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## Inequality of Opportunity in Times of Rising Global Inequality: USA vs. Switzerland

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# Inequality of Opportunity in Times of Rising Global Inequality: USA vs. Switzerland\*

## Abstract

We provide a comparative analysis of inequality of opportunity for children's future success in Switzerland and the United States during an era of rising global inequality. Leveraging Swiss administrative earnings data and U.S. survey data, we estimate sibling correlations for cohorts entering the labor market in the early 1970s and early 1980s in the two countries. We find a sharp rise in sibling correlations and income inequality in the United States during the 1980s similar to Davis & Mazumder (2026) who study intergenerational income mobility. However, we find that both inequality and inequality of opportunity in Switzerland remained remarkably stable. Sibling correlations in long-run income consistently hovered below 15% across both cohorts in Switzerland, whereas in the United States they nearly doubled, from 15.4% to 30.6%. These findings thus position Switzerland as a salient counterfactual to the U.S. case.

## JEL classification

D63, I30, J62, J12

## Keywords

inequality of opportunity, income inequality, social mobility, time trends, sibling correlation

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# 1 Introduction

How inequality evolves over time is a central concern in the social sciences and researchers have increasingly focused not only on the level of income inequality in a society but also on the extent to which this may lead to greater inequality of opportunity in the next generation (e.g., Nybom & Stuhler, 2024). While the rise in income inequality since the 1980s in many advanced economies is well documented (Atkinson & Piketty, 2007; Atkinson et al., 2011; Katz & Autor, 1999; Piketty & Saez, 2003), its consequences for the subsequent generation remain less well understood. There is however evidence that the two phenomenon are correlated across countries as high cross sectional inequality appears to be associated with greater intergenerational income persistence, or lower intergenerational mobility (Corak, 2013; Durlauf et al., 2022). The degree of intergenerational mobility is one of the main proxies used to capture inequality of opportunity.

Davis & Mazumder (2026) provide compelling evidence that rising inequality within a country is associated with less equality of opportunity. Focusing on the United States, they show that intergenerational persistence increased substantially between cohorts entering the labor market around 1970 to those who entered roughly a decade later in the early 1980s—a period marked by sharp increases in top income shares and returns to education. During this period, the intergenerational elasticity (IGE) rose from 0.28 to 0.45, and the rank-rank slope from 0.25 to 0.36. This trend is also mirrored in earlier evidence using sibling correlations, an omnibus measure of the overall importance of family background, by Levine & Mazumder (2007). Sibling correlations are a useful indicator of inequality of opportunity that captures *all* factors shared by siblings that determine economic success that includes, but is not limited to, parent income (Björklund et al., 2010; Mazumder, 2008; Solon et al., 1991). Sibling correlations are also commonly referred to as “intra-class correlations” (ICC).

Against this backdrop, Switzerland provides a unique empirical setting to examine whether the relationship between inequality and inequality of opportunity also holds under conditions of persistently low inequality. Switzerland has long maintained a relatively stable and egalitarian income distribution, without experiencing a parallel rise in top income concentration.<sup>1</sup> As a high-income economy characterized by a large financial sector, low average tax rates, internal tax competition, and the absence of wartime disruptions (Dell et al., 2007; Foellmi & Martínez, 2017; Schaltegger & Gorgas, 2011), Switzerland therefore offers a compelling setting for studying inequality of opportunity under conditions of persistently low inequality. Yet despite its salience, empirical evidence on changes over time in measures of inequality of opportunity in Switzerland remains scarce.

This paper addresses that gap by using the cohort-based design of Davis & Mazumder (2026) to study changes in sibling correlations using rich Swiss administrative data covering the social security earnings records (SSER) of over two million individuals from 38 birth cohorts.

We estimate sibling correlations in long-run income for two groups: individuals born between 1948-1953 and those born between 1958-1963. The former entered the labor market well before the sharp global rise in inequality while the latter group joined the workforce precisely when inequality sharply rose. In parallel, we implement the equivalent cohort comparison for the United States using harmonized NLS66 and NLSY79 data following Davis & Mazumder (2026), thereby ensuring direct comparability across countries. Long-run income is measured as a four-year average, observed during 1981-1984 and 1991-1994, respectively, when individuals are approximately 32 years old.<sup>2</sup>

We focus on sibling correlations and not on other commonly used intergenerational per-

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<sup>1</sup>See, e.g., Dell et al. (2007), Foellmi & Martínez (2017), Frey & Schaltegger (2016), and Schaltegger & Gorgas (2011).

<sup>2</sup>In Section 4.4.2, we examine the patterns for individuals observed at younger (approximately 22 years) and older (approximately 42 years) ages, again, during the early 1980s and 1990s. This robustness check ensures that our findings are not an artifact of the life-cycle stage at which income is measured.

sistence measures because we are unable to link children to parent income for Swiss cohorts born before 1966, making it impossible to leverage the pre vs. post rise in inequality cross cohort design. While the sibling correlation is somewhat conceptually different from other vertical measures of persistence, they yield strikingly similar empirical patterns for other cohorts where we can calculate all three measures (see Section 4.4.1). This is consistent with (Deutscher & Mazumder, 2023) who also find very similar patterns across regions using Australian tax data.

We capture inequality of opportunity in the early 1980s, before the steep rise in global income inequality, as well as exactly a decade later, during the early 1990s. This temporal separation allows us to benchmark trends before and after the rise in global inequality.<sup>3</sup>

Switzerland presents a striking contrast to the U.S. experience. During the 1980s, income inequality in Switzerland remained largely unchanged, as confirmed by tax data from the Swiss Federal Tax Administration (see Figure 1). In parallel, we find that sibling correlations also remained low and stable. In contrast, our harmonized U.S. estimates show a marked increase in sibling correlations across cohorts.

Our analysis provides two main contributions. First, we provide direct evidence that inequality of opportunity in Switzerland remained stable during a period of rising global inequality. This stability mirrors Switzerland’s steady inequality profile and reinforces the association between cross-sectional inequality and inequality of opportunity in the next generation. We further replicate our analysis separately by gender and nativity and find no meaningful differences across Swiss-born and foreign-born individuals, or between men and women.

Second, we investigate the role of changes in the returns to education in explaining these diverging patterns. While Davis & Mazumder (2026) report a 47% increase in returns in the U.S., our Swiss estimates indicate only a modest increase of 10.5%, with statistical tests

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<sup>3</sup>The 1980s marked a turning point for many countries, with spikes in the top 1% income share, 90-10 ratios, and Gini coefficients (Kuhn et al., 2020; Piketty & Saez, 2003).

suggesting stable returns across cohorts. This result supports the view that Switzerland’s institutional architecture—characterized by a strong vocational education and training (VET) system, moderate returns to formal schooling, and a flexible labour market—may help buffer against inequality-induced declines in opportunity.

We conduct a wide range of robustness checks, including parent-child models, alternative cohort definitions, regional analyses, the analysis of a longer time spans, and the extensions to educational mobility. These exercises confirm our core findings and underscore Switzerland’s exceptional position in the global mobility landscape: a country where economic opportunity has remained stable despite rising inequality elsewhere.

The remainder of this paper is structured as follows. Section 2 reviews the related literature. Section 3 describes the data and empirical strategy. Section 4 presents the main results. Section 5 concludes.

## 2 Related Literature

A large body of comparative research has documented substantial cross-country differences in inequality of opportunity. Much of the research has focused on parent-child linkages to estimate vertical mobility measures, such as intergenerational elasticities (IGE’s) or rank-rank slopes.<sup>4</sup> These metrics capture the extent to which a child’s economic outcomes can be predicted by their parents’ status, typically measured at a fixed point in the life cycle. Comparative evidence consistently finds lower intergenerational persistence in Scandinavian countries and higher levels in the United States (Black & Devereux, 2011; Bratberg et al., 2017; Corak, 2013; Deutscher & Mazumder, 2023; Jäntti & Jenkins, 2015; Solon, 2018). For example, Chetty et al. (2014a) report a rank-rank slope of 0.34 for the U.S., compared to 0.32 in Germany (Dodin et al., 2024), 0.30 in France (Kenedi & Sirugue,

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<sup>4</sup>See Black & Devereux (2011) and Solon (2018) for comprehensive overviews.

2023), 0.22 in Italy (Acciari et al., 2022), and 0.20 in Denmark (Helsø, 2021).

A growing strand of the literature examines how mobility evolves over time (Aaronson & Mazumder, 2008; Abramitzky et al., 2025; Ahrsjö et al., 2025; Baarck et al., 2025; Blanden et al., 2004; Chetty et al., 2014b; Connolly et al., 2019; Davis & Mazumder, 2026; Engzell & Mood, 2023; Goldthorpe & Mills, 2008; Grebol et al., 2025; Harding & Munk, 2020; Jácome et al., 2021; Markussen & Røed, 2020). Taken together, the international evidence points to a general decline in intergenerational mobility, with rising persistence documented e.g., in Canada (Connolly et al., 2019), Germany (Baarck et al., 2025), and the United Kingdom (Blanden et al., 2004), and—with particular significance—even in traditionally high-mobility Scandinavian countries such as Sweden, Norway, and Denmark (Ahrsjö et al., 2025).<sup>5</sup> For the U.S., Chetty et al. (2014b) find no evidence of declining relative mobility across cohorts since the 2000s. However, Jácome et al. (2021) show that intergenerational persistence follows a long-run U-shape: between the 1910s and 1940s birth cohorts, the IGE declines substantially from roughly 0.74 to 0.49, before rising again for subsequent cohorts. This pattern is highly consistent with Davis & Mazumder (2026) and Levine & Mazumder (2007), who document a pronounced increase in intergenerational persistence between cohorts born in 1948–1953 and 1961–1964. Their findings coincide with the sharp rise in U.S. top income shares and returns to education during the 1980s, suggesting a link between rising inequality and declining mobility.<sup>6</sup>

A complementary approach in the broader literature on inequality of opportunity uses sibling correlations—intraclass correlation coefficients (ICC’s)—to capture the broader influence of shared family background on outcomes. Unlike vertical parent-child measures focused on a single dimension of status (e.g., income, education), sibling correlations account for all observed and unobserved familial factors shared by siblings (Solon, 1999; Björklund

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<sup>5</sup>For country-specific analyses of the Scandinavian cases, see Engzell & Mood (2023) for Sweden, Markussen & Røed (2020) for Norway, and Harding & Munk (2020) for Denmark.

<sup>6</sup>These trends in relative mobility are distinct from patterns in absolute mobility documented by Chetty et al. (2017).

& Jäntti, 2020). Thus, they are a comprehensive measure of the overall influence of family background, capturing shared factors such as parenting style, neighborhood environment, genetics or social networks (Björklund & Jäntti, 2012). In practice, research shows that sibling correlations are strongly correlated with conventional parent-child estimates such as the IGE or the rank-rank slope (Deutscher & Mazumder, 2023).<sup>7</sup> Furthermore, countries with low IGE's (e.g., Nordic countries) also tend to exhibit low sibling correlations, while high-persistence countries such as the United States rank consistently high across both vertical and horizontal measures.<sup>8</sup> Using Danish data, Bingley & Cappellari (2019) also highlight that intergenerational income transmission accounts for about 70 percent of sibling correlations in income.

While sibling correlations are conceptually appealing they have been relatively understudied, especially for looking at longer-run trends in inequality of opportunity. Most existing evidence comes from the Nordic countries: Björklund et al. (2009) estimate declining, followed by increasing ICC's in Sweden for cohorts born between 1932 and 1968, and Pekkarinen et al. (2017) extend the analysis to Norway for the same period of time showing a declining trend. Wiborg & Hansen (2018) also suggest a U-shaped trend in Norway, with brother and sister correlations in earnings rising from slightly below 0.20 to 0.25 for younger and more recent cohorts compared to Pekkarinen et al. (2017).<sup>9</sup> Grätz & Kolk (2022) find that sibling influence declines with age, implying that family background plays a stronger role in early adulthood than later in life.<sup>10</sup> In contrast, Bingley & Cappellari

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<sup>7</sup>For details, see Chapter 4.4.1 and Deutscher & Mazumder (2023).

<sup>8</sup>In our own administrative data for Switzerland, we find that sibling correlations in income are strongly correlated with vertical parent-child measures across cohorts. For all available cohorts born between 1966 and 1988, we estimate sibling correlations (ICC's) as well as parent-child intergenerational elasticities (IGE's) and rank-rank slopes (RRS), using harmonized income definitions averaged over ages 30–33. We find similar developments for the different measures. For details and visualization, see Section 4.4.1.

<sup>9</sup>Notably, the sibling correlation levels for brothers, sisters and mixed siblings in Norway are comparable in magnitude to those found in Switzerland. See Section 4 for Swiss estimates.

<sup>10</sup>Our life course analysis traces sibling correlations in income for the same cohort (1958–1963) at four different ages (22, 32, 42, and 52). It shows that the family's influence on economic outcomes in Switzerland remains consistently small over the life course. See Section 4.4.2 and Appendix B11 for details.

