	6,589
p41–p45	−0.05	0.98	1.4	7.5	7.8	0.1	1.2	11.8	6,602
p46–p50	0.00	1.00	1.3	8.8	9.0	0.1	1.8	12.6	6,598
p51–p55	0.05	1.06	1.5	10.2	9.4	0.1	2.0	13.5	6,598
p56–p60	0.09	1.12	2.0	11.5	10.4	0.1	2.2	13.5	6,605
p61–p65	0.13	1.17	2.8	13.2	10.6	0.1	2.2	14.8	6,597
p66–p70	0.22	1.32	3.0	14.5	12.3	0.2	3.0	15.3	6,598
p71–p75	0.29	1.33	4.0	16.8	13.1	0.2	3.2	17.2	6,594
p76–p80	0.41	1.45	5.4	20.5	14.6	0.2	3.8	18.6	6,602
p81–p85	0.57	1.51	7.5	25.5	16.2	0.2	4.7	22.2	6,597
p86–p90	0.90	1.97	12.1	34.0	18.8	0.5	6.9	25.6	6,600
p91–p95	1.38	2.45	18.7	46.0	21.6	0.9	10.6	30.3	6,597
p96–p100	2.06	3.07	22.5	55.9	29.8	1.8	14.4	40.6	6,598

Notes: Each row corresponds to a ventile of the father income distribution. Father income is average annual total taxable income above 1G at age 35. Fathers are deduplicated to the father level. The social capital index is a standardized weighted index (Anderson, 2008) of six binary elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). The mean and standard deviation are reported in columns 2 and 3. Component columns report the share of fathers in each income ventile holding each indicator (%). The sample is subject to the main analysis sample restrictions described in Section 3.

Table A.14: Balance on pre-adoption characteristics

	Q1	Q2	Q3	Q4	<i>p</i> -value
Panel A: Social capital rank					
Female	0.512	0.621	0.486	0.505	0.007
Age at immigration	1.053	1.027	1.042	1.144	0.752
Country of origin	1.837	1.918	1.766	1.743	0.000
Observations	430	256	286	319	
Panel B: Income rank					
Female	0.514	0.560	0.525	0.505	0.512
Age at immigration	1.158	1.124	0.975	1.016	0.331
Country of origin	1.892	1.870	1.855	1.639	0.000
Observations	323	323	324	321	
Panel C: Cognitive ability rank					
Female	0.550	0.526	0.543	0.482	0.321
Age at immigration	0.997	1.016	1.079	1.190	0.333
Country of origin	1.874	1.832	1.801	1.743	0.000
Observations	342	321	317	311	

Notes: Each cell reports the mean of the row characteristic within the corresponding quartile of the adopting father's social capital rank in Panel A, income rank in Panel B, or cognitive ability rank in Panel C. The *p*-value column reports the p-value from an F-test of joint equality across the four groups. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. Country of origin equals 0 for Norwegian citizens, 1 for Nordic, EU/EFTA, UK, US, Canadian, Australian, or New Zealand nationals, and 2 for all others. The sample is subject to the adoption analysis sample restrictions described in Section 3. Number of observations: 1,291.

Table A.15: Balance on pre-adoption characteristics, conditional on country of origin

	Q1	Q2	Q3	Q4	<i>p</i> -value
Panel A: Social capital rank					
Female	0.512	0.621	0.486	0.505	0.013
Age at immigration	1.053	1.027	1.042	1.144	0.501
Observations	430	256	286	319	
Panel B: Income rank					
Female	0.514	0.560	0.525	0.505	0.614
Age at immigration	1.158	1.124	0.975	1.016	0.461
Observations	323	323	324	321	
Panel C: Cognitive ability rank					
Female	0.550	0.526	0.543	0.482	0.403
Age at immigration	0.997	1.016	1.079	1.190	0.165
Observations	342	321	317	311	

Notes: Each cell reports the mean of the row characteristic within the corresponding quartile of the adopting father's social capital rank in Panel A, income rank in Panel B, or cognitive ability rank in Panel C. The *p*-value column reports the *p*-value from an F-test of joint equality across the four groups, controlling for country of origin. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. Country of origin equals 0 for Norwegian citizens, 1 for Nordic, EU/EFTA, UK, US, Canadian, Australian, or New Zealand nationals, and 2 for all others. The sample is subject to the adoption analysis sample restrictions described in Section 3. Number of observations: 1,291.

Table A.16: Balance on pre-win characteristics

	Large prize	Small prize	Difference	<i>p</i> -value
<i>Child characteristics</i>				
Year of birth	1983.26	1983.13	0.13	0.13
Female	0.50	0.47	0.03	0.05
<i>Father characteristics</i>				
Year of birth	1956.55	1956.37	0.18	0.09
Cognitive ability	5.75	5.75	0.01	0.89
Country of origin	0.03	0.02	0.01	0.03
Income	286.35	287.09	−0.74	0.84
Employed	0.93	0.92	0.00	0.67
Number of children	0.46	0.53	−0.07	0.00
Observations	1,914	1,714		

Notes: Each row reports means for large and small lottery prize winners on pre-determined characteristics. Large prizes are those above the 75th percentile of the year-specific distribution of prizes. Small prizes are those at or below the 25th percentile of the year-specific distribution of prizes. The *p*-value column reports the *p*-value from a two-sided *t*-test of equality of means. Cognitive ability is the score from the military conscription test. Country of origin equals 0 for Norwegian citizens, 1 for Nordic, EU/EFTA, UK, US, Canadian, Australian, or New Zealand nationals, and 2 for all others. Income is total taxable income above 1G in 1000s NOK. Employment is a binary indicator for earnings above 1G. Income, employment and number of children are all measured for the father in the year before the birth of the child. The sample is subject to the lottery analysis sample restrictions described in Section 3.

