# **The very long arm of wealth:** Effects of intergenerational wealth resources on health in the U.S. over the last three decades

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**Abstract (429 words)**

Background. Health inequalities result from multidimensional socioeconomic inequalities (income, education, wealth, etc.); these inequalities are cumulative over the life course, and just as social disadvantages have been shown to be inherited, so too are wealth induced advantages of this generation and prior generations. In the current context of a trend in which wealth inequalities worldwide are on the rise, an important question is how wealth affects health inequalities over generations. Given the specific size and greater stability through time of wealth than income, wealth might act beyond other socioeconomic indicators in affecting health. These trends are important as wealth is closely connected with almost all features of economic, social, and family life. Nonetheless, social scientists have frequently neglected the study of wealth, partly because of methodological difficulties in accurately measuring respondents' wealth. We study both parental and personal wealth as predictors of age-adjusted self-assessed health (ASAH), as well as trajectories of health across the life course based on differences in parental and personal wealth.

Method. Drawing on data from the Panel Study of Income Dynamics (PSID), we built a database of "parents" observed before 1997, and their own adult children, followed across the 2000s' through their life course: on both sides, the household's income, wealth, members' education, and relevant sociodemographic variables are observed. The outcome variable is the aged-adjusted self-assessed health status (ASAH), a measure of relative aging where negative values help detect early depletion of health resources. The two-generational panel data from the PSID permits a longitudinal observation of parents' variable influence on their children's trajectory. With various model specifications (nested OLS regressions, multilevel random-slope models with best linear unbiased prediction (BLUP), robustness checks with marginal effects estimates of OLS interaction models) we consider the effects of intragenerational and intergenerational net impact of wealth on ASAH.

Results. We find that both parental and personal wealth strongly affect age-adjusted self-assessed health net of education, income, occupational class and other employment and household arrangement contextual variables. Furthermore, differences in health based on parental and personal wealth increase across the life course, providing evidence of how powerfully wealth sets one up to accumulate advantages in life. This study thus encourages social scientists to pay greater attention to wealth inequalities, despite the difficulties in accurately measuring respondents' wealth. It is important to identify this effect in a context of increasing wealth inequalities in the U.S. over the last three decades. Moreover, the concrete mechanism of transmission from parents' wealth to their children's better health deepened more than 30 years later: the different types of resources (home ownership, financial assets etc.) and different domains of health (mental or somatic) might present different dynamics.

## Introduction

Health inequalities result from multidimensional socioeconomic inequalities (income, education, wealth, etc.); these inequalities are cumulative over the life course, and just as social disadvantages have been shown to be inherited (Vauhkonen et al. 2017), so too are wealth induced health advantages of this generation and prior generations. Our aim is to assess the role of wealth in this process by questioning whether the wealth of today's mid-aged adults, alongside that of their parents, impact cumulatively on perceived personal health status as individuals age. Wealth confers an often hidden but strategic power to maintain higher health capital in the United States (U.S.), via better neighbourhoods, services, and several other health buffers. Greater wealth may prevent health deterioration through a multitude of ways: acting as a socioeconomic shock absorber in case of difficulties, enabling larger investments in human capital and reducing the costs of risky decisions over the life course.

Wealth holds particular importance as a measure of financial circumstances and social class. Inequalities in health call for an examination of wealth gaps not just at the level of individual inequalities over a lifetime, but of households as providers of pooled resources that can operate over generations (Shin, 2021). Wealth is more stable than income, which can change suddenly (Brulé and Suter 2019; Wolff 2019). This stability of wealth is especially important during periods such as illness, unemployment, or retirement, during which income is very low or absent and only accumulated wealth permits maintained levels of consumption (Brulé and Suter 2019; Hajat et al. 2010). As parental wealth affects children's social mobility and achievements in education and the workforce, beyond the effects of other measures of parents' socioeconomic status, wealth marks out one's social class (Brulé and Suter 2019). Furthermore, wealth determines the quality of homes and neighbourhoods within which one lives, solidifying one's position within a particular social class (Brulé and Suter 2019; Hajat et al. 2010). Generally, wealth is the central measure of material prosperity, which is strongly linked with happiness, beyond the effect of income (Brulé and Suter 2019). Furthermore, Piketty (2014) has shown that inequality in wealth is greater than inequality in income.

However, because it is more difficult to measure than other indicators of socioeconomic status, such as education, occupational class or income (Brulé and Suter 2019; Hajat et al. 2010), wealth has frequently been neglected in studies of health and quality of life. Wealth tends to be

measured in a crude manner. Typically, survey respondents provide overall self-assessments of their own wealth that are challenging to ascertain, resulting in considerable measurement error (Hajat et al. 2010). The simplicity and lack of consistency of operationalizations of wealth across studies make for problematic cross-study comparisons (Pollack et al., 2007). Despite these challenges, the importance of wealth and wealth inequalities, especially in recent times, should lead to further study of wealth dynamics and their effects upon health and well-being.

## The Expansive Reach of Wealth on Health

Recent times have seen increases in wealth inequalities (see Pfeffer and Schoeni 2016; Piketty 2014). Piketty (2014) explained that these increases are largely due to returns to one's capital outdistancing the growth rate of the economy. He further emphasized that throughout the 20th century, developed nations across the world underwent similar trajectories of change in wealth inequality. Pfeffer and Schoeni (2016:4) argued that these trends are important as

> wealth and wealth inequality are intertwined with almost all aspects of social and economic life: child development, education and human capital, success in the labor market, marriage and divorce, health, consumption, retirement decisions and policies, macroeconomic conditions, and historical events.

Wolff (2019) concurred that wealth has a powerful influence upon subjective well-being. For these reasons, recent studies have emphasized wealth distributions (see Chauvel et al. 2019; Cowell et al. 2017; Piketty 2014; Pfeffer et al. 2016; Saez and Zucman 2016; Wolff 2016).

Some scholarship takes a life course perspective and emphasizes the benefits of beginning one's life within a wealthy home and family. Like other social advantages (Vauhkonen et al. 2017), wealth is commonly inherited across familial generations, and it represents assets accumulated throughout a family's history (Hajat et al. 2010). Children growing up within wealthier families show fewer emotional and behavioral problems (Kaiser et al. 2017; Moulton et al. 2020). Parents' wealth improves a child's socioemotional maturation, educational achievement (within higher quality schools), cognitive abilities, early life transitions into paid work, achievement in the workforce and consequent income, work schedule, likelihood of stable marriage and probability of eventual home and/or business ownership (Brady et al. 2020; Karagiannaki 2017; Killewald, Pfeffer, and Schachner 2017; Pfeffer and Schoeni 2016). Furthermore, financial transfers and gifts from living parents significantly affect life circumstances, especially during important life course

events such as marriage, becoming a parent and entry into homeownership (Angel and Mudrazija 2011; Cooney and Uhlenberg 1992; Huang, Perales, and Western 2021; Mayer and Engelhardt 1996). As such, one's parents' wealth yields life course benefits even before it is transferred through inheritance (Pfeffer and Schoeni 2016). Through these mechanisms, parents' wealth affects children's social mobility, life chances and ultimately, health and quality of life (Pfeffer and Schoeni 2016).

Other studies have examined the benefits of personal wealth in younger adulthood and later in the life course. In general, richer persons enjoy better health, longer lives and a greater standard of living (Semyonov, Lewin-Epstein, and Maskileyson 2013). Their living circumstances are improved through healthier nutrition and the ability to purchase better and more expensive healthcare services (including preventive treatments) (Allin, Masseria, and Mossialos 2009; Semyonov et al. 2013). More broadly, greater wealth allows for more purchasing of the work of others, pertinent to many life domains. Wealth eases homeownership and self-employment (Killewald et al. 2017). Generally, wealth is a central determinant of social status and class (Brady et al. 2020) and a resource for various investments in financial and human capital (Killewald et al. 2017). Lack of wealth, on the other hand, is an impediment to accomplishments and goal achievements over the life course (Aneshensel 1992). Scholarship has conceptualized 'vulnerability' as a dynamic interplay of resources and stressors that affect opportunities throughout one's life (Spini, Bernardi, and Oris 2017). This vulnerability precludes control over one's life course, including its transitions and outcomes (Chauvel, Leist, and Ponomarenko 2016).