(2019) find a U-shaped pattern in sibling correlations over the life course.

For Switzerland, existing evidence points to low levels of inequality of opportunity. Chuard & Grassi (2020) report a rank-rank income correlation of 0.14, while Bühler et al. (2026a) find a sibling correlation of 0.16. Several analyses highlight the role of Switzerland’s dual-track education system in explaining differences between educational and income mobility (Bauer, 2006; Bauer & Riphahn, 2007; Chuard & Grassi, 2020). Chuard & Grassi (2020) document stable income mobility for cohorts born between the mid-1960s and mid-1980s, with some regional heterogeneity across cantons. Häner & Schaltegger (2024) use surname-based methods to trace long-run family status since 1550 and find substantial decay in economic persistence over four generations. Using multigenerational data from the Zurich Longitudinal Studies (ZLS), Bühler et al. (2026b) find that the influence of socioeconomic status on cognitive abilities attenuates within three generations.

Our study contributes to this literature in several ways. First, we provide new evidence on inequality of opportunity in Switzerland using sibling correlations across comparable cohorts. This allows us to assess whether inequality of opportunity remained stable, as suggested by Switzerland’s persistent low level of cross-sectional inequality, or declined in parallel with global trends, as observed in the United States. Second, for Switzerland, we extend the analysis along several dimensions: we conduct subgroup analyses by gender and nativity, examine patterns for different cohorts and over the life course for one cohort-group (1958-1963), and track long-run trends across cohorts born between 1951 and 1988.<sup>11</sup> These contributions offer new insights and position Switzerland as a revealing counterfactual in the comparative literature on the dynamics of inequality over generations.

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<sup>11</sup>Our samples for the United States are too small to make meaningful comparison of the sort we can do with the administrative data in Switzerland.

## 3 Methods and Data

### 3.1 Time Trends in Sibling Correlations

Our empirical strategy builds on the cohort-based framework of Davis & Mazumder (2026), who document a sharp rise in intergenerational income persistence in the United States between cohorts born in 1948-1953 and 1961-1964. These cohort groups each entered the labor market under very different inequality regimes. We adopt their cohort design in order to ensure direct comparability across time.

We estimate *horizontal* sibling correlations rather than *vertical* parent-child regressions. Therefore, we apply as closely as possible the same methodology to Switzerland as we do for the United States. We use the same underlying data and birth cohorts as in Davis & Mazumder (2026). This harmonized approach allows us to compare sibling correlation time patterns across both countries using a consistent measurement framework while holding the cohort structure constant.

There are two main motivations for relying on sibling correlations. First, sibling correlations provide a broader measure of family background effects, capturing both observed and unobserved characteristics shared among siblings such as parental income and education, family structure, cultural capital, genetics or neighborhood environments (Björklund & Jäntti, 2020). Second, Swiss data constraints preclude vertical estimation for any of the relevant birth cohorts: while children’s income is observable beginning in 1981, parental earnings are not consistently available in the administrative data when children are still living at home, which is standard in the literature.<sup>12</sup> In contrast, a sibling-based strategy extends the analytical window by over a decade, enabling comparison across pre- and post-inequality-shift cohorts in accordance with Davis & Mazumder (2026). As shown in

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<sup>12</sup>For example if we wanted to measure parent income when children were at least 15 years old we could not observe any cohorts born before 1966.

a robustness check in Section 4.4.1, for cohorts born between 1966 and 1988—where both estimation strategies are feasible—sibling correlations and parent-child mobility estimates (rank-rank slopes and IGE’s) yield nearly identical trends. This suggests that sibling correlations likely provide very similar answers about how inequality of opportunity changed compared to what would be found using traditional vertical measures of income persistence.

We estimate sibling correlations using a linear mixed-effects model (e.g., Mazumder, 2008; Björklund et al., 2010; Pekkarinen et al., 2017; Hällsten & Thaning, 2022). Specifically, we estimate the following two-level variance decomposition model:

$$y_{ij} = \beta_{00} + \alpha_{0j} + \varepsilon_{ij}, \quad (1)$$

where  $y_{ij}$  denotes long-run income (averaged over four years) for individual  $i$  from family  $j$ ,  $\beta_{00}$  is the grand mean,  $\alpha_{0j} \sim \mathcal{N}(0, \sigma_{\alpha}^2)$  is a family-specific random intercept capturing unobserved shared background, and  $\varepsilon_{ij} \sim \mathcal{N}(0, \sigma_{\varepsilon}^2)$  is an individual-specific error term.

The total variance in long-run income is decomposed as:

$$\text{Var}(y_{ij}) = \sigma_{\alpha_0}^2 + \sigma_{\varepsilon}^2. \quad (2)$$

The intraclass correlation coefficient (ICC), or sibling correlation  $\rho$ , is then given by:

$$\rho = \frac{\sigma_{\alpha_0}^2}{\sigma_{\alpha_0}^2 + \sigma_{\varepsilon}^2}. \quad (3)$$

This parameter reflects the share of income variation attributable to shared family background. Higher values of  $\rho$  indicate greater intergenerational persistence and thus lower mobility.

We estimate  $\rho$  separately for each cohort window for both Switzerland and the United States by applying Equation (1) to successive birth-year groups. The resulting ICC’s are

interpreted as cohort-specific estimates of the influence of family background on economic outcomes.<sup>13</sup>

We adopt the same comparative framework for both Switzerland and the United States. For Switzerland, we contrast sibling correlations in long-run income for cohorts born in 1948–1953 and 1958–1963, constructed using identical four-year windows. For the United States, we estimate sibling correlations for the same birth cohorts using the identical cohort definitions and data structure as in Davis & Mazumder (2026). This parallel implementation enables a direct cross-country comparison of changes in intergenerational mobility.

For each cohort, we estimate the ICC using the following random-intercept model:

$$y_{ijc} = \beta \mathcal{X}_{ijc} + \alpha_{0jc} + \epsilon_{ijc}, \quad (4)$$

where  $y_{ijc}$  denotes inflation-adjusted long-run income for sibling  $i$  from family  $j$  in cohort  $c$ , the vector  $\mathcal{X}_{ijc}$  captures gender fixed effects,  $\alpha_{0jc} \sim \mathcal{N}(0, \sigma_{\alpha_{0c}}^2)$  is the cohort-specific shared family component, and  $\epsilon_{ijc} \sim \mathcal{N}(0, \sigma_{\epsilon_c}^2)$  is the individual-specific error.<sup>14</sup>

## 3.2 Development of Returns to Education

Following Davis & Mazumder (2026), we also examine whether the returns to education have changed across cohorts. To assess whether a similar pattern is observable in Switzerland, we estimate cohort-specific returns to schooling for the two groups used in our main analysis: individuals born between 1948-1953 and those born between 1958-1963.

We estimate the following cohort-interacted log-linear regression model:

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<sup>13</sup>All models are estimated via restricted maximum likelihood (REML) using the `lmer` function in R (Bates et al., 2015), with standard errors and  $p$ -values computed using Satterthwaite’s degrees of freedom as implemented in the `lmerTest` package (Kuznetsova et al., 2017). Our approach extends the cohort-based sibling correlation designs of Björklund et al. (2009) and Pekkarinen et al. (2017), who estimate long-run trends in Sweden and Norway, respectively, by extending the cohort window through 1988, providing new evidence on intergenerational mobility in a persistently low-inequality setting.

<sup>14</sup>Confidence intervals for the ICC are based on parametric bootstrapping using `confint()` from the `lme4` package with 100 simulations.

$$\log(y_{ij}) = \beta_0 + \beta_1 \cdot \text{Educ}_{ij} \cdot C_{ij} + \mathcal{X}'_{ij}\delta + \epsilon_{ij}, \quad (5)$$

where  $y_{ij}$  denotes log long-run inflation-adjusted income and  $\text{Educ}_{ij}$  represents years of schooling. The interaction terms allow the returns to education to vary across cohorts. The control vector  $\mathcal{X}'_{ij}$  includes gender and state of birth indicators.

### 3.3 Administrative Swiss Data

Our empirical analysis draws on comprehensive Swiss administrative data combining social security earnings records (SSER) from the Central Compensation Office (CCO) with population register data (STATPOP) from the Federal Statistical Office (FSO). This integrated dataset offers full population coverage and enables the construction of sibling-based mobility measures for over two million individuals born between 1951 and 1988, spanning 38 birth cohorts.

Demographic characteristics, household structures, and citizenship status are obtained from the annual Population and Households Statistics (STATPOP).<sup>15</sup> These data are pseudonymously linked to longitudinal earnings histories from the social security earnings records (SSER), which provide total annual labor income for all employees and self-employed individuals from 1981 onward.<sup>16</sup> Importantly, the SSER include mandatory pension contributions and is not subject to an upper earnings cap, allowing us to observe the full distribution of individual labor income over multiple decades.

To analyze returns to education (see Section 3.2 for details), we incorporate additional data from the Structural Survey (SE), a rotating panel survey that is linkable to the Swiss

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<sup>15</sup>STATPOP is a register-based data system that covers the entire resident population of Switzerland. It includes information on household composition, civil status, and nationality.

<sup>16</sup>Sensitivity checks using Swiss Household Panel (SHP) data for latest cohorts indicate that the inclusion of capital income has a negligible effect on overall income mobility. This supports our focus on labor income as a consistent and comparable outcome measure.

federal census system. Since 2010, the SE has sampled approximately 200,000 individuals annually, resulting in a dataset of over 2.9 million unique observations. The survey contains harmonized measures of highest educational attainment, which we convert into years of schooling using official federal conversion tables.

The integration of these high-quality administrative sources enables us to estimate fine-grained, nationally representative trends in sibling correlations and returns to education over the last four decades.

### **3.4 Sample and Variable Selection: Switzerland and the United States**

For each cohort, we define overlapping subgroups, each consisting of three birth years. Following the best practices in the income mobility literature, we aim to measure long-run income at a stage in the life course when earnings trajectories have largely stabilized (Haider & Solon, 2006). Specifically, our baseline sample includes individuals aged 28 to 36, born in either the 1948-1953 or 1958-1963 cohorts. This ensures that labor market outcomes are observed consistently across cohorts—either between 1981 and 1984 or between 1991 and 1994. In addition to these two anchor cohorts, we also leverage a broader sample covering all birth cohorts from 1951 to 1988 to analyze long-run trends in a robustness check (see Section 4.4.4).

Our primary outcome variable is long-run, inflation-adjusted labor income in Swiss francs (CHF, 2021 prices). Income includes all earnings from dependent employment and self-employment that are subject to mandatory social security contributions.<sup>17</sup>

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<sup>17</sup>Covered income sources include regular wages, self-employment income, unemployment benefits, disability insurance, parental leave payments, military service compensation, and pandemic-related income replacement schemes. We also include earnings from certain non-employed individuals with minimal Old-age and survivors' insurance (OASI) contributions, provided they receive recognized municipal benefits. Individuals with wealth-based minimum contributions are coded as having zero income. Records without a valid OASI identifier are excluded. Splitting components, child-rearing credits, and care credits are not

To reduce transitory fluctuations, long-run income is computed as the arithmetic average of earnings over four consecutive calendar years.<sup>18</sup>

Family affiliation is determined based on parental identifiers in the census data. Individuals are classified as siblings if they share the same mother; in cases where maternal identifiers are missing, paternal identifiers are used. No additional restrictions are imposed regarding biological versus adoptive status or full versus half-siblings.

For the United States, we construct comparable estimates using harmonized survey data from the NLS66 and NLSY79, following the design of Davis & Mazumder (2026). Long-run income is defined as own wage and salary earnings averaged over three survey years.<sup>19</sup>

Appendix Table A2 provides a structured comparison of data sources, income concepts, family definitions, cohort construction, and sample sizes for both countries.

### 3.5 Descriptive Statistics

Table 1 presents summary statistics for the final analysis sample used to estimate the trends in sibling correlations. The Swiss sample includes a total of 393,589 individuals born between 1948 and 1963, for whom we observe at least one sibling. The average long-run income (in 2021 CHF) is CHF 56,475, with an interquartile range of CHF 24,998 to CHF 80,006. The average birth year is 1957, with an interquartile range spanning 1952 to 1961.

The sex distribution is broadly balanced: 217,503 individuals (55.3%) are male and

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included, as they do not represent directly earned income.

<sup>18</sup>We use the arithmetic mean in CHF without log transformation, as the income distribution at this stage of the life course is approximately symmetric. High incomes are rare at younger ages, reducing concerns about skewness.

<sup>19</sup>Siblings are identified through household identifiers, defined as individuals sharing the same household at interview. To maximize observation numbers in the main comparison (Figure 2), U.S. birth cohorts are pooled within the early (1948–1953) and late (1961–1964) periods. Figure 6 additionally reports estimates based on overlapping three-year birth cohorts, mirroring the Swiss construction.