Table A.17: Intergenerational persistence of social capital and income under lottery shocks

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A: Child social capital rank</i>							
Father social capital rank		0.25*** (0.02)			0.23*** (0.02)	0.21*** (0.02)	0.21*** (0.02)
Father income rank			0.13*** (0.02)		0.07*** (0.02)	0.05*** (0.02)	0.06*** (0.02)
Father cognitive ability rank				0.14*** (0.01)		0.08*** (0.02)	0.08*** (0.02)
Demographic controls							X
R^2		0.060	0.017	0.024	0.065	0.072	0.080
<i>Panel B: Child income rank</i>							
Father social capital rank		0.16*** (0.02)			0.13*** (0.02)	0.11*** (0.02)	0.11*** (0.02)
Father income rank			0.18*** (0.02)		0.14*** (0.02)	0.12*** (0.02)	0.11*** (0.02)
Father cognitive ability rank				0.14*** (0.02)		0.08*** (0.02)	0.08*** (0.02)
Demographic controls							X
R^2		0.021	0.024	0.018	0.036	0.042	0.139

Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable in Panel A is the child's percentile rank in their cohort-specific social capital distribution. The dependent variable in Panel B is defined analogously for the child's cohort-specific income distribution at age 35. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest total profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the lottery analysis sample restrictions described in Section 3. Number of observations: 3,628 in Panel A, 3,628 in Panel B. Mean of the dependent variable: 48.77 in Panel A, 54.39 in Panel B. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.18: Characteristics of lottery players and non-players

	Non-players	Players	Difference	<i>p</i> -value
<i>Child characteristics</i>				
Year of birth	1981.62	1983.15	1.53	0.00
Female	0.49	0.49	0.00	0.90
<i>Father characteristics</i>				
Year of birth	1955.89	1956.52	0.63	0.00
Country of origin	0.03	0.02	−0.00	0.22
Number of children	2.36	2.32	−0.03	0.00
Income rank	65.06	64.50	−0.57	0.06
Cognitive ability rank	47.76	47.69	−0.07	0.83
Social capital rank	52.66	51.60	−1.06	0.00
Elite education	0.04	0.03	−0.02	0.00
Elite occupation	0.16	0.15	−0.01	0.02
Executive status	0.12	0.12	−0.00	0.39
Corporate elite	0.00	0.00	0.00	0.74
Elite position	0.03	0.03	−0.00	0.20
Elite tract	0.16	0.16	−0.00	0.59
Observations	203,136	6,887		
<i>p</i> -value, joint <i>F</i> -test (SC proxies)				0.000

Notes: Each row reports means for non-players and players. Non-players are children whose parents had no recorded lottery prize while they were aged 0 to 18. Players are children whose parents had at least one recorded lottery prize over the same period. The *p*-value column reports the *p*-value from a two-sided *t*-test of equality of means. Country of origin equals 0 for Norwegian citizens, 1 for Nordic, EU/EFTA, UK, US, Canadian, Australian, or New Zealand nationals, and 2 for all others. Number of children is recorded at age 35. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Income is measured as total taxable income above 1G. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. The social capital components reflect the maximum observed value over the observation window (2003–2020). The joint *F*-test *p*-value is from a linear probability model regressing the player indicator on the six social capital components jointly. The sample is subject to the main analysis sample restrictions described in Section 3.

Table A.19: Intergenerational persistence of income, top-tail inputs

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: Top Decile Inputs</i>						
Father top 10% social capital	8.80*** (0.18)			6.44*** (0.19)	4.64*** (0.19)	4.60*** (0.18)
Father top 10% income		8.70*** (0.16)		6.98*** (0.17)	5.35*** (0.17)	5.19*** (0.16)
Father cognitive ability rank			0.14*** (0.00)		0.11*** (0.00)	0.11*** (0.00)
Demographic controls						X
R^2	0.011	0.013	0.020	0.019	0.030	0.143
<i>Panel B: Top Ventile Inputs</i>						
Father top 5% social capital	9.29*** (0.24)			6.85*** (0.25)	4.90*** (0.25)	4.84*** (0.24)
Father top 5% income		9.80*** (0.22)		8.10*** (0.23)	6.03*** (0.23)	5.83*** (0.22)
Father cognitive ability rank			0.14*** (0.00)		0.12*** (0.00)	0.12*** (0.00)
Demographic controls						X
R^2	0.007	0.009	0.020	0.013	0.027	0.141

Notes: OLS estimates of intergenerational mobility regressions between father and child. The dependent variable is the child's percentile rank in their cohort-specific income distribution at age 35. Father top social capital is a binary indicator equal to 1 if the father's social capital score falls in the top decile (Panel A) or top ventile (Panel B) of his cohort-specific distribution. Father top income is a binary indicator equal to 1 if the father's income falls in the top decile (Panel A) or top ventile (Panel B) of his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest total profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 210,023. Mean of the dependent variable: 53.53. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.20: Top-tail income attainment, top-tail inputs

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: Child top 10% income</i>						
Father top 10% social capital	9.09*** (0.21)			6.46*** (0.22)	5.31*** (0.22)	5.30*** (0.21)
Father top 10% income		9.52*** (0.18)		7.80*** (0.19)	6.75*** (0.20)	6.68*** (0.19)
Father cognitive ability rank			0.11*** (0.00)		0.07*** (0.00)	0.07*** (0.00)
Demographic controls						X
R^2	0.009	0.013	0.009	0.017	0.020	0.064
<i>Panel B: Child top 5% income</i>						
Father top 5% social capital	6.19*** (0.20)			4.39*** (0.21)	3.69*** (0.21)	3.69*** (0.20)
Father top 5% income		7.08*** (0.18)		5.99*** (0.19)	5.26*** (0.19)	5.20*** (0.19)
Father cognitive ability rank			0.06*** (0.00)		0.04*** (0.00)	0.04*** (0.00)
Demographic controls						X
R^2	0.005	0.007	0.005	0.010	0.012	0.036