Having considerable wealth provides insurance through unpredictable life difficulties, including unemployment, need for expensive medical treatments, separation or divorce, and automobile and home reparations, which heighten risk of poverty (Brulé and Suter 2019; Pfeffer and Schoeni 2016; Vandecasteele 2010; Wolff 2019). Wealth thus increases resilience and serves as a socioeconomic shock absorber (Brulé and Suter 2019; Pfeffer and Schoeni 2016; Wolff 2019). A younger adult whose parents have considerable wealth is likely to feel protected and insured against such challenges, alleviating their negative health concomitants. This sense of protection and security might also motivate a younger adult to seek out riskier but potentially more lucrative educational and workforce pathways, as the costs of risky life course decisions are reduced (Pfeffer and Schoeni 2016). Relatedly, having a safety net based on considerable wealth reduces chronic stress, especially persistent financial stress (Hajat et al. 2010). Chronic stress and associated

negative psychosocial conditions lead to adverse nervous, neuroendocrine and immune system events that can precipitate hypertension and other cardiovascular system problems (Hajat et al. 2010). These effects of wealth upon health and subjective well-being, based on insurance and security, are particularly strong in liberal welfare regimes with less interventionist governments (Hochman and Skopek 2013).

Hajat et al. (2010) discussed numerous pathways between low wealth and health detriments based on the environments within which people of low wealth tend to live. Worse socioeconomic environments could hinder access to effective healthcare, healthy food and high-quality homes (Hajat et al. 2010). Furthermore, they tend to involve lower development of health, social, human and physical institutions and infrastructure (Hajat et al. 2010; Lynch et al. 2000). This results in less effective public transport systems, fewer green spaces and parks and more dangerous streets (Hajat et al. 2010). All these negative conditions increase social isolation, lower extents of social support, lead to lifestyles that are more sedentary, result in poorer diets and lead to greater strains at work, including less control over one's work tasks and circumstances (Hajat et al. 2010). Stressors such as these increase smoking behavior and rates of obesity (Hajat et al. 2010; Taylor, Repetti, and Seeman 1997).

Furthermore, wealth might act beyond other socioeconomic indicators in affecting health (see Brulé and Suter 2019; Hajat et al. 2010; Killewald et al. 2017; Semyonov et al. 2013). Hajat et al. (2010) explained that wealth might be a more effective assessment of location within the social hierarchy than some other commonly studied socioeconomic measures. This is because on top of being a measure of financial status, wealth permits political influence, endows social stature and prestige and provides opportunities in education and the workforce beyond what income, on its own, is capable of (Hajat et al. 2010). Different dimensions of socioeconomic status are not fully substitutable and may affect health and other important outcomes through different pathways and mechanisms (Killewald et al. 2017). For example, in a period of unemployment or sickness, wealth is a more effective measure of financial circumstances than income (Hajat et al. 2010). While income is an inflow of financial resources to a household at any one particular time point, wealth is the mass of financial resources accumulated by oneself and one's family through time (Brulé and Suter 2019; Wolff 2019). As such, wealth is a dimension of socioeconomic status of greater stability. Income, on the other hand, fluctuates more through time (Brulé and Suter 2019; Hajat et al. 2010; Wolff 2019). As Hajat et al. (2010:1941) argue, while wealth may be

cumbersome to record, as a socioeconomic marker, wealth holds both empirical and theoretical relevance to research on how to prevent long-term disparities in health.

**How Wealth Helps One's Health over the Life Course**

Wealth brings health benefits to individuals at earlier and later stages of the life course, and may especially benefit older adults as they age and their health deteriorates in specific ways. For older adults, wealth improves health and reduces risk of mortality (Killewald et al. 2017). Among men, greater wealth improves prospects for retirement (Hajat et al. 2010; Semyonov et al. 2013). Wealth might be a particularly effective measure of socioeconomic status among older persons with limited to no income, often due to retirement (Hajat et al. 2010; Semyonov et al. 2013).

The concept of "developmental trajectories" within Glen Elder's (1998) life course theoretical perspective and the theory of cumulative advantage/disadvantage (see O'Rand 1996; Ross and Wu 1996) present reasons to expect that the effects of personal and parents' wealth on health and well-being will increase over the adult life course. Developmental trajectories refer to pathways of psychological, social and biological changes that are heavily influenced by important earlier life circumstances and events (Crosnoe and Elder 2002). For example, an episode of illness or disability earlier in adulthood could affect one's educational involvement, work choices and performance and social relationships, all of which could impact future goals, decisions, self-concepts, relations with family members and friends and socioeconomic circumstances. Kapelle and Lersch (2020) revealed complex wealth trajectories throughout the life course as individuals transition from cohabitation to marriage and proceed within their married lives. As such, problems and disadvantages earlier in life are accentuated along these pathways through time (Crosnoe and Elder 2002).

Similarly, the theory of cumulative advantage/disadvantage proposes that advantages and disadvantages earlier in life develop into additional advantages and disadvantages over time, respectively (O'Rand 1996; Ross and Wu 1996). These advantages and disadvantages encompass socioeconomic characteristics and resources, including education, income, wealth and occupational prestige, as well as health circumstances (O'Rand 1996; Ross and Wu 1996). Accordingly, acquisition of wealth and social status are processes that accrue over the life course (Huang et al. 2021). These cumulative processes create divergences between constituents of the same cohort in their living conditions across the life course (Mayer 2009; O'Rand, 1996; Ross &

Wu, 1996). Life circumstances preceding a possibly stressful life course transition help determine whether this transition will be a source of stress (Wheaton 1990). One in-depth life course investigation highlights the nexus of life domains, levels of analysis (inner individual, individual action, and supra-individual) and points in time, resulting in diverging life paths (Bernardi, Huinink, and Settersten Jr. 2019). As such, the theory of cumulative advantage/disadvantage is intricately linked with "issues of heterogeneity and inequality" (Dannefer 2003:327).

A further rationale for divergent effects of parental wealth over children's adult lifespans is based on the fact that adult children who receive substantial financial transfers and gifts from their living parents are more likely to obtain large quantities of wealth through inheritance and bequests after their parents have died (Huang et al. 2021). The benefits for adult children of parental wealth might thus undergo a spike later in adulthood after their parents are deceased.

## Hypotheses

We consider two sets of hypotheses. The first set of two hypotheses pertain to impacts of wealth beyond the effects of other measures of socioeconomic status. The third hypothesis refers to impacts of wealth over the life course of individuals.

*Hypothesis 1 (intergenerational wealth on health effects):* higher levels of parental wealth additively improve the next generation's health status, net of other dimensions of socioeconomic position of the previous generation (education, income, etc.).

*Hypothesis 2 (intra-generational wealth on health effects):* higher levels of personal wealth likewise benefit the current generation's health status, net of other socioeconomic measures.

*Hypothesis 3 (life course wealth on health effects):* The effects of parental and personal wealth upon health diverge across the adult life course.

## Data and Methods

### *Data*

The Panel Study of Income Dynamics (PSID) regularly collects a detailed set of socio-economic indicators at the individual and household levels, over time (1968-2014). Children born into PSID households become PSID members and are followed. Their characteristics through time are also

recorded. Our analysis draws on an analytic sample of 7,031 individuals (adult "children" in an age range of 25- 64 years) from the PSID, waves 1999, 2004, 2009 and 2014. We could retrieve information from their parents within the PISD from waves 1984, 1989 and 1994; wealth indicators were registered for the first time in 1984. Parents' households are characterized by their quintiles of averaged wealth, income, educational resources, and indicators of household arrangements describe their family structure. We merged these data sources to build a systematic follow-up of individuals and their families of origin, yielding complete, pooled waves of four data points for both. This allows us to capture several dimensions of intergenerational transmission of (dis)advantage that may be related to differences in current health status of individuals in the younger generation.