176,086 (44.7%) are female. With respect to migration background, 384,464 individuals (97.7%) were born in Switzerland, while 9,125 individuals (2.3%) were born abroad.<sup>20</sup>

In addition to studying income, we also estimate sibling correlations in educational attainment (see sensitivity check in Section 4.4.5) using matched data from the Structural Survey (SE), provided by the Federal Statistical Office (FSO). We are able to link 85,562 individuals from sibling pairs in our main sample with valid education data. For this subsample, the average years of schooling amount to approximately 12.8 years.

Additional descriptive statistics related to the long-run time trend robustness check presented in Section 4.4.4 are reported in Appendix Table A3.

Appendix Table A4 provides further descriptive statistics for the subsamples used in our heterogeneity analyses. These include dyads restricted to only brothers, only sisters, as well as groups stratified by nativity status.

For comparability, we construct analogous estimates for the United States using harmonized data from the NLS66 and NLSY79, following the data preparation in Davis & Mazumder (2026). The gender distribution is balanced in the sample. The education sample includes 8,265 individuals, with average educational attainment of 13.2 years. Detailed descriptive statistics for the U.S. data are reported in Appendix Table A1.

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<sup>20</sup>The relatively high share of Swiss-born individuals is not representative of the population composition in Switzerland. This is due to sample restrictions arising from our identification strategy: many individuals born abroad are excluded either because they may have no identified siblings in the administrative records or because no parental information is available to assign them to a family unit.

Table 1: Descriptive Statistics of main Variables and Cohort Structure for Trend Analysis

<b>Full Sample: Long-run Income</b>		
Long-run Income, mean (IQR)	56,475.3	(24,997.5–80,005.7)
Sex, n(%)	393,589	(100.0)
Male	217,503	(55.3)
Female	176,086	(44.7)
Year of Birth, mean (IQR)	1957	(1952–1961)
State of Birth, n(%)		
Switzerland	384,464	(97.7)
Abroad	9,125	(2.3)
<b>Full Sample: Educational Attainment</b>		
Years of Education, mean (IQR)	12.79	(12.0–14.0)
Sex, n(%)	85,562	(100.0)
Male	46,448	(54.3)
Female	39,114	(45.7)
Year of Birth, mean (IQR)	1957	(1952–1961)
<b>Cohort Definitions for Trend Analysis</b>		
Period 1: Birth cohorts 1948–1953	Observed in 1981–1984 (avg. age: 32 yrs)	
1948: age 33–36 at observation	1951: age 30–33 at observation	
1949: age 32–35 at observation	1952: age 29–32 at observation	
1950: age 31–34 at observation	1953: age 28–31 at observation	
Period 2: Birth cohorts 1958–1963	Observed in 1991–1994 (avg. age: 32 yrs)	
1958: age 33–36 at observation	1961: age 30–33 at observation	
1959: age 32–35 at observation	1962: age 29–32 at observation	
1960: age 31–34 at observation	1963: age 28–31 at observation	

*Notes:* Table 1 provides a description of the main sample. Long-run Income (CHF) is expressed in 2021 prices. The proportion of Swiss-born individuals is not representative of the overall Swiss society. Descriptive statistics of the brothers, sisters, Swiss-born, non-Swiss-born subgroup samples are provided in Table A3. The states of birth are not shown in the education sample of the main analysis, as sub-analyses with these corresponding subgroups are only carried out with regard to income. Cohort definitions follow the approach of Davis & Mazumder (2026) and allow comparison of intergenerational mobility trends before and after the rise in global inequality in the 1980s. For each period, we observe long-run income over a four-year window (1981–1984 or 1991–1994), capturing individuals between age 28 and 36 depending on their birth year. Descriptive statistics for the U.S. data are depicted in Appendix Table A1.

## 4 Results

### 4.1 Contrasting Inequality Trends: Switzerland vs. the United States

Between the 1950s and the mid-1970s, the United States experienced sustained economic growth alongside relatively low income inequality. Beginning in the 1980s, however, the country underwent a marked increase in inequality (Piketty & Saez, 2003; Kuhn et al., 2020). This shift is illustrated in Figure 1, which depicts the evolution of top income shares. In 1980, the top 1% of earners in the U.S. accounted for 8% of total income; by 1990, their share had risen to 13%—an increase of about 60%.<sup>21</sup> As shown in Appendix Figures B1 and B2, similar patterns emerge for other top income groups and for overall inequality as measured by the Gini coefficient.

In contrast, income inequality in Switzerland remained remarkably stable over the same period.<sup>22</sup> As shown in Figure 1 and in Appendix Figures B1, B2 and B3, the top 1% income share in Switzerland remained virtually unchanged at 9% in both 1980 and 1990. Furthermore, Appendix Figures B4, B5 and B6 show very long-run stability for the time span from 1917 to 2021.

Against this backdrop, Switzerland offers an interesting counterfactual to the U.S. case: a high-income economy that has maintained a stable and egalitarian income distribution

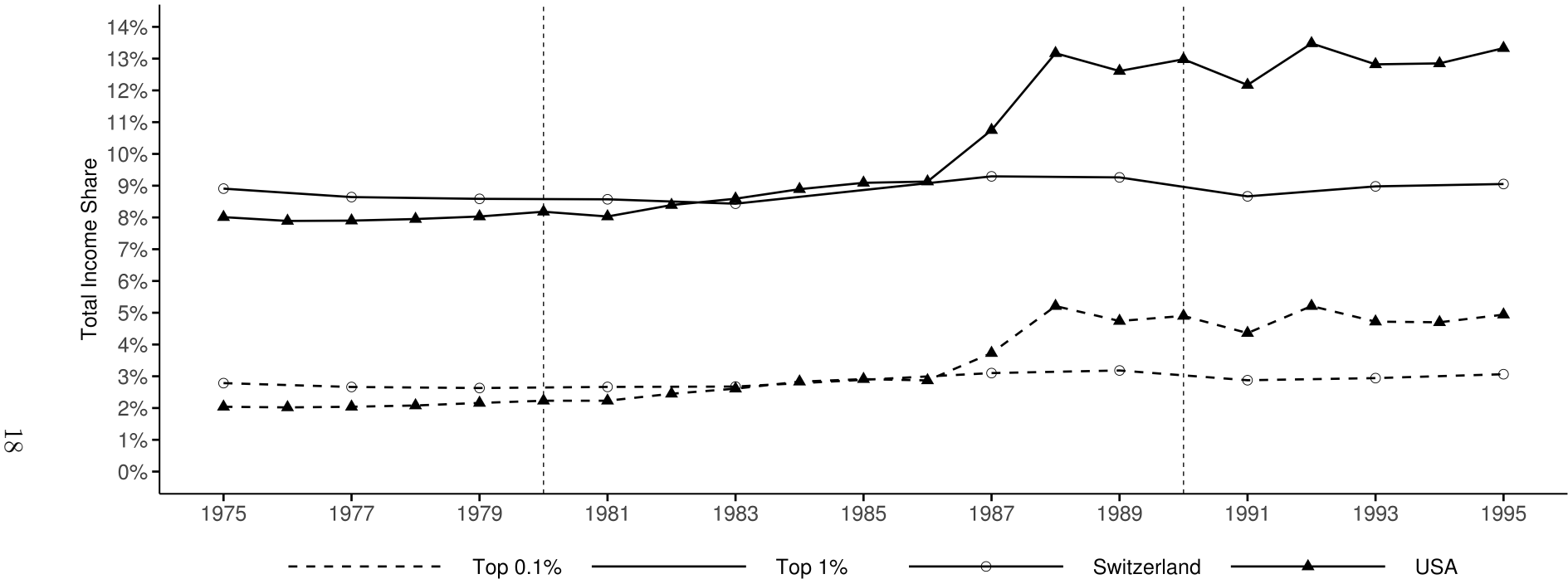
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<sup>21</sup>Detailed statistical breakdowns, such as annual growth rates or total growth rate, for all income groups are provided in Appendix Table A5 for the U.S. and in Appendix Table A6 for Switzerland.

<sup>22</sup>Swiss income inequality data are from Swiss Inequality Database (SID) (2024) and based on full-population tax records across federal, cantonal, and communal levels. The dataset captures net taxable household income, adjusted for child, second-earner, marriage, and insurance deductions, ensuring international comparability. Top shares are estimated using Pareto extrapolation above the 80th percentile. Gini coefficients follow the same source, with 2019-2021 updates based on Federal Tax Administration (FTA) federal tax statistics. For pre-1993 data, the number of non-filers is imputed using census-based matching. Methodological changes in 2013 do not materially affect top shares. All computations follow the official SID methodology and are consistent with prior research using the same data: Feld et al. (2021), Frey & Schaltegger (2021), Frey et al. (2017), Frey & Schaltegger (2016), Schaltegger et al. (2018), and Schaltegger & Gorgas (2011).

without a corresponding rise in top income concentration. This divergence raises a central question-whether inequality of opportunity, as captured by sibling correlations, also followed a different trajectory across the two countries during this period of structural economic change.

Figure 1: Top 1% and Top 0.1% Income Shares in Switzerland (1980–1990) vs. United States



Notes: Figure 1 plots the evolution of pre-tax top 1% and 0.1% income shares in Switzerland (1980–1990), based on the Swiss Inequality Database (SID) (2024) and official tax statistics from the Swiss Federal Tax Administration (FTA). Income data for the U.S. is from Piketty & Saez (2007), Table 5A.1 in Chapter 5 in Atkinson & Piketty (2007).

## 4.2 Contrasting Trends in Sibling Correlations: Switzerland vs. the United States

As illustrated in Figure 2, inequality of opportunity in Switzerland remained notably stable over the course of the 1980s. The influence of family background on individual long-run income—measured by the intraclass correlation coefficient—averaged just 11.7% in the early 1980s, and rose only modestly to 14.5% by the early 1990s.

In contrast, using harmonized U.S. data constructed to match the specification of Davis & Mazumder (2026), we find a pronounced decline in opportunity over the same period.<sup>23</sup> The sibling-based ICC rises from 15.4% for the 1948–1954 birth cohort to 30.6% for the 1961–1964 cohort.<sup>24</sup> Thus, the importance of family and community advantages in the United States roughly doubled across cohorts, indicating a substantial decline in inequality of opportunity during the 1980s.

For Switzerland, there is no evidence of a systematic shift in inequality of opportunity as family background continued to explain only a small portion of income variation in Switzerland, even as the same period marked a turning point for the U.S..

To assess the robustness of our findings (see Section 4.4.2 for details), we use alternative income-defining age ranges. Specifically, we estimate sibling correlations for individuals observed around age 22 (ages 18–26) and around age 42 (ages 38–46), in both the early 1980s and the early 1990s. This allows us to separately analyze trends for younger individuals at the onset of their careers and for older individuals with substantial labor market

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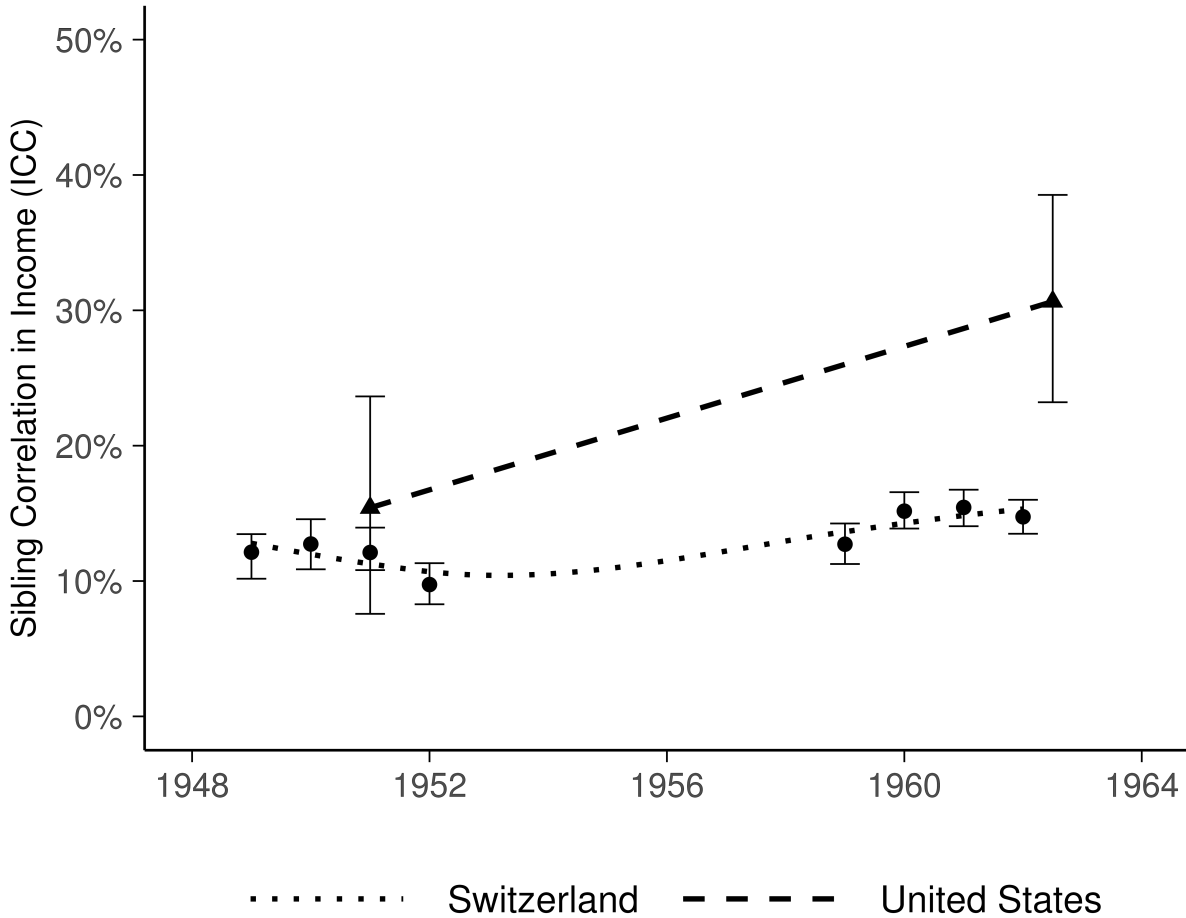
<sup>23</sup>The main U.S. estimates apply the same data preparation as in Davis & Mazumder (2026), including a USD 750 income threshold and restricting the sample to individuals observed above age 18. Figure 6 reports alternative specifications without the income threshold and without the age restriction; the upward trend in persistence remains virtually unchanged. A detailed comparison of data construction for the United States and Switzerland is provided in Appendix Table A2.