Notes: OLS estimates of intergenerational mobility regressions between father and child. The dependent variable in Panel A is a binary indicator equal to 1 if the child's income falls in the top decile of their cohort-specific income distribution at age 35, scaled by 100. The dependent variable in Panel B is defined analogously for the top ventile. Father top social capital is a binary indicator equal to 1 if the father's social capital score falls in the top decile (Panel A) or top ventile (Panel B) of his cohort-specific distribution. Father top income is a binary indicator equal to 1 if the father's income falls in the top decile (Panel A) or top ventile (Panel B) of his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest total profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 210,023. Mean of the dependent variable: 11.14 in Panel A, 5.52 in Panel B. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.21: Relative upward mobility in social capital

	(1)	(2)	(3)	(4)	(5)	(6)
Father social capital rank	-0.15*** (0.00)			-0.18*** (0.00)	-0.21*** (0.00)	-0.21*** (0.00)
Father income rank		0.04*** (0.00)		0.09*** (0.00)	0.05*** (0.00)	0.06*** (0.00)
Father cognitive ability rank			0.09*** (0.00)		0.13*** (0.00)	0.13*** (0.00)
Demographic controls						X
R^2	0.008	0.000	0.003	0.010	0.017	0.022

Notes: OLS estimates of intergenerational mobility regressions. The dependent variable is a binary indicator equal to 1 if the child's percentile rank in their cohort-specific social capital distribution exceeds the father's rank, scaled by 100. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest total profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 210,022. Mean of the dependent variable: 23.61. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.22: Marriage rates

	(1)	(2)	(3)	(4)	(5)	(6)
Father social capital rank	0.06*** (0.01)			0.05*** (0.01)	0.03*** (0.01)	0.03*** (0.01)
Father income rank		0.08*** (0.01)		0.07*** (0.01)	0.06*** (0.01)	0.05*** (0.01)
Father cognitive ability rank			0.08*** (0.00)		0.06*** (0.01)	0.05*** (0.01)
Demographic controls						X
R^2	0.001	0.002	0.002	0.002	0.003	0.020

Notes: OLS estimates of linear probability regressions. The dependent variable is a binary indicator equal to 1 if the child has a formal spouse at age 35, scaled by 100. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 130,175. Mean of the dependent variable: 42.64. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.23: Intergenerational persistence of social capital by gender

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: Girls</i>						
Father social capital rank	0.21*** (0.00)			0.19*** (0.00)	0.16*** (0.00)	0.16*** (0.00)
Father income rank		0.12*** (0.00)		0.07*** (0.00)	0.04*** (0.00)	0.04*** (0.00)
Father cognitive ability rank			0.16*** (0.00)		0.11*** (0.00)	0.11*** (0.00)
Demographic controls						X
R^2	0.045	0.015	0.033	0.050	0.062	0.063
<i>Panel B: Boys</i>						
Father social capital rank	0.23*** (0.00)			0.21*** (0.00)	0.18*** (0.00)	0.18*** (0.00)
Father income rank		0.14*** (0.00)		0.08*** (0.00)	0.06*** (0.00)	0.06*** (0.00)
Father cognitive ability rank			0.16*** (0.00)		0.10*** (0.00)	0.10*** (0.00)
Demographic controls						X
R^2	0.050	0.018	0.030	0.055	0.066	0.067

Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable is the child's percentile rank in their cohort-specific social capital distribution. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 102,131 in Panel A, 107,891 in Panel B. Mean of the dependent variable: 47.21 in Panel A, 50.77 in Panel B. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.24: Intergenerational persistence of income by gender

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: Girls</i>						
Father social capital rank	0.16*** (0.00)			0.12*** (0.00)	0.09*** (0.00)	0.09*** (0.00)
Father income rank		0.15*** (0.00)		0.11*** (0.00)	0.08*** (0.00)	0.08*** (0.00)
Father cognitive ability rank			0.18*** (0.00)		0.14*** (0.00)	0.14*** (0.00)
Demographic controls						X
R^2	0.023	0.020	0.039	0.034	0.053	0.056
<i>Panel B: Boys</i>						
Father social capital rank	0.13*** (0.00)			0.09*** (0.00)	0.07*** (0.00)	0.07*** (0.00)
Father income rank		0.17*** (0.00)		0.14*** (0.00)	0.13*** (0.00)	0.12*** (0.00)
Father cognitive ability rank			0.11*** (0.00)		0.06*** (0.00)	0.06*** (0.00)
Demographic controls						X
R^2	0.014	0.023	0.013	0.029	0.032	0.036

Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable is the child's percentile rank in their cohort-specific income distribution at age 35. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 102,131 in Panel A, 107,892 in Panel B. Mean of the dependent variable: 43.97 in Panel A, 62.59 in Panel B. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.25: Predictive power of the components in turn

	(1)	(2)	(3)	(4)	(5)	(6)
Father elite education	6.48*** (0.29)					
Father income rank	0.11*** (0.00)	0.10*** (0.00)	0.11*** (0.00)	0.12*** (0.00)	0.11*** (0.00)	0.11*** (0.00)
Father cognitive ability rank	0.10*** (0.00)	0.11*** (0.00)	0.11*** (0.00)	0.11*** (0.00)	0.11*** (0.00)	0.11*** (0.00)
Father elite occupation		3.82*** (0.16)				
Father executive status			3.82*** (0.18)			
Father corporate elite				6.58*** (1.15)		
Father elite position					2.68*** (0.33)	
Father elite tract						2.93*** (0.16)
Demographic controls	X	X	X	X	X	X
R^2	0.146	0.146	0.146	0.144	0.144	0.145