The analytic sample is restricted to an age range of 25- 64 years, comprising individuals in the labour force who have reached a minimal occupational maturity (Breen 1994). We also keep only household heads and their partners, from White and Afro-American ethnic backgrounds.

***Variables***

The dependent variable is a measure of *individuals' self-assessed health status*, which originally had five values (1: Excellent to 5: Poor). After reversing the coding (1: Poor to 5: Excellent), this variable is adjusted by age (and wave), producing the aged-adjusted self-assessed health status (ASAH), to account for general depletion of health capital as people age. We accomplished this through calculating the residuals from regression models that predict the continuous measure of health by age and survey wave. From these regressions, we retrieved the residuals, which represent deviations from the overall linear trends of age and wave.

The main predictors are individual age and *household wealth* from the younger generation. The wealth indicator captures total family wealth plus home equity. This household-level variable is logged (to reduce the right skew) and also adjusted by age and wave, in the same fashion, thus capturing deviations from age and time linear trends. The continuous variables of education (number of years) and equivalized household income (logged, to reduce the right skew) are adjusted in the same way. The same variables are collected on respondents' parents, including a wealth measure. We applied the same procedure for all parents' controls

The variable age is demeaned. That is to say, we subtract the individual value of age from the average value from the whole sample, in order to rank individuals according to their relative position from the overall mean (around 43 years old)[1]. Additional controls for the younger generation included in the estimations are sex, race, whether one has children and couple status (dummy variables), employment and self-employment status (categorical), average number of work hours per week (standardized, capped at 80) and number of work hours squared.

In a second step, for the sake of parsimony and simplicity, we construct quintiles for each continuous predictor for both sampled individuals and their parents, within each wave, yielding time-varying categorical variables. Therefore, we obtain education, income and wealth transformed into categorical variables, each with five strata. Sample statistics are reported in the appendix (see Table A3).

***Empirical Strategy***

We first estimate a series of nested OLS models to assess the relative importance of both individuals' and their parents' wealth effects on ASAH, net of control variables that are step wise added to the model: gender age, race, income, occupational class, employment status, and likewise with corresponding parents' indicators. Then, we estimate non-nested hierarchical linear model to capture the effects of intergenerational transmission of advantages that stem from parents' wealth and also of current wealth of the individuals in the sample, on ASAH. Non-nested models deal with data that can be arranged into groups in multiple ways. In this study, we have constructed quintiles for each predictor from both generations. Hence, our main predictor, individuals' wealth is captured by strata that have five categories.

$$y_i = \alpha_{j[i]} + \beta_{j[i]} x_i + V_I \Upsilon + \epsilon_i \text{ , for } i=1,\ldots, n \quad (1)$$

where $\begin{pmatrix} \alpha_j \\ \beta_j \end{pmatrix} \sim N \left( \begin{matrix} \mu_\alpha \\ \mu_\beta \end{matrix} , \begin{matrix} \sigma_\alpha^2 & \rho\sigma_\alpha\sigma_\beta \\ \rho\sigma_\alpha\sigma_\beta & \sigma_\beta^2 \end{matrix} \right)$ , for $j=1,\ldots, J$

[1] For the OLS analyses we constructed an interval variable that constrain age to intervals of five years. This variable is demeaned, using its average.

The dependent variable ($y_i$) represents the the age-adjusted self-assessed health status (ASAH) for individual *i* in the quintile *j*. Then, $\alpha_{j[i]}$ is the intercept, and $\beta_{j[i]}$ is the random slope of age (demeaned) of the individual *i* across wealth strata (quintiles) *j*, which captures the converging, or diverging, trends of health gradients (Gelman and Hill 2006:279). The intercept and the random slopes are normally distributed, with means $\mu_\alpha$ and $\mu_\beta$, respectively, and we employ a covariance matrix which captures the variation in $\alpha_j$'s and $\beta_j$'s, with between-group correlation parameter $\rho$. The term $\Upsilon$ captures all the fixed effects of the control variables that are also step wise added.

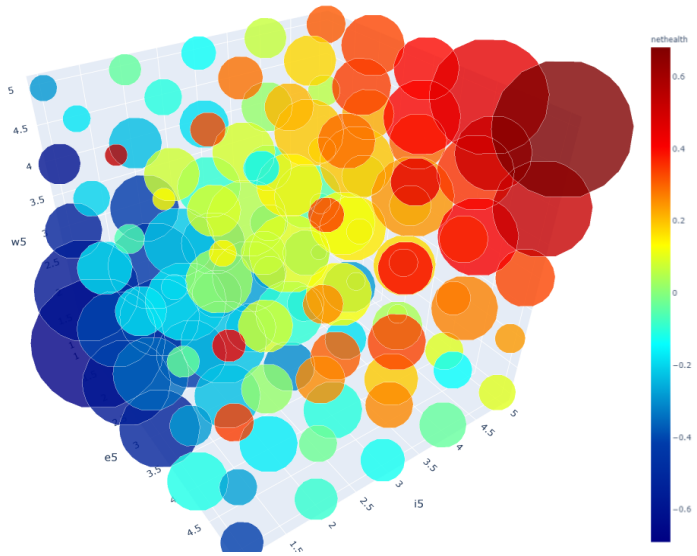
Our focus of interest is the parameter $\beta_{j[i]}$, the random slope that captures the variation of ASAH over individuals' life course (*i*), as captured by adjusted age variable ($x_i$), for each wealth strata (*j*) net of controls from individuals and their parents' generation ($V_I$). One advantage of this models is that it allows us to model explicitly unobserved heterogeneity in ASAH across individuals, not related to aging or wealth effects.

We estimate a full pooled OLS and multilevel models, as well as OLS and multilevel models for sex-split samples as robustness checks. We include an interaction term between individuals' wealth strata and our adjusted age measure for the full sample and for the sex-split sample. We also check the effect of parents' wealth across life course. By using OLS models we estimate effects with a different parametrization, in which all the variability differences between subjects in ASAH is captured by the fixed effects (Snijders and Bosker 2011)

**Results**

A first descriptive picture illustrating the importance of wealth inequalities for health inequalities is given in Figure 1. In this 3D graph, two reappearing elements of socio-economic position in the literature – that is, education and income- are plotted alongside wealth as quintiles to assess their distribution in relation to the self-assessed health status observed among respondents in the PSID. The role of wealth as a key part in mapping any axes of health inequalities in the US is striking. As we move towards the bottom left-hand corner of the graphic visualization of these elements (W, E, I) we see those with the lowest levels of wealth and education ballooning in low health, indicated through blue bubbles; likewise, as one moves towards higher income quintiles into the top quintiles of wealth and education the concentration of higher ratings of health become most prominent in dark red.

**Figure 1: Rubik's cube of health (ASAH)** by quintiles of education, income, and wealth (WEI, Q5)




Red to blue from the healthiest to the least

3 quintile variables e i w, size of the bubble proportional to the size of the sample in the subcube

An interactive (one can rotate with a mouse the 3D axes to inspect the facets of the cube) version of this graph is available at http://www.louischauvel.org/cube1.html

Two major hypotheses we aim to test in this paper are firstly, whether higher levels of parental wealth additively improve the next generation's health status, beyond other dimensions of socio-economic position of the previous generation (education, income, etc.) (*H1 intergenerational wealth on health effects*); and secondly, whether or not higher levels of personal wealth benefits the current generation's health status, beyond the effects of other socio-economic measures (*H2: intra-generational wealth on health effects*).