<sup>24</sup>For the United States, we report pooled cohort estimates rather than overlapping three-year birth cohorts in order to maximize the number of families and individuals per cohort. Figure 6 presents the equivalent specification using overlapping three-year birth cohorts, analogous to the Swiss approach, and yields similar results (16.8% for the earlier cohorts and 35.9% for the later cohorts).

experience. Across all age groups and time periods, the results consistently support our main conclusion: inequality of opportunity in Switzerland remained persistently low and stable. Even when tracking the 1958–1963 birth cohorts from early adulthood into their early 50s, we observe a high degree of stability in sibling correlations over the life course (see robustness check in Section 4.4.2).

Taken together, the evidence suggests a clear association between the evolution of income inequality and intergenerational mobility: while the United States experienced a sharp rise in inequality accompanied by a decline in mobility, both the income distribution and the extent of economic opportunity remained stable in Switzerland.

Figure 2: Trends in Sibling Correlations: Switzerland vs. U.S.



*Notes:* The figure shows trends in the sibling correlation (Intraclass Correlation Coefficients, ICC's) for the early 1980s and the early 1990s in Switzerland and the United States. Sibling correlations were estimated separately for overlapping three-year birth cohorts. For each cohort group, ICC's were estimated using a linear mixed-effects model, and parametric bootstrap procedures (with 100 replications and fixed random seed) were used to compute 95% confidence intervals. We estimate all models via restricted maximum likelihood (REML) using the `lmer` function in R (Bates et al., 2015), with standard errors and  $p$ -values computed using Satterthwaite's degrees of freedom as implemented in the `lmerTest` package (Kuznetsova et al., 2017). For the United States, pooled cohort estimates are reported in order to maximize sample size. Figure 6 reports corresponding U.S. estimates based on overlapping three-year birth cohorts, analogous to the Swiss specification. The plotted points indicate cohort-specific ICC estimates, vertical lines represent the 95% bootstrap confidence intervals, and a LOESS smoothing curve (dotted line) was added for visual trend approximation, whereas U.S. estimates are displayed without smoothing.

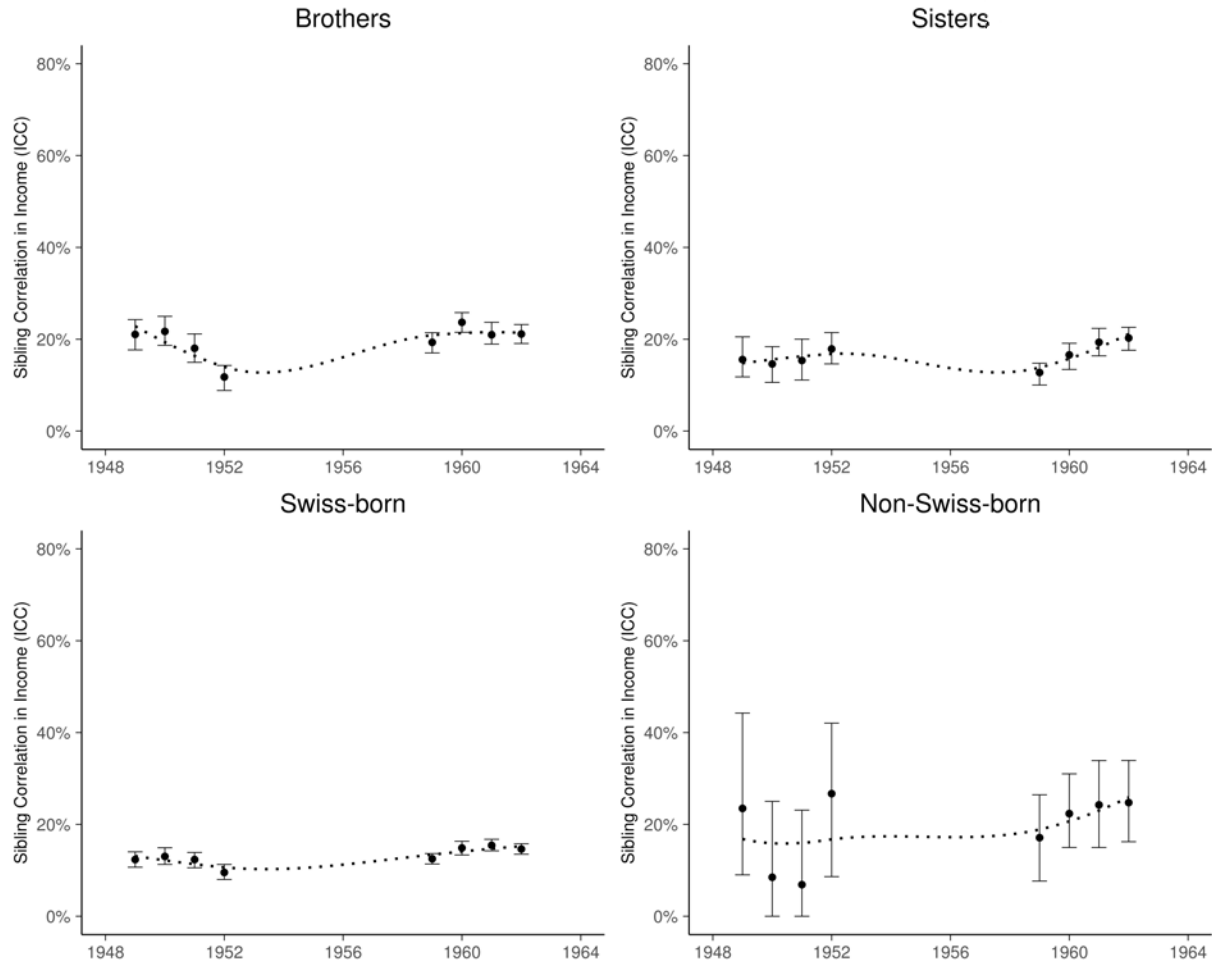
To assess potential heterogeneity in ICC trends in Switzerland, we estimate them separately for key subgroups: brothers, sisters, Swiss-born individuals, and individuals born abroad. Unfortunately, we do not explore heterogeneity for the U.S. due to the very small sample size in the survey data that would lead to very noisy estimates.

Figure 3 presents cohort-specific intraclass correlation coefficients (ICC's) by subgroup for Switzerland. Across all four groups, correlations remain remarkably stable over time. Among brothers, ICC's remain consistently around 21%, with no indication of a systematic upward trend. The pattern for sisters is similar, albeit with slightly lower average levels of persistence.

Swiss-born individuals exhibit consistently low sibling correlations across cohorts. In contrast, non-Swiss-born individuals display greater variability and wider confidence intervals, largely attributable to smaller sample sizes. Nonetheless, their average ICC's are broadly comparable to those of the Swiss-born population, suggesting no significant divergence in long-run economic opportunity by migration background.

Overall, the subgroup results reinforce the findings from the main analysis: inequality of opportunity in Switzerland remained stable across cohorts born between 1948-1953 and 1958-1963, even within narrower population strata.

Figure 3: Trends in Sibling Correlations for Subgroups



*Notes:* The figure above shows the sibling correlations in long-run income (ICC) by subgroup (Brothers, Sisters, Swiss-born, Non-Swiss-born), estimated separately for overlapping 3-year birth cohorts. Black dots represent point estimates; vertical lines denote 95% bootstrap confidence intervals. A dotted LOESS (Locally estimated/weighted Scatterplot Smoothing) curve is added for visual trend smoothing.

### 4.3 Diverging Returns to Education

The diverging trends in family and community advantage between Switzerland and the United States raise the question of which underlying mechanisms may explain these patterns. In their analysis, Davis & Mazumder (2026) identify rising returns to education as a key driver of the increase in U.S. intergenerational persistence among cohorts born after 1960.<sup>25</sup> Specifically, they report that the average return to one additional year of education rose from 9.6% to 14%—a 47% increase that is statistically significant at the 1% level.

What, then, is the corresponding pattern in Switzerland? Table 2 presents results from three regression models. The cohort-specific estimates in Columns (2) and (3) show that the return to education increased from 4.9% in the early cohort to 5.4% in the later cohort—a relative increase of 10.5%. However, because this comparison is based on separate regressions, it does not allow for a formal statistical test. The interaction model in Column (1) addresses this directly. It estimates a positive interaction term of +0.2 percentage points, but the effect is small and statistically insignificant ( $p = 0.33$ ), suggesting stable returns across cohorts.

These findings stand in sharp contrast to the U.S. pattern documented by Davis & Mazumder (2026). In Switzerland, the increase in returns to education was modest—less than one-fourth the magnitude observed in the United States—and statistically insignificant. This suggests that institutional features such as Switzerland’s dual vocational education and training (VET) system, efficient school-to-work transitions, and low structural unemployment may have helped buffer social mobility from the forces that eroded opportunity elsewhere. While returns to education rose substantially in the United States, we find no comparable trend in Switzerland.

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<sup>25</sup>This interpretation is consistent with the long-run evidence presented by Aaronson & Mazumder (2008), who show that intergenerational mobility rose after 1940 and fell after 1980, closely mirroring fluctuations in the return to education documented by Goldin & Katz (1999).

Table 2: Returns to Education in Switzerland (1948–1953 vs. 1958–1963 Cohorts)

	(1) Pooled	(2) 1948–1953	(3) 1958–1963
Intercept	10.453*** (0.027)	10.496*** (0.038)	10.494*** (0.029)
Years of Education	0.051*** (0.002)	0.049*** (0.002)	0.054*** (0.001)
Cohort: 1958–1963	0.066** (0.026)	–	–
Sex	–0.982*** (0.006)	–1.058*** (0.009)	–0.940*** (0.007)
State of Birth	–0.036** (0.018)	–0.018 (0.031)	–0.043* (0.022)
Educ. × 1958–1963	0.002 (0.002)	–	–
Obs.	81,192	29,976	51,216
$R^2$	0.320	0.352	0.299
Residual Std. Error	0.774 on 81,186 DF	0.768 on 29,972 DF	0.776 on 51,212 DF
F-Statistic (p-value)	< 2.2e-16	< 2.2e-16	< 2.2e-16

*Notes:* Significance Codes: ‘\*\*\*’ 0.01 ‘\*\*’ 0.05 ‘\*’ 0.1

Dependent variable is  $\log(1 + \text{income})$ , with income measured in 2021 CHF and bottom-coded at 1,463 CHF (based on Davis & Mazumder (2026) USD threshold).

Column (1) pools all observations and includes an interaction term for education × cohort group.

The "Year of education" gives the return of each additional year of education in log-income by 5.1% for the early cohort (1948–1953).

The interaction effect, the additional return per year of education in the later cohort, is not statistically significant ( $p = 0.332$ ), suggesting stable returns across cohorts.

Columns (2) and (3) estimate returns separately. The implied increase from the rounded figure of 4.9% to the rounded figure of 5.4% corresponds to a +10.5% change. However, this comparison is based on two separate regressions and does not test the significance of the difference between the cohorts directly. The appropriate statistical test is the interaction term in Column (1), which implies a smaller increase of +3.7% ( $= (0.0511 + 0.002)$  vs.  $0.0511 = 0.0530$  vs.  $0.0511$ ) that is, as mentioned, not significant at conventional levels.

## 4.4 Sensitivity Analyses and Robustness Checks

To test the robustness of our findings, we conduct a series of sensitivity and robustness analyses focusing on the measurement of inequality of opportunity (horizontal vs. vertical) and different dimensions (time-spans, cohorts, ages, regional variation and status indicators).