Notes: OLS estimates of intergenerational mobility regressions between father and child. The dependent variable is the child's percentile rank in their cohort-specific income distribution at age 35. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Income is measured as total taxable income above 1G. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Elite education indicates completion of a highly selective degree program; elite occupation indicates employment in an occupation whose median income falls in the top decile; executive status indicates a senior management or public leadership role (ISCO group 11); corporate elite indicates a CEO, CFO, board, or senior management position at a top firm; elite position identifies earners in the top decile of the income distribution at a top firm; elite tract indicates residence in a census tract in the top decile of the distribution of neighborhood social capital scores. Top firms are the 100 Norwegian firms with the highest profit. Each of the components reflects the maximum observed value over the observation window (2003–2020). Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 210,023. Mean of the dependent variable: 53.53. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.26: Predictive power of the components jointly

	(1)	(2)	(3)	(4)	(5)
Father elite education	9.95*** (0.31)	7.99*** (0.31)	6.60*** (0.32)	5.52*** (0.32)	5.31*** (0.30)
Father elite occupation	4.31*** (0.19)	2.70*** (0.19)	3.30*** (0.19)	2.12*** (0.19)	2.20*** (0.18)
Father executive status	4.10*** (0.20)	3.73*** (0.20)	3.21*** (0.20)	3.05*** (0.20)	2.95*** (0.19)
Father corporate elite	3.86*** (1.24)	3.22*** (1.24)	3.46*** (1.24)	2.99** (1.23)	2.96** (1.16)
Father elite position	2.93*** (0.36)	1.54*** (0.36)	2.35*** (0.36)	1.29*** (0.36)	1.33*** (0.34)
Father elite tract	3.20*** (0.17)	2.62*** (0.17)	2.48*** (0.17)	2.12*** (0.17)	2.25*** (0.16)
Father income rank		0.12*** (0.00)		0.10*** (0.00)	0.10*** (0.00)
Father cognitive ability rank			0.11*** (0.00)	0.09*** (0.00)	0.09*** (0.00)
Demographic controls					X
R^2	0.020	0.030	0.030	0.037	0.150

Notes: OLS estimates of intergenerational mobility regressions between father and child. The dependent variable is the child's percentile rank in their cohort-specific income distribution at age 35. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Income is measured as total taxable income above 1G. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Elite education indicates completion of a highly selective degree program; elite occupation indicates employment in an occupation whose median income falls in the top decile; executive status indicates a senior management or public leadership role (ISCO group 11); corporate elite indicates a CEO, CFO, board, or senior management position at a top firm; elite position identifies earners in the top decile of the income distribution at a top firm; elite tract indicates residence in a census tract in the top decile of the distribution of neighborhood social capital scores. Top firms are the 100 Norwegian firms with the highest profit. Each of the components reflects the maximum observed value over the observation window (2003–2020). Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 210,023. Mean of the dependent variable: 53.53. Standard errors in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.27: Robustness to index composition

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Baseline	Drop elite education	Drop elite occupation	Drop executive status	Drop corporate elite	Drop elite position	Drop elite tract
Father social capital rank	0.08*** (0.00)	0.08*** (0.00)	0.09*** (0.00)	0.09*** (0.00)	0.09*** (0.00)	0.09*** (0.00)	0.09*** (0.00)
Father income rank	0.10*** (0.00)	0.10*** (0.00)	0.11*** (0.00)	0.10*** (0.00)	0.10*** (0.00)	0.10*** (0.00)	0.10*** (0.00)
Father cognitive ability rank	0.10*** (0.00)	0.10*** (0.00)	0.10*** (0.00)	0.10*** (0.00)	0.10*** (0.00)	0.10*** (0.00)	0.10*** (0.00)
Demographic controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Index components	6	4	4	4	4	4	5
Observations	210,023	210,023	210,023	210,023	210,023	210,023	210,023
R^2	0.15	0.15	0.15	0.15	0.15	0.15	0.15

Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable is the child's percentile rank in their cohort-specific income distribution at age 35. Social capital is a standardized weighted index (Anderson, 2008). Column (1) uses the baseline social capital index constructed from all six elite indicators. Columns (2)–(7) each reconstruct the index after dropping the indicated component. In Columns (2)–(6) elite residential tract is also excluded, as the dropped component enters its construction. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Income is measured as total taxable income above 1G. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.28: Intergenerational persistence of income, controlling for wealth and education

	(1)	(2)	(3)
<i>Panel A: Controlling for wealth</i>			
Father wealth rank	0.05*** (0.00)		0.05*** (0.00)
Father social capital rank		0.08*** (0.00)	0.08*** (0.00)
Father income rank		0.10*** (0.00)	0.10*** (0.00)
Father cognitive ability rank		0.10*** (0.00)	0.09*** (0.00)
Demographic controls		X	X
R^2	0.004	0.149	0.152
<i>Panel B: Controlling for education</i>			
Father education rank	0.18*** (0.00)		0.10*** (0.00)
Father social capital rank		0.08*** (0.00)	0.07*** (0.00)
Father income rank		0.10*** (0.00)	0.08*** (0.00)
Father cognitive ability rank		0.10*** (0.00)	0.05*** (0.00)
Demographic controls		X	X
R^2	0.028	0.148	0.154

Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable is the child's percentile rank in their cohort-specific income distribution at age 35. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Father wealth rank is the father's percentile rank in his cohort-specific wealth distribution at age 50. Father education rank is the father's percentile rank in his cohort-specific education level distribution at age 35. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. Wealth is gross assets minus total liabilities. Education is the highest completed broad education level. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 208,048 in Panel A, 209,170 in Panel B. Mean of the dependent variable: 53.57 in Panel A, 53.56 in Panel B. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.29: Intergenerational persistence of income, entropy balanced