By way of step-wise ordinary least squares modelling of socio-demographic and current socio-economic indicators of the US working-age population aged between 25 and 64 years, Table 1 displays the regressions estimated for age-adjusted self-assessed health status (ASAH). The nested OLS coefficients are based on four pooled waves of our dependent variable, with Huber-White variance estimators specified. The first thing to note looking across models M3-M7 is the consistent, strong and significantly stratifying health effects that parental wealth strata have across each of these successive models. Looking at model 6 in Table 1, where we have yet to introduce personal (household) wealth, we see that the effects on health of parental wealth and their adult children's education are almost on par with one another, being close to 5 percentage point (p.p) for parent's wealth effects and 6 p.p for an individual's own education. In the final model, if we compare the degree to which intergenerational wealth is associated with higher self-assessed health

as an additive factor to both parental education and income strata – as well as intra-generational socio-economic indicators of education, income and household wealth – our models indicate it is primarily the transmission of parental wealth and educational resources that count: having parents from a higher wealth bracket brings approximately a 4 percentage point (p.p) increase in health status of the current generation. However, once we control for the current generation's own education and income, parental income's effects become negligible. Accordingly, our first hypothesis of parental wealth substantially improving the next generation's health finds initial support from these seven nested OLS regressions.

Next, we turn to the dynamics of intra-generational health status and effects of one's own household wealth as pitted against individuals' education and income and control variables. Here again we find corroborating evidence for hypothesis 2. Estimates show that among the working-age population in the U.S., arriving at higher wealth strata significantly improve a person's assessment of their health; and this effect – holding all else equal - proves to be double the effect size of the parental wealth indicator; there is an approximately 8 p.p. benefit for health from holding higher household wealth (see end row of coefficients, Table 1). Comparing model fits, the BIC statistics between models 6 and 7 confirm household wealth to be a parsimonious and relevant predictor of age-adjusted health.

What the estimates starkly highlight is that intergenerational and intra-generational wealth accumulation act as health boosters that cannot be ignored even after controlling for other measures of social positioning. In separate models (not shown, available upon request from authors), we took a sub-sample of the respondents who reported their own and their parents' occupational status (categorized according to the Erikson-Goldthorpe-Portocarero (EGP) class scheme). The positive, additive effects of own and parental wealth remained undiminished, with little significance found in relations between EGP class and health. In sum, health is affected more strongly by higher wealth positions than by occupational class positions. This lines up with recent research which has pointed to the rather weak effects that social mobility (occupational) seems to have on health status in Europe. However, a significant relation appears between health outcomes and subjective, not objective, accounts of socio-economic mobility trajectories over one's lifetime (Präg and Gugushvilli 2021). Likewise, another recent paper using representative, household panel data (the German Socio-Economic Panel) demonstrates that wealth accumulation is most significantly tied

not necessarily to differences across social classes but rather to the distinction between being self-employed or not (Waitkus and Minkus 2021).

For these reasons, in addition to the key WEI indicators of parents and own household, we introduced controls for individuals' working time and status as employed, particularly in the capacity of being self-employed into our models. Each can be thought to be a tangible wealth generating mechanism that individuals can accurately perceive and that may influence perceptions of health over the lifecourse, i.e., those who work an excessive number of hours per week may be more likely to gain in income (and wealth capital), but might perceive their health as suffering as a consequence, regardless of whether they are the ones more likely to select into work and self-employment, long working hours, etc., on the basis of better health in general. As expected, there are significant, substantial beneficial effects of being self-employed. Working hours average around 33 hours per week in our sample, and each standard-deviation increase of working hours positively affects age-adjusted, self-assessed health – this effect is seemingly curvilinear however, since for the extreme end of working time, health associations are significantly negative. Controls for having a child and couple formation in households, which have been shown to generate wealth premiums over time in prior studies (Kapelle and Lersch 2020), show positive relations with age-adjusted health (ASAH). These positive effects lose significance in those estimations where intra-generational wealth and sideline wealth accumulation controls are included (self-employment, working hours measure; models 6-7).

Table 1. Inter and intra-generational wealth strata effect on age-adjusted self-assessed health, OLS regression estimates

| | (1) | | (2) | | (3) | | (4) | | (5) | | (6) | | (7) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Age-Adjusted self-assessed Health (ASAH)** | | | | | | | | | | | | | |
| | Coef. | S.E. | Coef. | S.E. | Coef. | S.E. | Coef. | S.E. | Coef. | S.E. | Coef. | S.E. | Coef. | |
| Sex | -0.131*** | (0.015) | -0.123*** | (0.015) | -0.122*** | (0.015) | -0.107*** | (0.014) | -0.116*** | (0.014) | -0.064*** | (0.015) | -0.065*** | ( |
| Race | -0.363*** | (0.016) | -0.172*** | (0.018) | -0.133*** | (0.019) | -0.062*** | (0.019) | -0.056** | (0.019) | -0.058** | (0.019) | -0.041* | ( |
| Age (Centred) | 0.002* | (0.001) | 0.003*** | (0.001) | 0.001 | (0.001) | 0.001 | (0.001) | 0.002* | (0.001) | 0.003*** | (0.001) | 0.003*** | ( |
| 5Par Education | | | 0.078*** | (0.006) | 0.072*** | (0.006) | 0.032*** | (0.007) | 0.033*** | (0.007) | 0.037*** | (0.007) | 0.037*** | ( |
| 5Par Income | | | 0.067*** | (0.007) | 0.028*** | (0.008) | -0.005 | (0.008) | -0.005 | (0.008) | -0.002 | (0.008) | -0.001 | ( |
| 5Par Wealth | | | | | 0.074*** | (0.008) | 0.051*** | (0.007) | 0.050*** | (0.007) | 0.052*** | (0.007) | 0.035*** | ( |
| 5HEducation | | | | | | | 0.063*** | (0.006) | 0.063*** | (0.006) | 0.058*** | (0.006) | 0.056*** | ( |
| 5HIncome | | | | | | | 0.139*** | (0.006) | 0.138*** | (0.006) | 0.093*** | (0.007) | 0.063*** | ( |
| Couple HH | | | | | | | | | 0.037* | (0.017) | 0.066*** | (0.017) | 0.028 | ( |
| Has child/Children (ref. no children) | | | | | | | | | 0.104*** | (0.016) | 0.086*** | (0.015) | 0.067*** | ( |
| Individual Employed | | | | | | | | | | | 0.148*** | (0.039) | 0.158*** | ( |
| Individual Self-employed | | | | | | | | | | | 0.074** | (0.023) | 0.040 | ( |
| Standardised Individual hours worked | | | | | | | | | | | 0.095*** | (0.011) | 0.095*** | ( |
| Standardised Individual hours worked squared | | | | | | | | | | | -0.036*** | (0.008) | -0.035*** | ( |
| 5HWealth | | | | | | | | | | | | | 0.079*** | ( |
| Constant | 0.646*** | (0.030) | -0.012 | (0.044) | -0.127** | (0.046) | -0.567*** | (0.049) | -0.634*** | (0.050) | -0.710*** | (0.061) | -0.799*** | ( |
| N.of observations | 17172 | | | | | | | | | | | | | |
| AIC | 47377.883 | | 46930.253 | | 46844.590 | | 46021.154 | | 45959.310 | | 45553.244 | | 45383.952 | |
| BIC | 47416.638 | | 46984.510 | | 46906.598 | | 46098.664 | | 46052.322 | | 45677.261 | | 45515.720 | |