Specifically, Section 4.4.1 shows that horizontal (sibling) and vertical (parent–child) Swiss measures track each other closely across cohorts, confirming that the two measures provide similar readings on inequality of opportunity. Section 4.4.2 demonstrates that Swiss ICC trends are robust to alternative cohort definitions and income-defining ages, with persistently low sibling correlations across all specifications. Section 4.4.3 examines regional heterogeneity within Switzerland and shows that ICC’s are stable over time across all major regions. Section 4.4.4 extends the Swiss analysis to an expanded period (1981–2021), highlighting the long-term stability of inequality of opportunity in Switzerland over four decades. Section 4.4.5 shows that the temporal pattern of sibling correlations in educational attainment remained flat over the observed period in the 1980s in both countries. Finally, Section 4.4.6 evaluates alternative U.S. specifications, including overlapping cohort constructions and modified sample restrictions, to verify that the observed increase in sibling correlations is not driven by specific empirical choices.

### 4.4.1 Horizontal vs. Vertical Estimates of Family Advantage

To better understand whether sibling-based horizontal measures (ICC’s) provide similar conclusions about inequality of opportunity with conventional, widely applied vertical parent–child mobility measures (intergenerational elasticities and rank-rank slopes) across the same birth cohorts we compare readings across the different measures. Appendix Figure B8 shows the cohort-specific estimates with over 1.1 million observations for Swiss birth

cohorts 1966–1988, each based on long-run income measured at ages 30–33.<sup>26</sup>

We find similar trends across the three measures: all the estimates are relatively stable throughout the observation window, with only moderate fluctuations across cohorts. This suggests a high degree of alignment between sibling-based and parent–child-based approaches to measuring inequality of opportunity.

These findings closely align with the Australian evidence reported by Deutscher & Mazumder (2023), who document strong correlations between vertical and horizontal mobility measures across subnational regions. Moreover, they conclude that countries with low intergenerational elasticities (e.g., the Nordic countries) tend to exhibit lower sibling correlations, whereas high-persistence countries such as the United States consistently rank higher on both dimensions.

Our results reinforce the view that sibling-based estimates serve as a useful proxy for tracking long-run inequality of opportunity and yield estimates that are broadly similar to those obtained using vertical measures of intergenerational income persistence.

#### 4.4.2 Alternative Cohort Definitions and Income Defining Ages

**Alternative Cohort Definitions** Our results are robust to alternative cohort definitions. Figure B10 in the Appendix confirm the main findings using non-overlapping cohorts.

In this specification, sibling correlations in income remain at comparably low and stable levels. Although there are minor fluctuations in the early and late birth cohorts, the overall pattern of stable and low intergenerational dependence persists. This strengthens our

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<sup>26</sup>We restrict this comparison to birth cohorts 1966–1988 because parent–child estimates require income data for both generations. Following Chetty et al. (2014a), we measure children’s income at ages 30–33 and require parental income to be observed when the child was around 15–20 years old. Since the social security earnings records (SSER) are only available from 1981 onward, this implies that reliable parent–child linkages are only possible from the 1966 birth cohort onward. The 1988 cohort is the latest included, as these individuals turned 33 in 2021. In contrast, sibling correlations can be estimated further back, as they do not rely on parental earnings.

interpretation of a Swiss mobility corridor in which equality of opportunity was broadly constant across birth cohorts.

We further complement our analysis by examining sibling correlations over the life course of a single cohort-group active in the labor force during the 1980s, 1990s, 2000s, and 2010s (see Figure B11 for illustration). Tracking the 1958–1963 birth cohorts from early adulthood into their early 50s reveals a striking degree of stability, with ICC’s remaining remarkably constant across four decades.<sup>27</sup>

**Alternative Income Defining Ages** A common concern in the intergenerational mobility literature is the appropriate timing of income measurement (Haider & Solon, 2006; Jenkins, 1987; Nybom & Stuhler, 2017). To assess the robustness of our main results to this life-cycle choice, we replicate the core analysis using alternative age windows when we measure long-run income. Specifically, we consider income measured at significantly younger (around 22 years, i.e., 18–26) and older (around 42 years, i.e., 38–46) ages, once again during the early 1980s and early 1990s, respectively. Appendix Figure B12 shows sibling correlations in income for individuals aged 18–26 entering the labor market in the 1980s and 1990s. We find that familial influence was slightly weaker for the earlier cohort (born 1958–1963), who entered the labor market in the early 1980s, than for the later cohort (born 1968–1973) entering ten years later in the early 1990s. However, sibling correlations remain stably low, fluctuating around 20%.

Appendix Figure B13 presents the results for older individuals aged 38–46. Here, the pattern reverses slightly: familial influence on long-run income appears to decline modestly

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<sup>27</sup>This pattern stands in sharp contrast to recent evidence from Sweden, provided by Grätz & Kolk (2022) who find that sibling correlations in earnings are highest in early adulthood and decline steadily with age. We estimate sibling correlations for the 1958–1963 cohorts at four distinct ages: around age 22 (1981–1984), age 32 (1991–1994), age 42 (2001–2004), and age 52 (2011–2014). The results show no evidence of divergence or convergence over the life course. This life course analysis is based on Figure B11 in the Appendix and provides a rare long-term perspective on the persistence of economic advantage over the life course.

across cohorts born between 1938 and 1953. Notably, the ICC’s are again stable and even lower in magnitude—consistently below 20% in later cohorts.

These robustness checks indicate that our main results do not hinge on the specific age at which income is measured. While the level of ICC’s may vary slightly depending on life-cycle stage, the broader conclusion remains unchanged: Switzerland exhibits a persistently high degree of equality of opportunity over time, independent of age definition or cohort.

#### 4.4.3 Regional Analysis

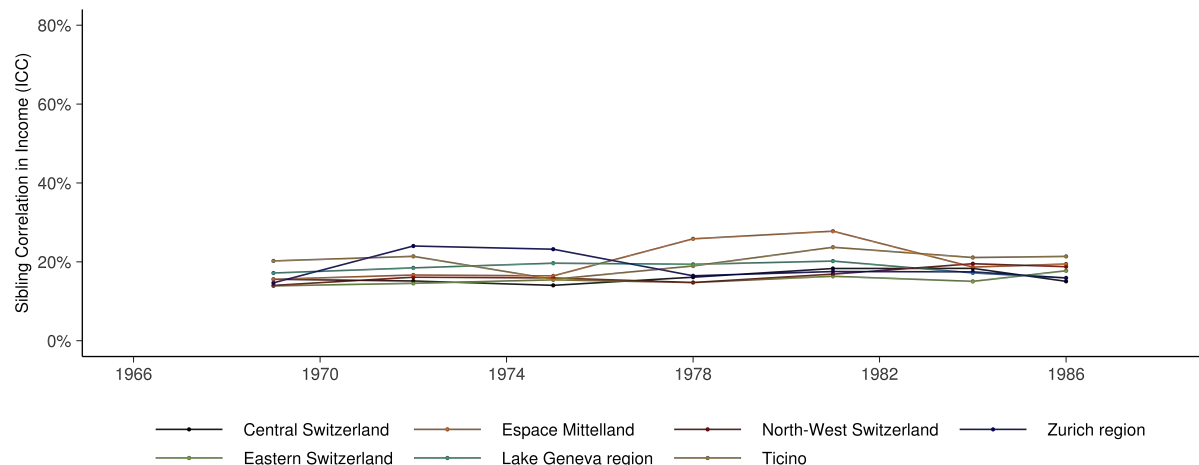
Motivated by the literature on geographic variation in intergenerational mobility, we extend our baseline analysis by examining regional patterns within Switzerland. In their seminal contributions, Chetty et al. (2014a) document substantial spatial heterogeneity in intergenerational mobility across U.S. commuting zones, highlighting geography as a key dimension along which opportunity structures differ.<sup>28</sup> This raises the natural question of whether similar regional gradients in opportunity can be observed within a small, institutionally homogeneous country such as Switzerland.

To address this question, we aggregate the 26 Swiss cantons into seven major regions according to the official classification of the Swiss Federal Statistical Office (FSO): Lake Geneva region, Espace Mittelland, Northwestern Switzerland, Zurich region, Eastern Switzerland, Central Switzerland, and Ticino. Figure 4 reports regional long-run trends in intergenerational income mobility. Despite some level differences across regions, the central result is that none of the major regions exhibits a systematic increase in ICC’s over time. Across all regions, sibling correlations remain remarkably stable throughout the observation period, with fluctuations that are modest in magnitude and not indicative of a common upward trend.

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<sup>28</sup>For further research on geographic variation in intergenerational mobility, see e.g. Chetty et al. (2026), Chetty & Hendren (2018a), Chetty & Hendren (2018b), Chetty et al. (2017), Chyn (2018), Chuard & Grassi (2020), Deutscher & Mazumder (2023), and Deutscher (2020).

Figure 4: Regional Long-run Trends in Sibling Correlations between 1996 to 2021, Cohorts 1966-1988



*Notes:* The figure presents regional trends in sibling correlations for Swiss birth cohorts 1966–1988, using sibling correlations. The 26 Swiss cantons were divided into the seven major regions of Switzerland according to the FSO. To estimate ICC's, we use 7-year overlapping cohorts as in Figure B8. For canton-level estimates, see Appendix Table A7 and Appendix Figure B9 for the visualization.

#### 4.4.4 Sibling Correlations in the Long-run between 1981 and 2021

We extend our analysis of sibling correlations beyond the two comparison cohorts to examine long-run trends. Figure B14 depicts the evolution of ICC's in Switzerland for birth cohorts up to 1988, based on more than two million observations ( $n = 2,033,618$ ).

The importance of family and community advantages remained remarkably stable. ICC's are below 21% in every year over four decades with an average ICC of 16.8%. In cross-national perspective, Switzerland remains a notable outlier. Sibling correlations in income are substantially lower in magnitude and more stable over time than those observed in the United States, Germany, or even the Nordic countries (see Björklund et al. (2009), Mazumder (2008), Pekkarinen et al. (2017), and Schnitzlein (2014). Appendix Figure B16 illustrates these international differences in long-run social mobility.<sup>29</sup>

<sup>29</sup>Appendix Figure B15 extends this long-run analysis to the regional level. Following the same approach as in Appendix Figure B14, but aggregating the 26 Swiss cantons into seven major regions according to the Swiss Federal Statistical Office (FSO), we estimate sibling correlations using 7-year overlapping birth cohorts for individuals born between 1951 and 1988. Consistent with the national results, ICC's remains

Overall, the influence of family background on economic outcomes remained stable at an internationally low level throughout the 1981–2021 observation window, indicating a persistently high degree of equality of opportunity in Switzerland over four decades.

Moreover, Switzerland’s stability becomes even more distinctive when viewed alongside the international evidence based on parent–child associations (see Appendix Figure B8 for the corresponding Swiss trends). The literature consistently documents declining intergenerational mobility over time across a wide range of advanced economies—including the U.S., the UK, Germany, Canada, and even the traditionally high-mobility Scandinavian countries (see, e.g., Ahrsjö et al. (2025), Baarck et al. (2025), Blanden et al. (2004), Connolly et al. (2019), Davis & Mazumder (2026), Engzell & Mood (2023), Harding & Munk (2020), Jácome et al. (2021), and Markussen & Røed (2020)).

#### **4.4.5 Alternative Status Indicator: Education**

We test the robustness of our results by looking at an alternative status indicator. As Figure 5 shows, ICC’s in years of education consistently range between 33% and 40% for the older cohort and between 33% and 34% for the younger cohort, indicating minor fluctuations over time. Notably, the temporal pattern of ICC’s in education mobility is flat even for younger birth cohorts, highlighting a high degree of consistency in educational mobility across families during the 1980s. For the United States, educational sibling correlations are likewise stable across cohorts, in contrast to the rising income correlations documented above. Pooled ICC estimates amount to approximately 50% for the earlier cohort and 51% for the later cohort, suggesting no meaningful change over time, consistent with Hertz et al. (2008). This pattern is also in line with the evidence reported in Davis & Mazumder (2026), who document only a modest increase in intergenerational educational persistence—from 0.35 to 0.39—across comparable cohorts, closely mirroring the remarkably stable across all regions over the 1981–2021 period, with no evidence of systematic increases in any major region.