	(1)	(2)	(3)	(4)	(5)
Father social capital rank	0.17*** (0.00)			0.13*** (0.00)	0.10*** (0.00)
Father income rank		0.19*** (0.00)		0.15*** (0.00)	0.12*** (0.00)
Father cognitive ability rank			0.17*** (0.00)		0.11*** (0.00)
R^2	0.025	0.027	0.029	0.039	0.050

Notes: Entropy-balanced OLS estimates of rank-rank regressions between father and child. Entropy balancing reweights observations to match the covariate distribution of high social capital fathers (ranking above 75th percentile) to that of low social capital fathers (ranking below 25th percentile). Balancing covariates include child's year of birth, gender, number of siblings, father's age at birth, mother's age at birth, immigration background, and county of birth. The dependent variable is the child's percentile rank in their cohort-specific income distribution at age 35. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 173,957. Mean of the dependent variable: 52.80. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.30: Intergenerational persistence of income, continuous social capital components

	(1)	(2)	(3)	(4)	(5)	(6)
Father social capital rank	0.16*** (0.00)			0.12*** (0.00)	0.09*** (0.00)	0.10*** (0.00)
Father income rank		0.16*** (0.00)		0.11*** (0.00)	0.09*** (0.00)	0.08*** (0.00)
Father cognitive ability rank			0.14*** (0.00)		0.09*** (0.00)	0.09*** (0.00)
Demographic controls						X
R^2	0.024	0.019	0.020	0.031	0.037	0.151

Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable is the child's percentile rank in their cohort-specific income distribution at age 35. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining four continuous inputs (education rank, occupation rank, wage rank within firm, and neighborhood rank), see Section 5.6. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 210,023. Mean of the dependent variable: 53.53. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.31: Intergenerational persistence of income, social capital attained by age 50

	(1)	(2)	(3)	(4)	(5)	(6)
Father social capital rank	0.17*** (0.00)			0.12*** (0.00)	0.09*** (0.00)	0.09*** (0.00)
Father income rank		0.16*** (0.00)		0.13*** (0.00)	0.11*** (0.00)	0.10*** (0.00)
Father cognitive ability rank			0.14*** (0.00)		0.10*** (0.00)	0.10*** (0.00)
Demographic controls						X
R^2	0.014	0.020	0.020	0.026	0.035	0.146

Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable is the child's percentile rank in their cohort-specific income distribution at age 35. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract), taking the maximum value attained by age 50. Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 179,191. Mean of the dependent variable: 53.40. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.32: Intergenerational persistence of income, sum of components

	(1)	(2)	(3)	(4)	(5)	(6)
Father social capital rank	0.14*** (0.00)			0.11*** (0.00)	0.08*** (0.00)	0.08*** (0.00)
Father income rank		0.16*** (0.00)		0.13*** (0.00)	0.10*** (0.00)	0.10*** (0.00)
Father cognitive ability rank			0.14*** (0.00)		0.10*** (0.00)	0.10*** (0.00)
Demographic controls						X
R^2	0.016	0.019	0.020	0.027	0.035	0.149

Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable is the child's percentile rank in their cohort-specific income distribution at age 35. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is the sum of six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 210,023. Mean of the dependent variable: 53.53. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.33: Intergenerational persistence of income, mean of components

	(1)	(2)	(3)	(4)	(5)	(6)
Father social capital rank	0.14*** (0.00)			0.11*** (0.00)	0.08*** (0.00)	0.08*** (0.00)
Father income rank		0.16*** (0.00)		0.13*** (0.00)	0.10*** (0.00)	0.10*** (0.00)
Father cognitive ability rank			0.14*** (0.00)		0.10*** (0.00)	0.10*** (0.00)
Demographic controls						X
R^2	0.016	0.019	0.020	0.027	0.035	0.149

Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable is the child's percentile rank in their cohort-specific income distribution at age 35. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is the mean of six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 210,023. Mean of the dependent variable: 53.53. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.34: Intergenerational persistence of income, GLS-weighted standardized index

	(1)	(2)	(3)	(4)	(5)	(6)
Father social capital rank	0.14*** (0.00)			0.10*** (0.00)	0.08*** (0.00)	0.08*** (0.00)
Father income rank		0.16*** (0.00)		0.13*** (0.00)	0.10*** (0.00)	0.10*** (0.00)
Father cognitive ability rank			0.14*** (0.00)		0.10*** (0.00)	0.10*** (0.00)
Demographic controls						X
R^2	0.016	0.019	0.020	0.027	0.035	0.148

Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable is the child's percentile rank in their cohort-specific income distribution at age 35. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a GLS-weighted standardized index (Anderson, 2008) combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 210,023. Mean of the dependent variable: 53.53. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.35: Intergenerational correlations in social capital proxies

	Elite education	Elite occupation	Executive status	Corporate elite	Elite position	Elite tract
Elite education	0.209	0.100	0.042	0.025	0.043	0.093
Elite occupation	0.050	0.077	0.041	0.021	0.031	0.043
Executive status	0.001	0.022	0.055	0.004	0.000	0.018
Corporate elite	0.001	0.005	0.008	0.004	-0.001	0.007
Elite position	0.009	0.016	-0.002	0.007	0.030	0.008
Elite tract	0.129	0.093	0.058	0.027	0.042	0.269

Notes: Each cell reports the pairwise correlation between a child (row) and father (column) social capital proxy. Elite education indicates completion of a highly selective degree program; elite occupation indicates employment in an occupation whose median income falls in the top decile; executive status indicates a senior management or public leadership role (ISCO group 11); corporate elite indicates a CEO, CFO, board, or senior management position at a top firm; elite position identifies earners in the top decile of the income distribution at a top firm; elite tract indicates residence in a census tract in the top decile of the distribution of neighborhood social capital scores. Top firms are the 100 Norwegian firms with the highest profit. Each of the components reflects the maximum observed value over the observation window (2003–2020). The sample is subject to the main analysis sample restrictions described in Section 3. Sample size: 210,012.

