

Extended Abstract

Intergenerational Persistence of Economic Status in Japan: Evidence from Three Generations and New Results on Assets and Debts

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Background and Motivation

A central question in the intergenerational mobility literature is whether economic advantages (and disadvantages) persist beyond the parent–child link. The classic Becker and Tomes (1986) framework implies an AR(1) transmission process in which long-run persistence decays geometrically across generations. Yet a growing body of work argues that grandparents may exert independent effects on grandchildren through lifetime gift, bequests, cultural capital, or networks, implying persistence in excess of AR(1). For Japan—where multigenerational evidence remains sparse—we provide new three-generation estimates of income persistence and extend the analysis to assets and debts, thereby connecting intergenerational resource flows to young adults’ wealth and indebtedness.

Research Questions

- ✓ How strongly does economic status persist from grandfathers (G0) to fathers (G1) and to grandchildren (G2) in Japan?
- ✓ Is the observed G0 to G2 persistence consistent with an AR(1) process (i.e., fully mediated by parents), or is there evidence of a direct grandparental influence?
- ✓ Beyond flows (income), do stocks (assets and debts) display multigenerational correlation, and what is the role of grandparental resources in shaping grandchildren’s indebtedness?

Data

We combine (i) the Japan Household Panel Survey (JHPS/KHPS, 2004–2023) for parents (G1), (ii) the JHPS Second-Generation Supplement (JHPS-G2, 2019–2023) for adult children (G2), and (iii) the Social Stratification and Social Mobility (SSM) surveys (1965, 1975), together with JHPS records on grandparents’ occupation, education, and birth year, to estimate returns to education and occupation and impute lifetime income for the grandparent cohort (G0). The rich information in the JHPS allows us to link exact G0, G1, and G2 family triads, while the SSM microdata provide period-appropriate earnings structures for the G0 birth cohorts (mid-careers in the late 1960s–1970s).

Measuring Permanent Economic Status

To minimize life-cycle bias and “market-luck” noise, we impute log income at age 45 for each generation from education and detailed occupation, estimating age-profiled returns and then predicting income at 45; we average predictions across available waves at the individual level. Grandfathers’ incomes are unobserved in JHPS, so we estimate their returns using SSM and apply them to G0 characteristics reported in JHPS. This yields a consistent, compound measure of latent economic status for G0, G1, and G2. A key design choice is imputing at mid-career. Because many G2 are still young while many G1 are nearing retirement, simple multi-year current income averages would understate (overstate) permanent income for G2 (G1), biasing three-generation elasticities; the age-45 imputation cures this asymmetry.

Empirical Strategy

We estimate intergenerational income elasticities (IGEs) from G0 to G1 and from G0 to G2 using OLS on imputed log incomes at age 45. We then test the AR(1) restriction by comparing the estimated G0 to G2 elasticity (β_2) with the square of the G0 to G1 elasticity (β_1^2). Failure to reject $\beta_2 = \beta_1^2$ is evidence that G0’s influence is fully mediated by G1. We further probe measurement robustness by implementing an IV design that instruments G1 income with G0 income to “restore” latent persistence attenuated by measurement error.

Main Findings on Income Persistence

We estimate an intergenerational income elasticity of about 0.35 from G0 to G1 and about 0.15 from G0 to G2 (about 0.18 for grandsons), indicating statistically meaningful persistence from G0 to G2. However, formal tests do not reject the hypothesis implied by AR(1): the G0–G2 elasticity is not statistically larger than the square of the G0–G1 elasticity, and once we condition on G1 income the estimated G0–G2 elasticity becomes small and imprecisely estimated, consistent with transmission operating mainly through parents.

When we instrument G1 income with G0 income, the G1–G2 elasticity roughly doubles—from about 0.30 in OLS to about 0.54 in the IV specification—as one would expect if measurement error attenuates the OLS estimate. A chi-square test, however, does not reject equality of the OLS and IV estimates at conventional significance levels in our sample, again consistent with limited direct grandparental effects under AR(1).

We extend the analysis from income flows to stock outcomes for G2, examining intergenerational correlations in assets and liabilities and regressing G2 debt on G0 income while controlling for G1 debt. Preliminarily, higher G0 income is associated with lower G2 debt conditional on G1 debt, consistent with wealthier grandparents easing credit constraints via lifetime gifts or collateral support. Together with the income results, this suggests that while the income channel is largely captured by AR(1), grandparental resources still shape young adults’ wealth and

indebtedness.