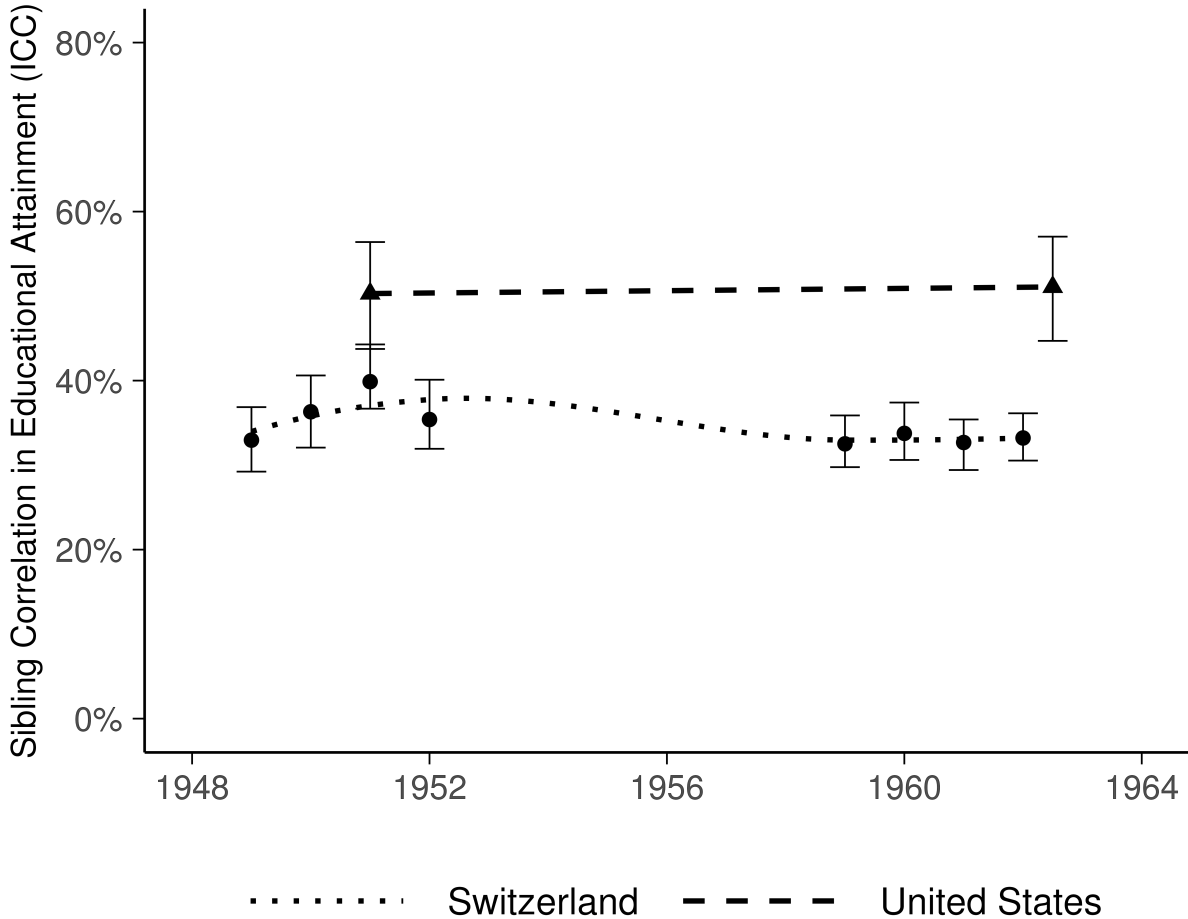
findings of Hilger (2017). The rise in sibling correlations observed over this period aligns suggestively with the increase in returns to education in the United States: as the labor market premium on human capital grew, differences in educational attainment plausibly transmitted more forcefully into earnings inequality across generations. In Switzerland, by contrast, the stability of educational ICC's—coupled with largely unchanged returns to schooling—is consistent with the absence of a discernible trend in income ICC's. Moreover, the overall level of sibling correlations in education is higher in the United States than in Switzerland.<sup>30</sup>

In Appendix Figure B17, we extend the analysis of sibling correlations in education to all birth cohorts from 1951 to 1988. The results are consistently stable across the entire observed period of almost four decades.

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<sup>30</sup>The same pattern for the United States emerges when applying a specification analogous to the Swiss approach based on overlapping three-year birth cohorts; see Appendix Figure B7.

Figure 5: Sibling Correlations in Educational Attainment during the 1980s



*Notes:* The figure depicts the development of the Intraclass Correlation Coefficient (ICC) in educational attainment for Switzerland and the United States. For Switzerland, ICC's are estimated separately for overlapping three-year birth cohorts. For the United States, pooled cohort estimates are reported to maximize the number of observations. Black dots represent point estimates; vertical lines denote 95% bootstrap confidence intervals. For Switzerland, a dotted LOESS (Locally Estimated Scatterplot Smoothing) curve is added for visual trend approximation, whereas U.S. estimates are displayed without smoothing. The ICC is estimated using linear mixed models, following the same methodological approach as in the main analysis for income. Appendix Figure B7 reports corresponding U.S. estimates based on overlapping three-year birth cohorts, analogous to the Swiss specification.

#### 4.4.6 Alternative U.S. Specifications

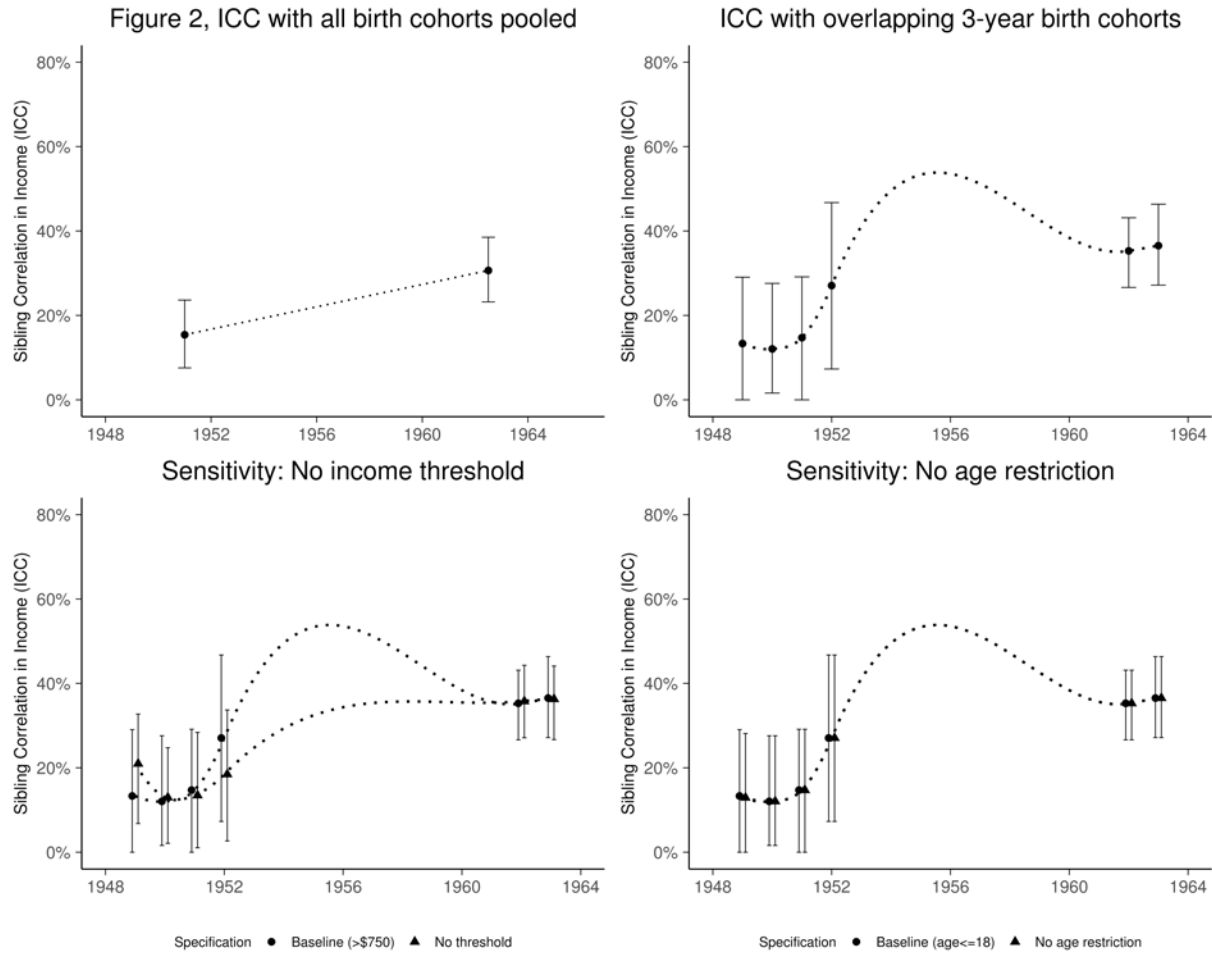
Finally, in this section, we assess the robustness of the U.S. estimates presented in Figure 2. In the main specification, U.S. sibling correlations are estimated using pooled birth cohorts in order to maximize the number of observations (families and individuals) and to ensure comparability with the data preparation choices in Davis & Mazumder (2026), including the USD 750 income threshold and the restriction to individuals older than 18 at first observation.

Figure 6 reports alternative specifications. First, the upper right panel presents U.S. estimates based on overlapping three-year birth cohorts, analogous to the Swiss specification. The pattern closely mirrors the pooled results in Figure 2. Averaging across the overlapping period, the ICC increases from approximately 17% for the earlier cohorts to about 36% for the later cohorts, confirming a substantial rise in intergenerational income persistence over time.

Second, the lower panels examine alternative data preparation choices. We report U.S. estimates with and without the income threshold as well as with and without the age restriction. While the main specification applies the USD 750 income threshold and restricts the sample to individuals aged above 18 in order to align with the original U.S. study design, removing these restrictions does not materially affect the results. Across all specifications, the increase in intergenerational persistence between the early and later cohorts remains visible.

Taken together, these robustness checks demonstrate that the documented increase in sibling correlations in the United States is not driven by specific cohort definitions or sample restrictions. The key findings remain under specifications directly comparable to the approach used with Swiss data.

Figure 6: Trends in Sibling Correlations in the U.S.



*Notes:* The figure reports alternative U.S. sibling correlation estimates in income. The upper right panel presents ICC's based on overlapping three-year birth cohorts, analogous to the Swiss specification. The lower panels show robustness checks with and without the USD 750 income threshold and with and without the age restriction (individuals older than 18 at first observation). ICC's are estimated using linear mixed-effects models via REML; vertical lines denote 95% bootstrap confidence intervals. The dotted LOESS (Locally estimated/weighted Scatterplot Smoothing) curves are added for visual trend smoothing.

## 5 Discussion and Conclusion

We provide new evidence on the implications of rising inequality on inequality of opportunity in the next generation through a comparative analysis. Specifically, following Davis & Mazumder (2026), we compare two sets of cohorts born roughly 10 years apart who were exposed to different regimes of inequality as they entered the workforce in the US, with an identical set of cohorts in Switzerland who were exposed to a low and stable inequality environment. We find that in the US, sibling correlations roughly doubled across these cohort groups from 0.15 to 0.31, indicating a sharp increase in the impact of family and community influences and thus, an increase in inequality of opportunity. In contrast, sibling correlations remained relatively low across both cohort groups in Switzerland, rising only slightly from 0.12 to 0.15.

We further find that the pattern of low and stable sibling correlations in Switzerland holds across subgroups defined by gender and nativity, underscoring the robustness of Switzerland’s opportunity structure across key population strata.

These findings position Switzerland as a salient counterfactual in the global debate on the inequality–mobility nexus. In contrast to the widely cited Great Gatsby Curve (Corak, 2013; Durlauf et al., 2022)—linking high inequality with low mobility across countries—our results highlight the importance of within-country variation over time. Whereas inequality of opportunity in the U.S. declined sharply in parallel with rising top income shares and educational wage premiums, the Swiss case demonstrates that stable institutional and economic conditions can sustain opportunity even as inequality rises elsewhere.

Our investigation into potential mechanisms offers further insight. In the United States, rising returns to education have been identified as a key driver of increased intergenerational persistence (Aaronson & Mazumder, 2008; Davis & Mazumder, 2026). In Switzerland, however, we find only a modest increase in returns to education—just 10.5% (vs. 47% in

the U.S.)—and this change is not statistically significant. This divergence is consistent with institutional differences: Switzerland’s dual vocational education and training (VET) system, strong school-to-work linkages, and relatively flat earnings structures may buffer the impact of educational inequality on long-run outcomes.

Our results are robust to multiple sensitivity checks, including the use of parent-child estimates as an alternative measure of inequality of opportunity, alternative cohort definitions, regional analyses, extensions to a broader cohort range from 1951 to 1988, and education as different status indicator. Notably, the parent-child associations track the sibling-based estimates closely, underscoring the strong alignment between vertical and horizontal approaches to measure the degree of opportunity and social mobility. Furthermore, the ICC’s in Switzerland over the entire four-decade period never exceed 21%, underlining the exceptional stability of mobility in the country. Even for more recent cohorts born in the 1980s, we observe no signs of a persistent decline in equality of opportunity. This pattern stands in sharp contrast to the broader international evidence, which consistently points toward declining social mobility across advanced economies (e.g. the U.S. the UK, Germany, Canada or the Scandinavian Countries). While sibling correlations in educational attainment are higher—around 32-35%—they show no systematic trend, suggesting that educational mobility has remained similarly consistent.