Table A.36: Lottery prizes in income rank terms

	Large prize	Small prize
<i>Panel A: Prize amounts</i>		
Mean prize amount	648	20
As multiple of mean income	1.68	0.05
<i>Panel B: Implied rank gain if added to income</i>		
Father at p25	+74.0	+7.8
Father at p50	+49.3	+7.2
Father at p75	+24.5	+3.6

Notes: Panel A reports mean prize amounts for large (top-quartile) and small (bottom-quartile) prizes in the lottery analysis sample. Prize amounts are in real 1,000s NOK (base year 2015). Where a household wins more than once across childhood, we take the largest prize. Income is total taxable annual earnings at age 35 for the father. The multiple of mean income uses the sample-mean computed over unique fathers (386 thousand NOK). Panel B reports implied rank gains. For a father at each baseline income percentile, we add the mean prize amount to his annual earnings and compute what fraction of fathers in the analysis sample earn less than this augmented amount. The gain is the difference between this implied rank and his baseline rank. The sample is subject to the main analysis sample restrictions described in Section 3. Number of observations: 1914 large prizes, 1714 small prizes.

Table A.37: Intergenerational persistence of social capital and income under lottery shocks

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A: Child social capital rank</i>							
Large lottery prize	-0.71 (1.29)	-1.11 (1.25)	-0.94 (1.28)	-1.19 (1.27)	-1.22 (1.25)	-1.43 (1.24)	-1.46 (1.24)
Father social capital rank		0.25*** (0.03)			0.23*** (0.03)	0.21*** (0.03)	0.20*** (0.03)
Father income rank			0.14*** (0.03)		0.09*** (0.03)	0.07** (0.03)	0.08*** (0.03)
Father cognitive ability rank				0.16*** (0.02)		0.10*** (0.02)	0.10*** (0.02)
Demographic controls							X
R^2	0.000	0.061	0.020	0.033	0.069	0.079	0.088
<i>Panel B: Child income rank</i>							
Large lottery prize	2.55* (1.40)	2.30* (1.39)	2.33* (1.39)	2.15 (1.39)	2.17 (1.38)	1.97 (1.38)	2.76** (1.32)
Father social capital rank		0.16*** (0.03)			0.13*** (0.03)	0.11*** (0.03)	0.11*** (0.03)
Father income rank			0.15*** (0.03)		0.12*** (0.03)	0.09*** (0.03)	0.09*** (0.03)
Father cognitive ability rank				0.14*** (0.02)		0.09*** (0.03)	0.09*** (0.02)
Demographic controls							X
R^2	0.002	0.022	0.019	0.022	0.032	0.040	0.133

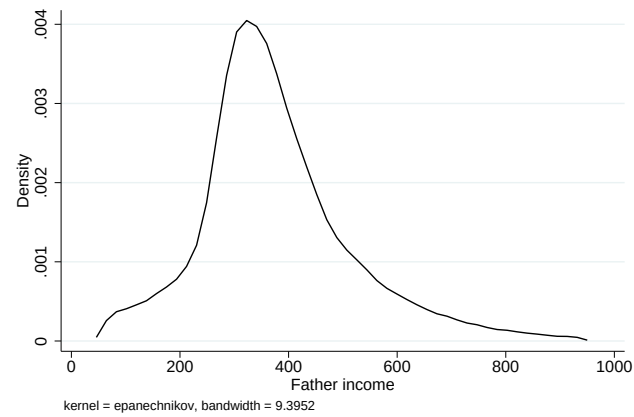
Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable in Panel A is the child's percentile rank in their cohort-specific social capital distribution. The dependent variable in Panel B is defined analogously for the child's cohort-specific income distribution at age 35. Large prize is a binary indicator equal to 1 if either parent won a lottery prize above the 90th percentile of the year-specific distribution of prizes while the child was aged 0-18. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest total profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the lottery analysis sample restrictions described in Section 3. Number of observations: 1,546 in Panel A, 1,546 in Panel B. Mean of the dependent variable: 49.27 in Panel A, 54.44 in Panel B. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.38: Intergenerational persistence of social capital and income under lottery shocks

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A: Child social capital rank</i>							
Large prize	-0.47 (0.60)	-0.38 (0.58)	-0.56 (0.59)	-0.20 (0.59)	-0.44 (0.58)	-0.27 (0.58)	-0.28 (0.58)
Father social capital rank		0.22*** (0.01)			0.20*** (0.01)	0.19*** (0.01)	0.19*** (0.01)
Father income rank			0.12*** (0.01)		0.07*** (0.01)	0.06*** (0.01)	0.06*** (0.01)
Father cognitive ability rank				0.14*** (0.01)		0.08*** (0.01)	0.08*** (0.01)
Demographic controls							X
R^2	0.000	0.049	0.015	0.023	0.054	0.062	0.068
<i>Panel B: Child income rank</i>							
Large prize	0.26 (0.67)	0.32 (0.67)	0.14 (0.66)	0.50 (0.67)	0.21 (0.66)	0.36 (0.66)	0.74 (0.63)
Father social capital rank		0.16*** (0.01)			0.12*** (0.01)	0.11*** (0.01)	0.11*** (0.01)
Father income rank			0.17*** (0.01)		0.14*** (0.01)	0.12*** (0.01)	0.11*** (0.01)
Father cognitive ability rank				0.13*** (0.01)		0.08*** (0.01)	0.07*** (0.01)
Demographic controls							X
R^2	0.000	0.019	0.022	0.016	0.033	0.038	0.137