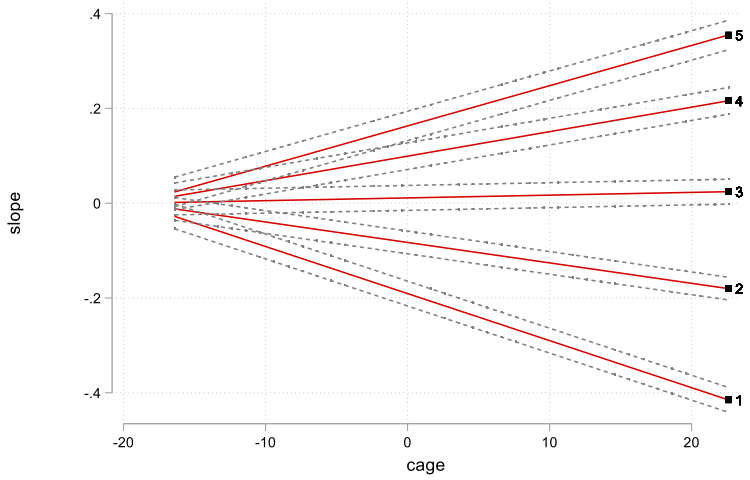
Source: PSID 1984-2014

Note: * p<0.05 ** p<0.01*** p<0.001, unweighted data. Age is sample demeaned, workhours are initially capped to 80 hours/ and mean centred

A major aim following on from these results is thus to test our third hypothesis, which conjectures that the reach of wealth is long-lasting and grows in intensity over the life course (*H3 life course effects of wealth on health)*. The predicted health benefits which parental wealth and personal (household) wealth affords one over one's lifetime for health relative to one's ageing peers should in this case be more visible at later life stages. The expectation is that wealth sets one up to report better health outcomes at the time when the health of the less advantaged starts to deteriorate rapidly. To do so, we estimate multilevel mixed models, which allow for variable growth over time through an introduction of random-slopes for age trajectories by current household's five different wealth strata. Figures 2 and 3 show the age-graded trajectories of health inequalities as people enter later adulthood, estimated from full models introducing all key predictors of WEI, and further controls (see Table A2).

The red lines of Figure 2 present a clear depiction of widening inequalities in health based on the different wealth quintiles. Examination of the differentiated improvement and deterioration in health of quintile 5 (more wealth) and quintile 1 (less wealth), respectively, plotted in the graphs, provides further evidence that assessments of health strongly diverge as people move from middle age into later life. This supports the third hypothesized relation of wealth and health over the life course

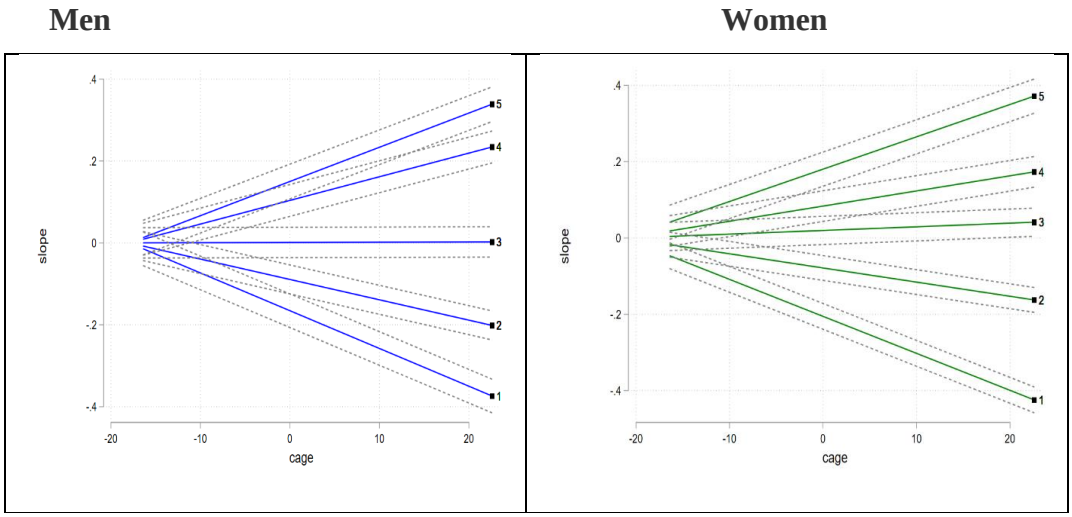
**Figure 2.** Predicted random slopes of age-graded health (ASAH) by wealth strata of population aged 25-64; Multilevel random-slope models (mixed models)




*Note***:** Full model bar hours squared (see Appendix Table 2), Health on y-axis, centred age on x-axis (mean age of sample is 43), red lines indicate lifetime wealth strata from low (1) to high (5), and 95% confidence intervals in grey

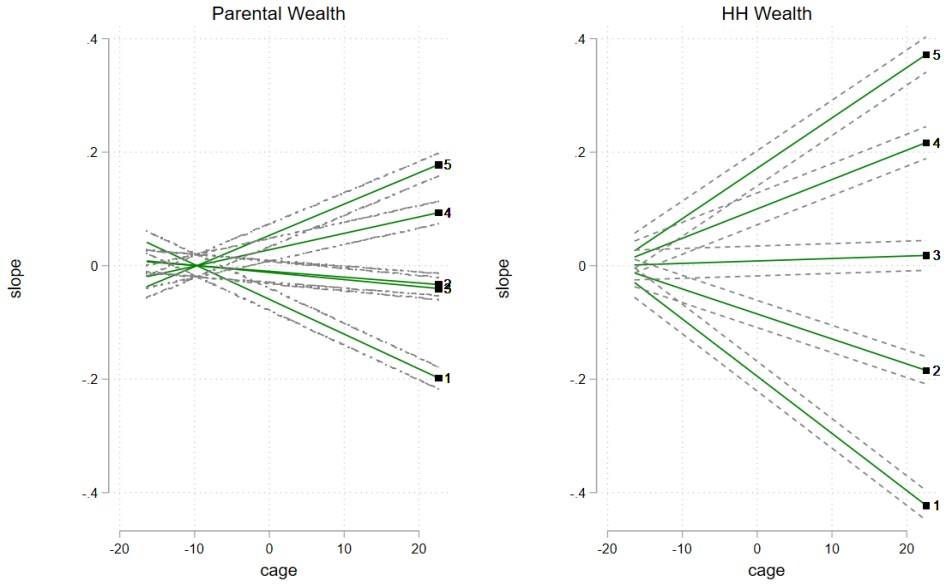
*Source:* Authors' calculations, PSID; *N= 17, 172*.

**Figure 3.** Robustness check: Predicted random slopes of age-graded health (ASAH) by wealth strata of population aged 25-64 among sex-split samples; Multilevel random-slope models (mixed models)




*Source*: Authors' calculations on PSID; men's estimates are in blue, *N= 7,840*; women's estimates are in green, *N=9,526*.

**Figure 4.** Robustness check: Predicted random slopes of age-graded health (ASAH) by wealth strata of parents (left) versus their adult children (right), population aged 25-64; Multilevel random-slope models (mixed models)




*Note:* Full model bar hours squared (see Appendix Table 2), Health on y-axis, centred age on x-axis (mean age of sample is 43), green lines indicate lifetime wealth strata from low (1) to high (5), and 95% confidence intervals in dotted lines. *Source:* Authors' calculations, PSID; *N= 17, 172*.

In addition to our analysis on the growing divide between adult children's household wealth quintiles across the life course, the same model is implemented using parents' wealth quintiles, while controlling for children's own wealth position. The idea here is to validate that parents' relative wealth position in the 1980s influences their children's subjective health in the 2010s, even with a control of the younger generation's resources. These results, displayed in figure 4 (left), compared to the results on children's percentile of wealth repeated from figure 2 on a same scale, confirm the very long arm of parental wealth on children outcomes that increases over the life course of the younger generation. Parental wealth effect gaps, after control of children's wealth, increase over the life course of children and represent circa one half of children's wealth gap: a -.2 to +.2 gap at centered-age +20 compared to a -.4 to +.4 for the younger generation wealth gaps intervals.