Taken together, our findings underscore the importance of institutional and policy contexts in shaping the long-run dynamics of inequality and opportunity. They suggest that inequality of opportunity is not solely driven by global economic forces, but also mediated by national systems of education and labor market characteristics. For policymakers, the Swiss experience highlights the potential for institutional design to preserve equality of opportunity, even in the face of broader inequality pressures.

Future research might build on these results by exploring the specific channels through which institutions mediate opportunity, including school quality, vocational pathways, and

labor market segmentation. Moreover, as more countries assemble administrative earnings data comparable to Switzerland's, it will become possible to construct richer cross-national mobility panels, deepening our understanding of the interplay between inequality, policy, and intergenerational persistence.

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# Appendix

## A Additional Tables

### A.1 U.S. Data

Table A1: Descriptive Statistics of Main Variables in the U.S. Sample (NLS66 and NLSY79)

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<b>Full Sample: Average Income</b>		
Average Income, mean (IQR)	35,037.52	(18,069.64–46,965.3)
Sex, n(%)	3,466	(100.0)
Male	1,897	(51.9)
Female	1,668	(48.1)
Year of Birth, mean (IQR)	1957	(1951-1962)

<b>Full Sample: Educational Attainment</b>		
Years of Education, mean (IQR)	13.19	(12.0–15.0)
Sex, n(%)	8,265	(100.0)
Male	4,235	(51.2)
Female	4,030	(48.8)
Year of Birth, mean (IQR)	1957	(11950-1962)

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*Notes:* Table A1 reports descriptive statistics for the U.S. sample constructed from the NLS66 and NLSY79 data. Following Davis & Mazumder (2026), we use these data to estimate horizontal measures of intergenerational mobility. The income sample includes 3,466 individuals. Average income amounts to USD 35,037.52, with an interquartile range from USD 18,069.64 to USD 46,965.30. The sample is broadly balanced by sex, with 1,897 men (51.9%) and 1,668 women (48.1%). The average birth year is 1957, with an interquartile range from 1951 to 1962. The education sample includes 8,265 individuals, with average educational attainment of 13.19 years and an interquartile range from 12 to 15 years.

Table A2: Comparison of Data Sources and Empirical Design: United States vs. Switzerland

<b>Dimension</b>	<b>United States</b>	<b>Switzerland</b>
Data source	NLS66 and NLSY79 survey data, following Davis & Mazumder (2026).	Swiss administrative data combining social security earnings records (SSER) from the Central Compensation Office (CCO) with population register data (STATPOP) from the Federal Statistical Office (FSO) offering full population coverage.
Income concept	Own wage and salary income, averaged over three survey years. The baseline specification imposes a minimum earnings threshold of USD 750. Sons are observed around age 29, daughters around age 41. Appendix Figure B10 reports estimates without the USD 750 minimum earnings threshold and estimates after dropping the restriction that children must be older than 18 at the first survey.	Total labor income from administrative records, averaged over four consecutive years. Individuals are observed at ages 30–33 for all cohorts. For details see Section 3.3 and Section 3.4.
Family definition	Siblings are identified through the NLS household identifier, i.e., individuals sharing the same household at interview.	Siblings are identified through parental identifiers in census/register data, primarily based on sharing the same mother.
Sample size	Approximately 750-850 families per pooled cohort.	Approximately 15,000–30,000 sibling families per overlapping three-year birth cohort.
Main cohort definition in Figure 2	To maximize sample size within each survey, all available birth cohorts are pooled within each NLS survey. The NLS66 cohort includes individuals born in 1948–1954, while the NLSY79 cohort includes individuals born in 1961–1964. Nevertheless, Figure 6 reports a specification using overlapping three-year birth cohorts, closely mirroring the Swiss cohort construction.	Estimates are based on overlapping three-year birth cohorts. Birth cohorts 1948–1953 in period 1 and Birth cohorts 1958–1963 in period 2 (see Table 1 for details). See Section 4.4.2 for multiple sensitivity analyses and robustness checks.

*Notes:* Table A2 summarizes the main differences in data sources, income definitions, age windows, family identifiers, sample sizes, and cohort construction underlying Figure 2 and Figure 6. The U.S. estimates are based on the NLS66 and NLSY79 data following Davis & Mazumder (2026).

## A.2 Swiss Data

Table A3: Descriptive Statistics of Main Variables in the 1951-1988 Sample

<b>Full Sample: Long-run Income</b>		
Long-run Income, mean (IQR)	60,433.62	(33,914.4–81,989.48)
Sex, n(%)	2,033,618	(100.0)
Male	1,079,410	(53.1)
Female	954,208	(46.9)
Year of Birth, mean (IQR)	1970	(1962-1979)
State of Birth, n(%)		
Swiss-born	1,942,550	(95.5)
Non-Swiss-born	91,068	(4.5)
<b>Full Sample: Educational Attainment</b>		
Years of Education, mean (IQR)	13.41	(12.0–16.0)
Sex, n(%)	477,105	(100.0)
Male	248,374	(52.1)
Female	228,731	(47.9)
Year of Birth, mean (IQR)	1969	(1961-1978)
State of Birth, n(%)		
Swiss-born	457,888	(96.0)
Non-Swiss-born	19,217	(4.0)

*Notes:* Table A3 provides a description of the main sample ranging from 1951-1988. Long-run Income (CHF) is expressed in 2021 prices.

Table A4: Descriptive Statistics of Main Analysis Subgroup Samples of the Main Sample

<b>Brothers</b>		
Long-run Income, mean (IQR)	75,049.57	(58,294.4–90,386.3)
Sex, n(%)	144,153	(100.0)
Male	144,153	(100)
Female	0	(0)
Year of Birth, mean (IQR)	1957	(1952–1961)
<b>Sisters</b>		
Long-run Income, mean (IQR)	33,044.93	(7,418.8–54,103.25)
Sex, n(%)	98,867	(100.0)
Male	0	(0)
Female	98,867	(100)
Year of Birth, mean (IQR)	1957	(1952–1961)
<b>Swiss-born</b>		
Long-run Income, mean (IQR)	56,399.79	(24,905–79,944.4)
Sex, n(%)	382,009	(100.0)
Male	211,327	(55.3)
Female	170,682	(44.7)
Year of Birth, mean (IQR)	1957	(1952–1961)
<b>Non-Swiss-born</b>		
Long-run Income, mean (IQR)	59,161.05	(28,362.97–82,185)
Sex, n(%)	6,398	(100.0)
Male	3,423	(53.5)
Female	2,975	(46.5)
Year of Birth, mean (IQR)	1958	(1953–1961)

*Notes:* Table A4 provides a description of the main analysis subgroup samples. Long-run Income (CHF) is expressed in 2021 prices.

### A.3 Income Inequality Data

Table A5: Growth of Top Income Shares in the US, 1980-1990

Income Group	Growth (1980-1990)	Annual Growth	Variance	Max Share	Year of Max
GINI Coefficient	12.91	1.29	4.40	51.45	1988
Top 20%	9.66	0.97	3.08	54.34	1988
Top 10%	18.16	1.82	5.80	38.84	1990
Top 5%	27.78	2.78	5.86	27.05	1990
Top 1%	58.68	5.87	4.09	13.17	1988
Top 0.1%	119.730	11.97	1.25	5.21	1988

*Notes:* Table A5 reports the total and average annual growth of pre-tax income shares across selected top income groups in the U.S. between 1980 and 1990. Maximum shares and the year in which they occurred are also shown.

GINI and Top 20% values for the U.S. are taken from World Inequality Database (2024). Top 10%, Top 5%, Top 1% and Top 0.1% are taken from Piketty & Saez, 2007 in Atkinson & Piketty, 2007.

Table A6: Growth of Top Income Shares in Switzerland, 1980–1990

Income Group	Growth (1980-1990)	Annual Growth	Variance	Max Share	Year of Max
GINI Coefficient	0.77	0.19	0.15	39.70	1987
Top 20%	1.42	0.36	0.30	45.51	1987
Top 10%	2.43	0.61	0.22	30.53	1987
Top 5%	4.44	1.11	0.27	20.92	1987
Top 1%	8.05	2.01	0.20	9.29	1987
Top 0.1%	19.42	4.86	0.08	3.18	1989

*Notes:* Table A6 reports the total and average annual growth of pre-tax income shares across selected top income groups in Switzerland between 1980 and 1990. Maximum shares and the year in which they occurred are also shown.

GINI values are taken from the Swiss Inequality Database (SID) (2024), updated with 2021 values. For the years 2019, 2020, and 2021, values are based on federal tax statistics from the Swiss Federal Tax Administration (FTA): <https://www.estv.admin.ch/estv/de/home/die-estv/steuerstatistiken-estv/allgemeine-steuerstatistiken/direkte-bundessteuer.html#835146521>.

### A.4 Social Mobility Data

Table A7: Canton-Level Income Mobility Differences in Switzerland between 1996 to 2021 (pooled)

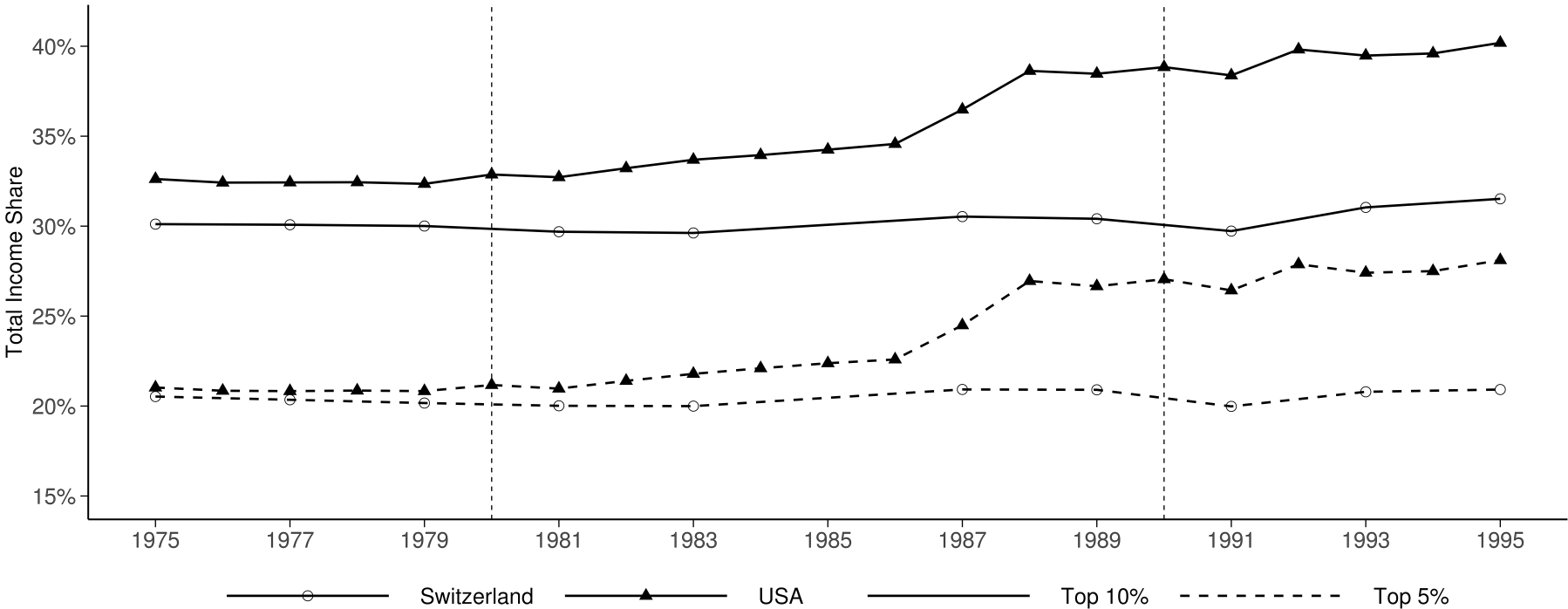
<b>Canton</b>	<b>Sibling Correlation</b>	<b>IGE</b>	<b>RRS</b>
Aargau (AG)	0.155 [0.146, 0.164]	0.109 [0.098, 0.119]	0.145 [0.139, 0.152]
Appenzell Innerrhoden (AI)	0.188 [0.145, 0.235]	0.174 [0.114, 0.234]	0.205 [0.171, 0.240]
Appenzell Ausserrhoden (AR)	0.162 [0.128, 0.193]	0.193 [0.157, 0.230]	0.191 [0.172, 0.211]
Bern (BE)	0.216 [0.211, 0.225]	0.127 [0.119, 0.135]	0.163 [0.159, 0.168]
Basel-Land (BL)	0.147 [0.129, 0.159]	0.125 [0.107, 0.142]	0.139 [0.129, 0.149]
Basel-Stadt (BS)	0.220 [0.192, 0.241]	0.183 [0.158, 0.208]	0.168 [0.154, 0.183]
Fribourg (FR)	0.173 [0.161, 0.185]	0.117 [0.104, 0.130]	0.161 [0.151, 0.170]
Genève (GE)	0.184 [0.170, 0.199]	0.138 [0.124, 0.151]	0.136 [0.126, 0.145]
Glarus (GL)	0.135 [0.108, 0.166]	0.144 [0.101, 0.187]	0.162 [0.137, 0.186]
Graubünden (GR)	0.148 [0.135, 0.161]	0.133 [0.118, 0.149]	0.167 [0.156, 0.177]
Jura (JU)	0.162 [0.143, 0.188]	0.100 [0.077, 0.123]	0.155 [0.138, 0.172]
Lucerne (LU)	0.162 [0.155, 0.172]	0.093 [0.082, 0.103]	0.154 [0.147, 0.161]
Neuchâtel (NE)	0.172 [0.151, 0.190]	0.142 [0.122, 0.162]	0.160 [0.147, 0.173]
Nidwalden (NW)	0.182 [0.153, 0.210]	0.081 [0.050, 0.112]	0.167 [0.145, 0.188]
Obwalden (OW)	0.168 [0.138, 0.201]	0.099 [0.068, 0.131]	0.192 [0.170, 0.214]
St Gall (SG)	0.166 [0.155, 0.177]	0.138 [0.127, 0.148]	0.172 [0.165, 0.179]
Schaffhausen (SH)	0.099 [0.071, 0.121]	0.090 [0.059, 0.122]	0.125 [0.107, 0.144]
Solothurn (SO)	0.161 [0.150, 0.177]	0.135 [0.118, 0.151]	0.155 [0.145, 0.165]
Schwyz (SZ)	0.184 [0.167, 0.202]	0.119 [0.101, 0.136]	0.185 [0.173, 0.198]
Thurgau (TG)	0.146 [0.134, 0.161]	0.113 [0.097, 0.130]	0.146 [0.135, 0.156]
Ticino (TI)	0.169 [0.156, 0.184]	0.081 [0.069, 0.093]	0.147 [0.137, 0.156]
Uri (UR)	0.188 [0.157, 0.216]	0.106 [0.077, 0.135]	0.224 [0.201, 0.247]
Vaud (VD)	0.145 [0.136, 0.156]	0.153 [0.141, 0.164]	0.148 [0.141, 0.155]
Wallis (VS)	0.161 [0.150, 0.172]	0.088 [0.076, 0.101]	0.149 [0.140, 0.158]
Zug (ZG)	0.103 [0.082, 0.128]	0.136 [0.111, 0.161]	0.144 [0.128, 0.159]
Zurich (ZH)	0.176 [0.169, 0.183]	0.123 [0.115, 0.131]	0.138 [0.133, 0.143]