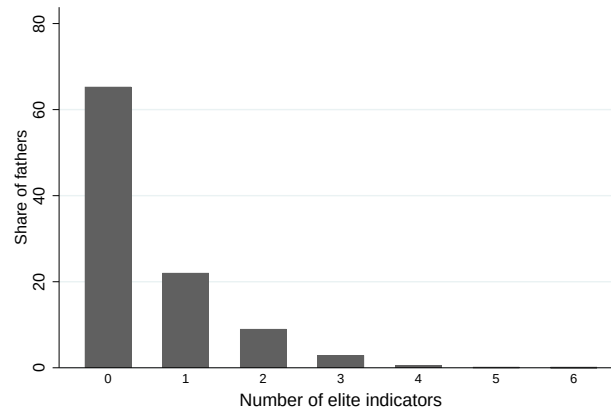
Notes: OLS estimates of rank-rank regressions between father and child. The dependent variable in Panel A is the child's percentile rank in their cohort-specific social capital distribution. The dependent variable in Panel B is defined analogously for the child's cohort-specific income distribution at age 35. Large prize is a binary indicator equal to 1 if either parent won a lottery prize above the median of the year-specific distribution of prizes while the child was aged 0-18. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Father cognitive ability rank is the father's percentile rank in his cohort-specific distribution of military conscription test scores. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest total profit. Income is measured as total taxable income above 1G. Demographic controls include a binary indicator for marriage or cohabitation at age 35, country of origin, and number of children at age 35, all measured for the father, and child gender. The sample is subject to the lottery analysis sample restrictions described in Section 3. Number of observations: 6,887 in Panel A, 6,887 in Panel B. Mean of the dependent variable: 48.28 in Panel A, 54.33 in Panel B. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Figure A.1: Distribution of income



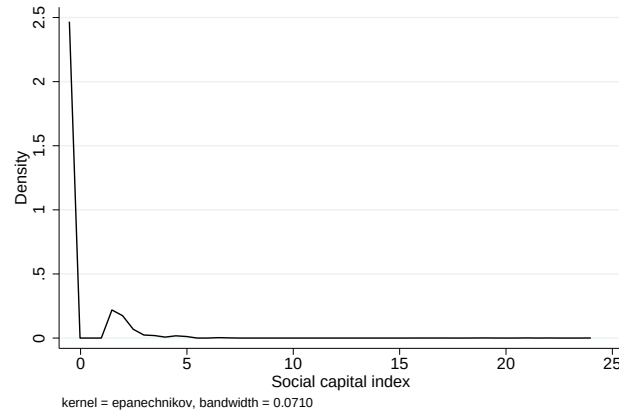
Notes: Kernel density of income. Income is total taxable income above 1G at age 35. The sample is subject to the main analysis sample restrictions described in Section 3. The sample collapses to unique fathers ($N = 131,977$). The distribution is trimmed at the 99th percentile (approximately 941,000 NOK).

Figure A.2: Distribution of social capital components



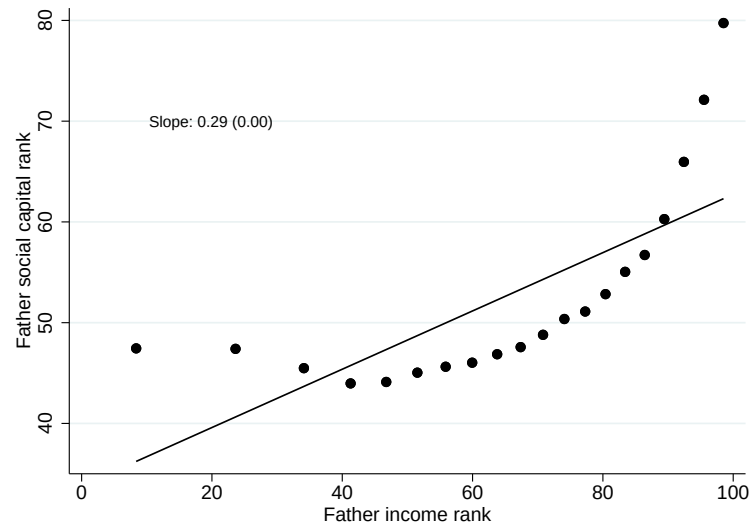
Notes: Each bar shows the share of fathers who attained that number of elite indicators. The six indicators are: elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract. Top firms are the 100 Norwegian firms with the highest profit. Each of the components reflects the maximum observed value over the observation window (2003–2020). The sample is subject to the main analysis sample restrictions described in Section 3, collapsed to unique fathers ($N = 131,977$).

Figure A.3: Distribution of social capital index



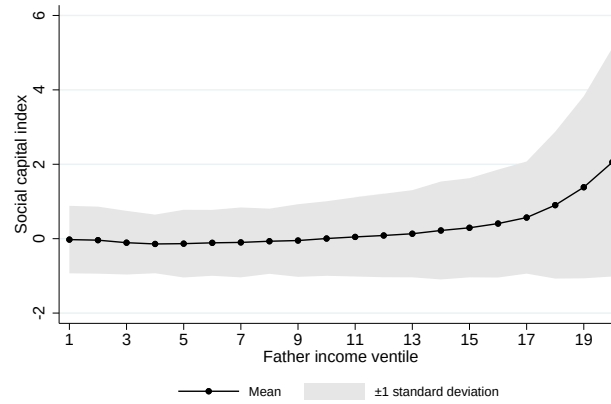
Notes: Kernel density of the social capital index. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. The sample is subject to the main analysis sample restrictions described in Section 3, collapsed to unique fathers ($N = 131,977$).