A further robustness check was performed by estimating pooled OLS models with an interaction term between individuals' ages and both their individual and parental wealth strata, using model 7 from Table 1. We confirm the main patterns within our central findings (Appendix Table A.1). The differential effect of wealth strata to which individuals belong shape different trajectories of ASAH over the life course (Figure A1). Moreover, parents' wealth seems to also exert a differential influence on individuals' subjective health perceptions over the life course, although this effect is less clear. The results show a more polarized effect between the haves and have-nots based on parents' wealth (Figure A2). Gender-specific analyses confirm our main findings, although women generally show lower levels of self-rated health. However, the benefits for health of greater wealth are similar among men and women in these models.

We conducted sensitivity analyses in which the MRSMs were split by sex, shown in Figure 3. Further sensitivity analyses were split by race (results not shown, available upon request from authors). All of our substantive effects remain relatively similar across samples, although these robustness checks did reveal that the inter- and intra-generational wealth and education effects were less valuable for the ASAH of Blacks than of Whites, and parental wealth is, on average, more enveloped by own household wealth in the women only models. However, among Blacks and women, when we predicted age-graded health from our multilevel models, the highest and lowest wealth strata diverged in their health outcomes in a similar manner across the life course: higher levels of wealth were associated with higher levels of health.

The main result here is therefore that wealth plays a very prominent role in the ageing process of the younger generation, from age 25 to 64. While the children's gaps of wealth mean a stronger gradient of health differentiation than the wealth position inherited from their parents in the late 1980s', both factors play a significant, increasing role with age. Each variable must be considered in the process of health variation across the life course, and the importance of their explanatory role is comparable to income and education. In sum, while the descriptive picture of Figure 1 first allowed us to grasp the potentially additive role that wealth has for health over the life course, our pooled linear regressions specified in the form of OLS and multilevel random slope models contribute new empirical evidence that one's own household wealth acts in conjunction with the wealth strata within which one was born into to fashion how ASAH develops as one ages. In terms of inequalities of health that grew in the working-age population of the US in the last decade, neither education nor income, nor other markers of socio-economic position seem to diminish the power that wealth brings to the table as regards shifting one's health assessment upwards.

Overall, our analyses demonstrate that wealth should form a unique component of social mobility accounts, as an important additional dimension of socio-economic position which appears to beget significant non-ignorable improvements in health assessments and that acts across generations in the U.S.

**Discussion**

This study confirms that parental wealth affects age-adjusted self-assessed health beyond the effects of other parental socioeconomic indicators, including education, income and occupational class. The power of parental wealth is revealed in effect sizes that are similar to those of parental education. This finding corresponds with literature showing how parental wealth improves children's emotional and behavioral development (Kaiser et al. 2017; Moulton et al. 2020), cognitive capacities and educational achievement, workforce circumstances and success, chances of marital stability and probability of eventual homeownership (Brady et al. 2020; Karagiannaki 2017; Killewald et al. 2017; Pfeffer and Schoeni 2016). The evidence our study contributes further concords with claims that children from wealthier families profit from growing up within higher quality neighborhoods marked by better schools, healthier foods, more effective

healthcare facilities and services, well-built homes, more green spaces, less dangerous streets and greater development of institutions and infrastructure (Hajat et al. 2010; Lynch et al. 2000). Additionally, it concurs with studies emphasizing that children of wealthier parents benefit from more numerous and extensive financial gifts and transfers over their lifetimes, especially during important transition periods such as entries into college, marriage, parenthood and homeownership (Angel and Mudrazija 2011; Cooney and Uhlenberg 1992; Huang et al. 2021; Mayer and Engelhardt 1996). Intergenerational household transfers are notable in the U.S. at entry into college and as parents become 'grandparents' with grandchildren – each transition is associated with adult children receiving money from their parents (Haider and McGarry 2018). Parental wealth further provides a financial safety net for children, allowing them to engage in riskier but possibly more remunerative education and workforce paths (Pfeffer and Schoeni 2016). All these advantages are more tightly tied to parental wealth than other parental socioeconomic measures.

Furthermore, we find that personal wealth strongly impacts age-adjusted self-assessed health independently of the effects of other dimensions of socioeconomic status, including education, income and occupational class. This finding is consistent with the literature that identifies unique effects of wealth upon health and quality of life, independent of other socioeconomic measures such as education and income (Brulé and Suter 2019; Hajat et al. 2010; Killewald et al. 2017; Semyonov et al. 2013). The unique potency of wealth is tied with the fact that it is more stable than income, making it especially important during times of lower income, including medical problems, unemployment and retirement (Brulé and Suter 2019; Hajat et al. 2010; Wolff 2019). As it strongly influences the quality of the communities and homes within which one lives, wealth centrally determines social class (Brulé and Suter 2019; Hajat et al. 2010). Furthermore, as the most pertinent measure of material prosperity, wealth affects health and happiness beyond other socioeconomic variables (Brulé and Suter 2019). Additionally, personal wealth serves as a socioeconomic shock absorber during unpredictable life challenges such as illness, marital dissolution, unemployment and costly vehicle and home repairs, which increase the risk of entering poverty (Pfeffer and Schoeni 2016; Vandecasteele 2010; Wolff 2019).

Lastly, we find that the age-adjusted self-assessed health of individuals who can rely on differing amounts of both parental and personal wealth, diverge over the life course. These findings connect with the concept of "developmental trajectories" within the life course theoretical perspective (Elder 1998) and cumulative advantage/disadvantage theory (O'Rand 1996; Ross and

Wu 1996). One's circumstances in childhood and early adulthood place one a life path of social, biological and psychological changes that often magnify one's earlier conditions (Crosnoe and Elder 2002).

It is furthermore noteworthy that robustness checks repeating our central analyses specifically among women, men, Blacks and Whites largely supported our central findings. This tentatively suggests some generalizability of our central findings.

*Limitations and Future Research Avenues*

While this study considers pathways between wealth and health identified within the social scientific literature, these mechanisms are not explicitly studied. Future research should assess which mechanisms are the main drivers behind the associations of inter- and intra-generational wealth with health.

Our assessments of the increasing effects of personal wealth on health over the life course are potentially biased by endogeneity. Those in better health might be more effective workers who achieve higher incomes, contributing to wealth accumulation through time. Future studies should employ cross-lagged panel models to assess to what extent wealth affects health and to what degree health affects wealth.

Our health outcome is a subjective assessment. Individuals of similar extents of health might differ in their general optimism and pessimism, affecting their evaluations of their own health. Nonetheless, self-rated health measures hold strong reliability and validity, are potent predictors of risk of mortality and have been promoted as tools for research by the European Commission, the United States Centers for Disease Control and the World Health Organization (Idler and Benyamini 1997; Salomon et al. 2009). However, future research should repeat our analyses with more objective measures of health, such as specific medical conditions or mortality.

## Conclusion

Our findings display the very long arms of both parental and personal wealth. As well as boosting health beyond the impacts of other socioeconomic measures, wealth effects are magnified across the life course. Greater wealth earlier in life can set in motion trajectories of increasing advantages, and the reach of wealth extends to health advantages: those in a privileged position to draw on parental and personal wealth are shown to benefit from higher age-adjusted self-assessed health as

they grow older compared to those with less accumulated parental and personal wealth earlier in their lives.

Since the explanatory role of wealth for people's health crosses from one generation to the next, and is a variable comparable in intensity to that of income or education, it is particularly important to collect information on the wealth of present households. Questions already tested in the PSID should be implemented more systematically, and information concerning parents' resources could be approximated through parents' homeownership status when the interviewee was 14 years old, with size of the dwelling and neighborhood type of the property, for instance. These elements of information are of importance, particularly in a context of increasing wealth gaps (Chauvel et al. 2021). Recent research has pointed to a myopic vision the wealthiest in the world can hold regarding inequality. Those in higher wealth strata will oftentimes discount the role played by their wealth and capital resources in generating the unequal life circumstances facing different households – what one author termed a "hyperopia of wealth" (Kuusela, 2020). The contribution our current analyses makes is to place front and center the wealth strata one is born into in explaining divergent health as populations like the U.S. age. Despite the difficulties in accurately measuring respondents' wealth, this study encourages social scientists to pay greater attention to wealth inequalities.