Figure A.4: Relationship between social capital and income rank



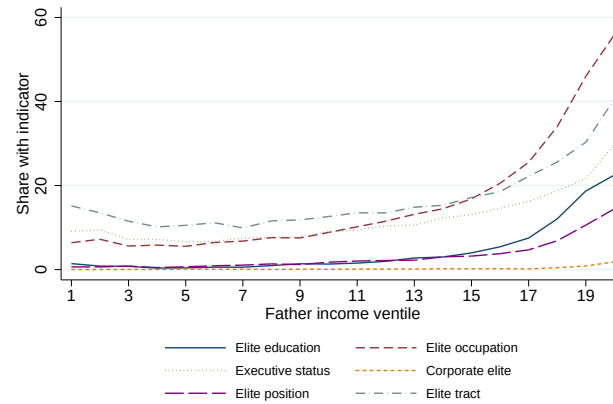
Notes: Binned scatterplot. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Father income rank is the father's percentile rank in his cohort-specific income distribution at age 35. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is measured as total taxable income above 1G. The slope coefficient (standard error) from the corresponding OLS regression is reported in the figure. The sample is subject to the main analysis sample restrictions described in Section 3.

Figure A.5: Social capital across the income distribution



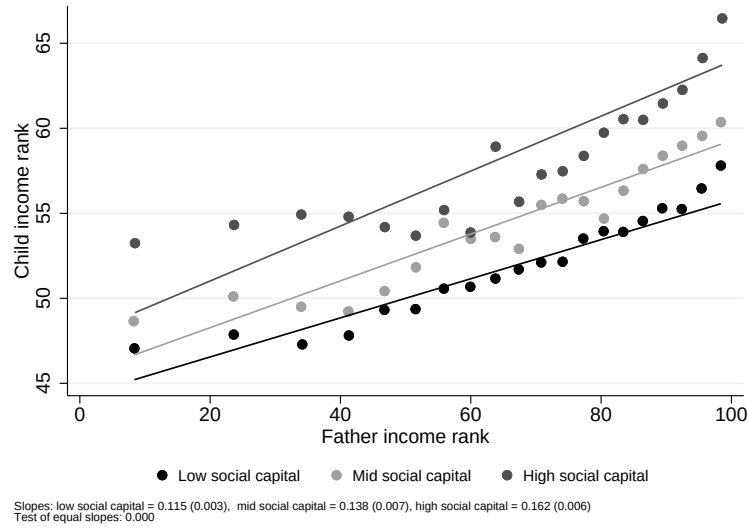
Notes: Mean social capital index ± 1 standard deviation band by ventile of the father income distribution. Father income ventiles are equal-count groups of total taxable income above 1G, measured at age 35. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. The sample is subject to the main analysis sample restrictions described in Section 3, collapsed to unique fathers.

Figure A.6: Elite indicators across the income distribution



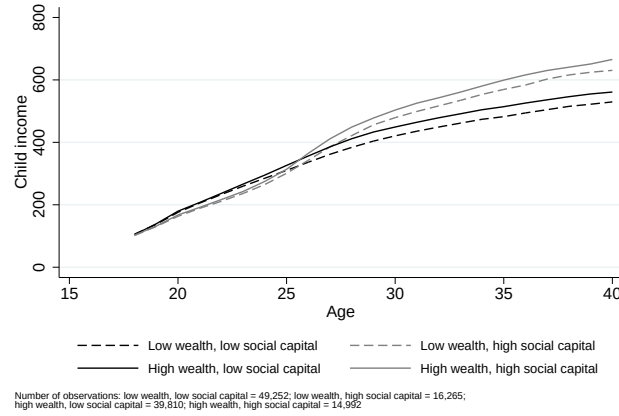
Notes: Each line shows the share (%) of fathers holding that binary elite indicator, by ventile of the father income distribution. Father income ventiles are equal-count groups of total taxable income above 1G, measured at age 35. The six elite indicators are: elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract. Top firms are the 100 Norwegian firms with the highest profit. The sample is subject to the main analysis sample restrictions described in Section 3, collapsed to unique fathers.

Figure A.7: Intergenerational income persistence by social capital group



Notes: Binned scatter plot of child income rank against father income rank, separately by father social capital group. Child income rank is the child's percentile rank in their cohort-specific income distribution. Father social capital rank is the father's percentile rank in his cohort-specific social capital distribution. Low social capital corresponds to fathers in the bottom quartile of the social capital distribution (Q1); mid social capital to the middle two quartiles (Q2–Q3); high social capital to the top quartile (Q4). Father income rank is the father's percentile rank in his cohort-specific income distribution. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Income is total taxable income above 1G, measured at age 35. Slope coefficients (standard errors) are from separate OLS regressions within social capital group, printed alongside p-values testing the null hypothesis that the slopes are equal across groups based on a joint test of the interaction terms between father income rank and social capital group indicators. The sample is subject to the main analysis sample restrictions described in Section 3.

Figure A.8: Life-cycle income trajectories



Notes: Mean child income (1,000 NOK) from age 18 to 40. Children are stratified into four groups by father social capital and wealth ranks: the father's percentile rank in his cohort-specific social capital and wealth distributions respectively. Father wealth rank is measured at age 50. The black dashed line plots children whose fathers rank in the bottom quartile of both distributions; the gray dashed line plots children whose fathers rank in the bottom wealth quartile but the top social capital quartile; the black solid line plots children whose fathers rank in the top wealth quartile but the bottom social capital quartile; the gray solid line plots children whose fathers rank in the top quartile of both distributions. Social capital is a standardized weighted index combining six elite indicators (elite education, elite occupation, executive status, corporate elite, elite position in top firms, and elite residential tract). Top firms are the 100 Norwegian firms with the highest profit. Wealth is gross assets minus total liabilities in 1000s NOK. The sample is subject to the main analysis sample restrictions described in Section 3.