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Table A1. Interaction Effects. Inter and intra-generational wealth strata effects on ASAH, for varying age levels.

| | (1) | | (2) | | (3) | |
|---|---|---|---|---|---|---|
| | **Age-Adjusted self-assessed Health (ASAH)** | | | | | |
| Sex | -0.062*** | (0.015) | -0.064*** | (0.015) | -0.062*** | (0.015) |
| Race | -0.040* | (0.019) | -0.038* | (0.019) | -0.039* | (0.019) |
| Age intervals (Centred) | -0.009*** | (0.002) | -0.004* | (0.001) | -0.011*** | (0.002) |
| 5Par Education | 0.036*** | (0.006) | 0.037*** | (0.006) | 0.037*** | (0.006) |
| 5Par Income | -0.000 | (0.007) | -0.002 | (0.007) | -0.000 | (0.007) |
| 5Par Wealth | 0.029*** | (0.007) | 0.031*** | (0.007) | 0.028*** | (0.007) |
| 5HEducation | 0.054*** | (0.006) | 0.057*** | (0.006) | 0.054*** | (0.006) |
| 5HIncome | 0.058*** | (0.007) | 0.064*** | (0.007) | 0.058*** | (0.007) |
| Couple HH | 0.020 | (0.017) | 0.026 | (0.017) | 0.020 | (0.017) |
| Has child/Children (ref. no children) | 0.066*** | (0.015) | 0.064*** | (0.015) | 0.065*** | (0.015) |
| Individual Employed | 0.144*** | (0.039) | 0.151*** | (0.039) | 0.143*** | (0.038) |
| Individual Self-employed | 0.029 | (0.023) | 0.037 | (0.023) | 0.028 | (0.023) |
| Standardised Individual hours worked | 0.101*** | (0.011) | 0.097*** | (0.011) | 0.101*** | (0.011) |
| Standardised Individual hours worked squared | -0.036*** | (0.008) | -0.035*** | (0.008) | -0.036*** | (0.008) |
| 5HWealth | 0.093*** | (0.006) | 0.080*** | (0.006) | 0.091*** | (0.006) |
| Interactions | | | | | | |
| Age intervals X 5HWealth | 0.005*** | (0.000) | | | 0.004*** | (0.001) |
| Age intervals X 5Par Wealth | | | 0.003*** | (0.000) | 0.001* | (0.001) |
| Constant | -0.790*** | (0.061) | -0.799*** | (0.061) | -0.791*** | (0.061) |
| N.of observations | 17172 | | 17172 | | 17172 | |
| AIC | 45287.829 | | 45349.364 | | 45285.063 | |
| BIC | 45427.348 | | 45488.883 | | 45432.333 | |

Source: PSID 1984-2014

Note:Based in Model 7 Table 1; * p<0.05 ** p<0.01*** p<0.001, robusts standard errors in parentheses. All models control for time(years), workhours are initially capped to 80 hours/ and mean centred.

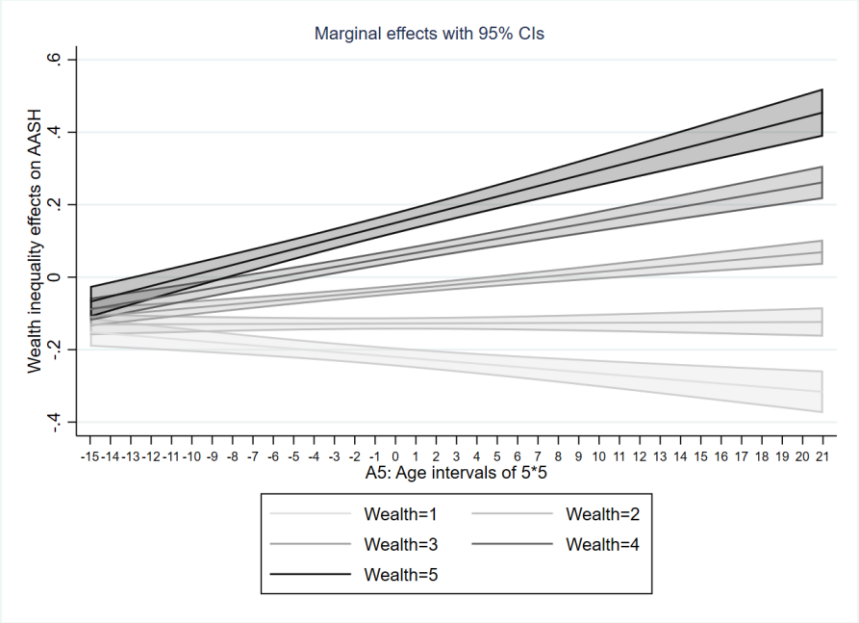
Table A2. Age-adjusted self-assessed health (ASAH) according to wealth strata (5) of population aged 25-64; Multilevel linear random-slope model estimates (Mixed models).

| | (1) | | (2) | | (3) | | (4) | | (5) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Age-Adjusted self-assessed Health (ASAH)** | | | | | | | | | |
| Sex | -0.131*** | (0.015) | -0.109*** | (0.014) | -0.108*** | (0.014) | -0.065*** | (0.015) | -0.062*** | (0.015) |
| Race | -0.364*** | (0.015) | -0.090*** | (0.018) | -0.050** | (0.018) | -0.055** | (0.018) | -0.038* | (0.018) |
| Age (Centred) | 0.001 | (0.001) | 0.001 | (0.001) | 0.001 | (0.001) | 0.004*** | (0.001) | 0.004 | (0.003) |
| 5Par Education | | | 0.033*** | (0.007) | 0.033*** | (0.007) | 0.038*** | (0.006) | 0.036*** | (0.006) |
| 5Par Income | | | 0.022** | (0.007) | 0.014* | (0.007) | 0.017* | (0.007) | 0.000 | (0.008) |
| 5HEducation | | | 0.066*** | (0.006) | 0.065*** | (0.006) | 0.059*** | (0.006) | 0.055*** | (0.006) |
| 5HIncome | | | 0.141*** | (0.006) | 0.106*** | (0.006) | 0.064*** | (0.007) | 0.059*** | (0.007) |
| Individual Employed | | | | | | | 0.159*** | (0.037) | 0.143*** | (0.037) |
| Individual Self-employed | | | | | | | 0.046 | (0.024) | 0.034 | (0.024) |
| Standardized Individual hours worked | | | | | | | 0.094*** | (0.011) | 0.099*** | (0.011) |
| Standardized Individual hours worked squared | | | | | | | -0.034*** | (0.008) | -0.035*** | (0.008) |
| Couple HH | | | | | | | 0.028 | (0.017) | 0.019 | (0.017) |
| Has child/Children (ref. no children) | | | | | | | 0.064*** | (0.016) | 0.065*** | (0.016) |
| 5Par Wealth | | | | | | | | | 0.031*** | (0.008) |
| Constant | 0.648*** | (0.030) | -0.494*** | (0.045) | -0.408*** | (0.070) | -0.517*** | (0.079) | -0.525*** | (0.083) |
| Random Effects | | | | | | | | | | |
| sd(residual) | 0.961*** | (0.005) | 0.925*** | (0.005) | 0.919*** | (0.005) | 0.907*** | (0.005) | 0.904*** | (0.005) |
| sd(cons_) | | | | | 0.119*** | (0.039) | 0.117*** | (0.038) | 0.127*** | (0.041) |
| sd(cage: age centred) | | | | | | | | | 0.007*** | (0.002) |
| corr(cage, cons_) | | | | | | | | | 1.000 | (0.000) |
| N.of observations | 17172.000 | | | | | | | | | |
| AIC | 47379.929 | | 46065.936 | | 45867.465 | | 45433.202 | | 45321.830 | |
| BIC | 47418.684 | | 46135.696 | | 45944.975 | | 45557.219 | | 45469.100 | |
| LL | -23684.964 | | -23023.968 | | -22923.732 | | -22700.601 | | -22641.915 | |

Source: PSID 1984-2014

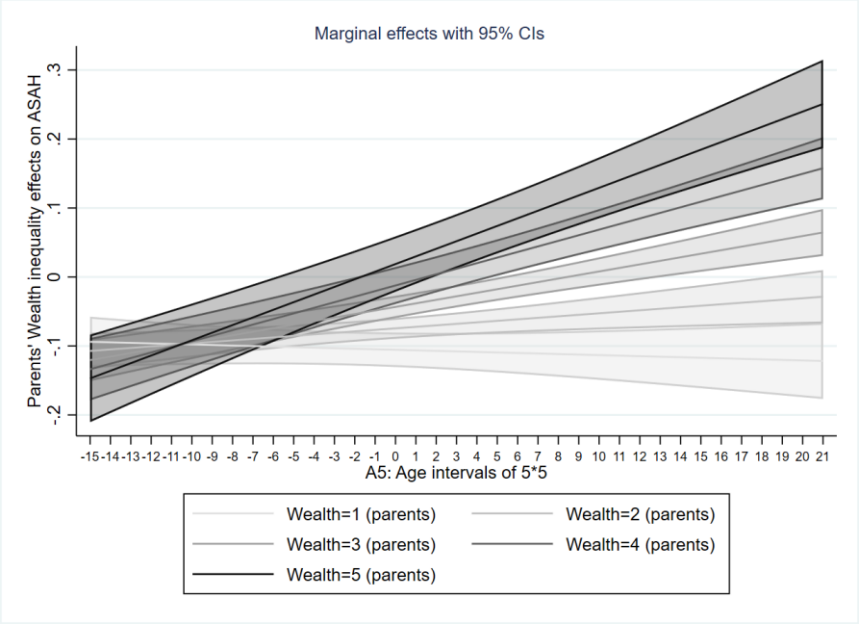
Note: * p<0.05 ** p<0.01*** p<0.001, unweighted data. Age is sample demeaned, workhours are initially capped to 80 hours/ and mean centred

**Figure A1.** Robustness check: :Marginal effects of wealth strata levels of of population aged 25-64, for varying age levels, on age-graded health (ASAH) OLS models.




*Source:* Authors' calculations, PSID; *N= 17, 172. Note: Full model based on Model 1 Table A1*

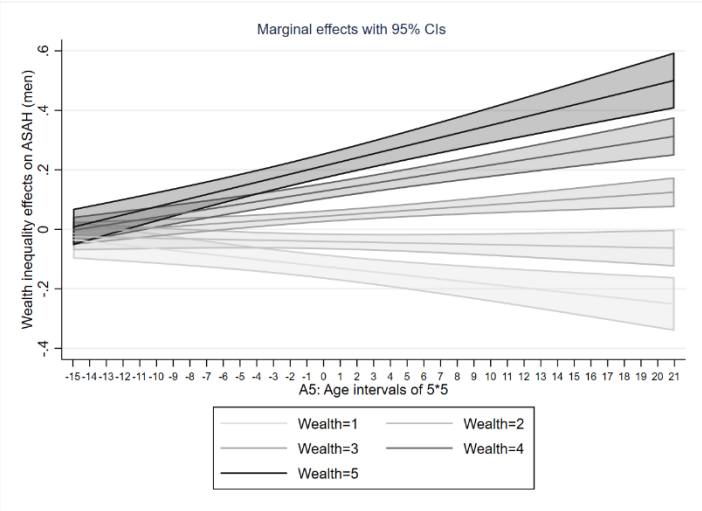
**Figure A2.** Robustness check: : Marginal effects of parents' wealth strata levels of population aged 25-64, for varying age levels, on age-graded health (ASAH) OLS models.



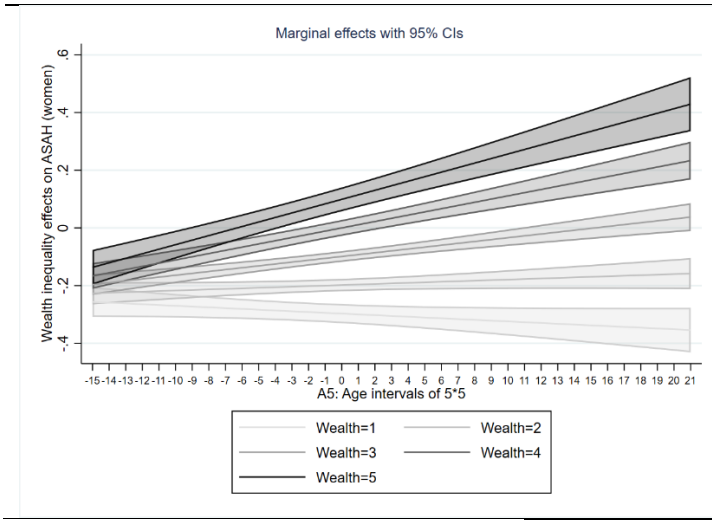

*Source:* Authors' calculations, PSID; *N= 17, 172. Note: Full model based on Model 2 Table A1*

Figure A3. :Marginal effects of wealth strata levels of of population aged 25-64, for varying age levels among sex-split samples;  on  age-graded health (ASAH) OLS models.

Men




Women




*Source:* Authors' calculations, PSID; *N= 17, 172. Note: Full model based on Model 1 Table A1*

**Table A3: Sample statistics**

| Variable | N | Mean | SD | Range | |
|---|---|---|---|---|---|
| Sex | 17366 | 1.51 | 0.50 | 1 | 2 |
| Race | 17366 | 1.14 | 0.35 | 1 | 2 |
| Age | 17366 | 43.43 | 10.57 | 25 | 64 |
| Age (sample demeaned) | 17366 | 2.02 | 10.57 | -16.41 | 22.59 |
| A5 Age intervals | 17366 | 0.77 | 4.82 | -8.67 | 8.67 |
| Age-adjusted self-assessed health (ASAH) | 17366 | 0.04 | 0.97 | -3.02 | 1.76 |
| Parents' age-adjusted self-assessed health | 17366 | -0.04 | 0.80 | -3.03 | 2.21 |
| 5Par Education | 17366 | 2.88 | 1.25 | 1 | 5 |
| 5Par Wealth | 17366 | 3.24 | 1.29 | 1 | 5 |
| 5Par Income | 17366 | 3.00 | 1.18 | 1 | 5 |
| Parental Couple | 17366 | 0.60 | 0.49 | 0 | 1 |
| Education | 17366 | 3.07 | 1.40 | 1 | 5 |
| Income | 17366 | 3.09 | 1.40 | 1 | 5 |
| Wealth | 17366 | 3.06 | 1.44 | 1 | 5 |
| Employed | 17366 | 0.87 | 0.34 | 0 | 1 |
| Working hours (cap at 80hrs/ week) | 17366 | 33.43 | 18.04 | 0 | 80 |
| Working hours (standardised) | 17366 | 0.11 | 0.97 | -1.69 | 2.61 |
| Self-employed work status | 17172 | 0.12 | 0.32 | 0 | 1 |
| Has child | 17366 | 0.45 | 0.50 | 0 | 1 |
| Couple | 17366 | 0.69 | 0.46 | 0 | 1 |
| Timeline | 17366 | 0.19 | 5.26 | -8.56 | 6.44 |
| Year of survey | 17366 | 2008.06 | 5.63 | 1999 | 2015 |

*Source:* Authors' calculations, Panel Study of Income Dynamics (PSID) 1984-2015, weighted data.