*Notes:* Table A7 reports pooled canton-level estimates of intergenerational income mobility in Switzerland for birth cohorts 1966-1988. Point estimates are reported with 95% confidence intervals in brackets. Sibling correlations (ICC) are estimated using linear mixed models with family-level random effects. Intergenerational elasticities (IGE) are obtained from log-log regressions of children's income on parental income. Rank-rank slopes (RRS) are estimated from regressions of children's income ranks on parental income ranks. All measures are based on income observed at ages 30-33. For the visualization of the cantonal estimates, see Figure B9.

## B Figures and Trends

## B.1 Income Inequality in the 1980s and the Long-run (1917-2021)

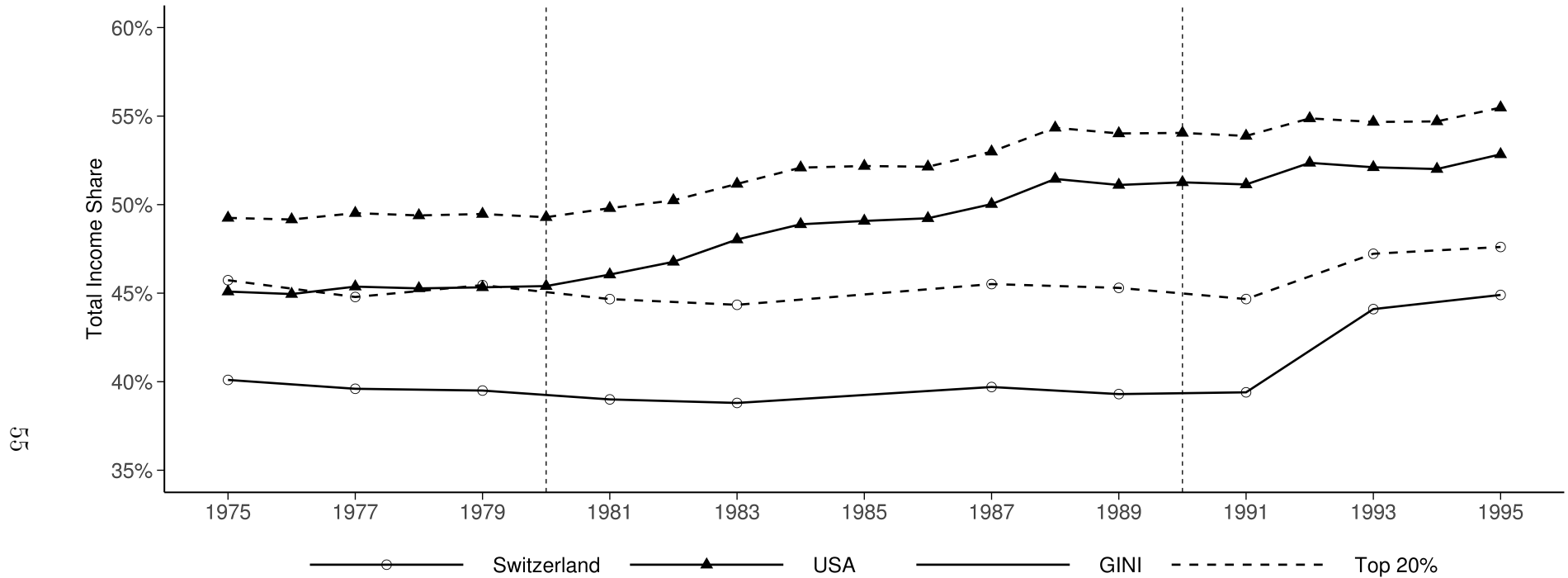
Figure B1: Top 5% and Top 10% Income Shares in Switzerland (1980–1990) vs. United States



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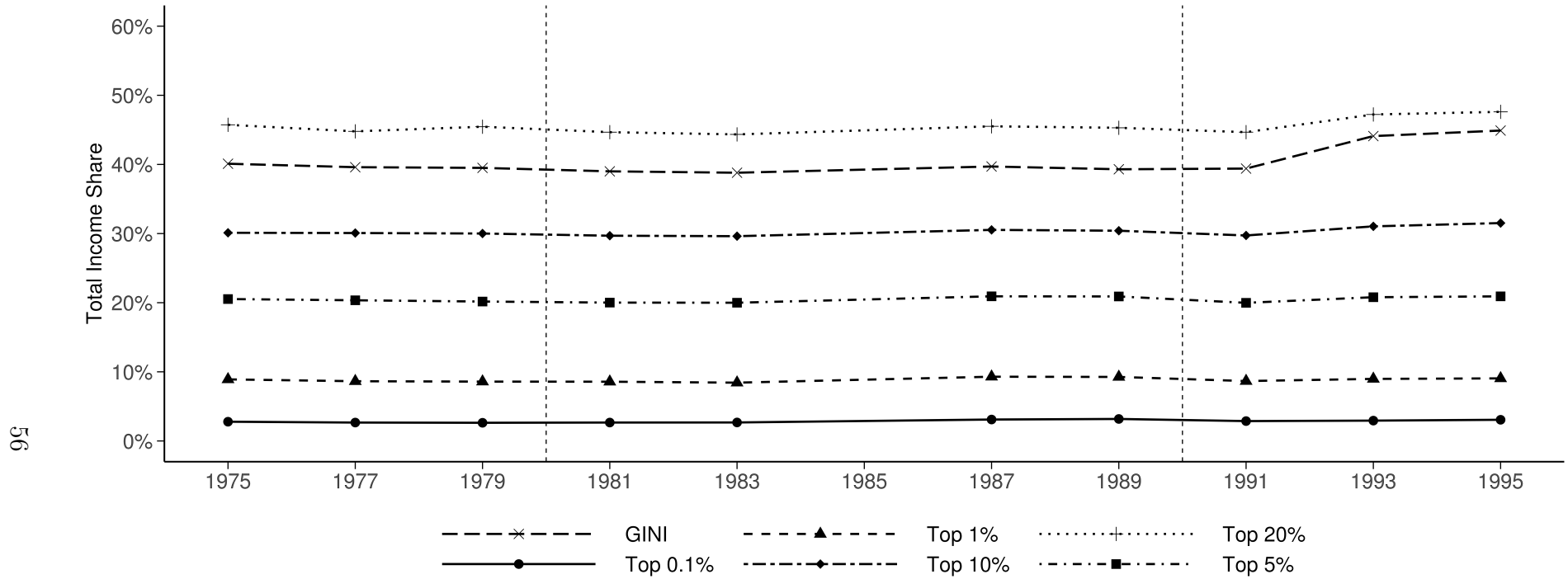
Notes: The figure plots the evolution of pre-tax top 5% and 10% income shares in Switzerland (1980–1990), based on the Swiss Inequality Database (SID) (2024) and official tax statistics from the Swiss Federal Tax Administration (FTA). Top income shares for the U.S. are sourced from Piketty & Saez (2007), Table 5A.1 in Chapter 5 in Atkinson & Piketty (2007).

Figure B2: Top 20% Income Shares and Gini-Coefficient in Switzerland (1980-1990) vs. United States



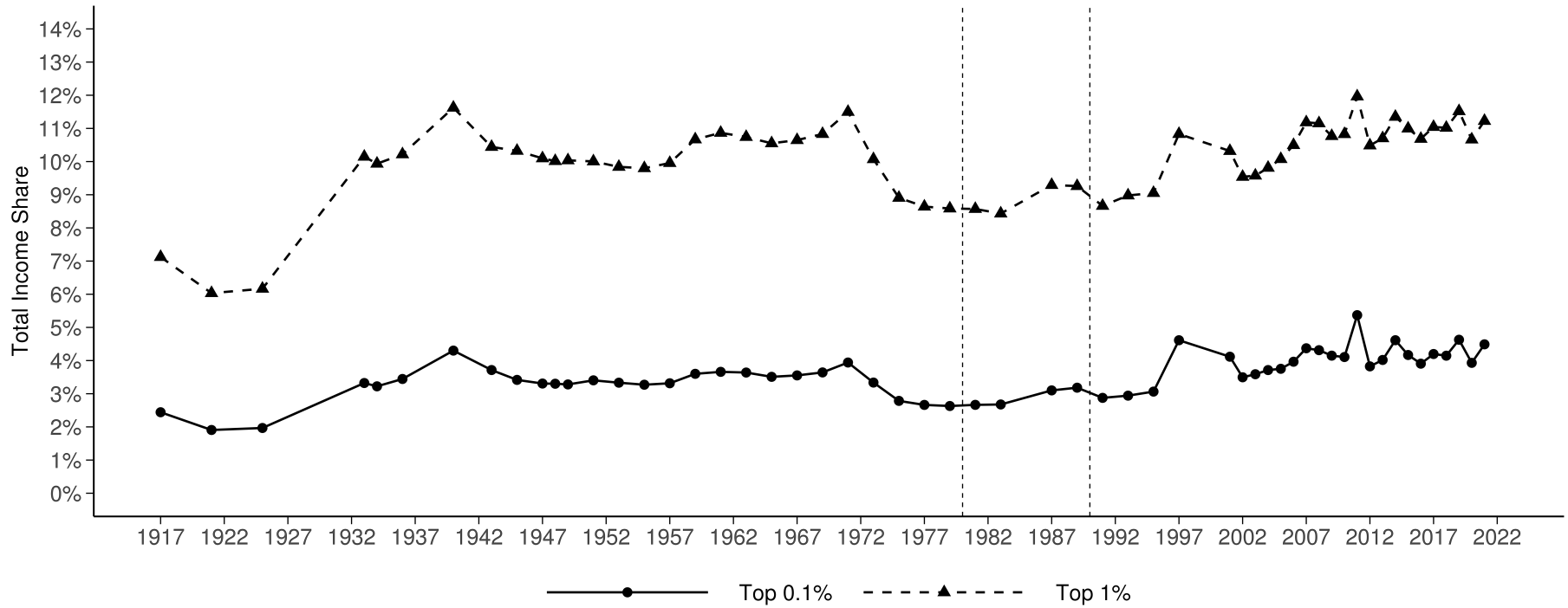
Notes: The figure plots the evolution of pre-tax top 20% income shares and Gini-Coefficients in Switzerland and the U.S. (1980–1990), based on the Swiss Inequality Database (SID) (2024) and official tax statistics from the Swiss Federal Tax Administration (FTA). Gini coefficients and top 20% income shares for the U.S. are sourced from the World Inequality Database (2024).

Figure B3: Top Income Shares in Switzerland (1980–1990), all Measures



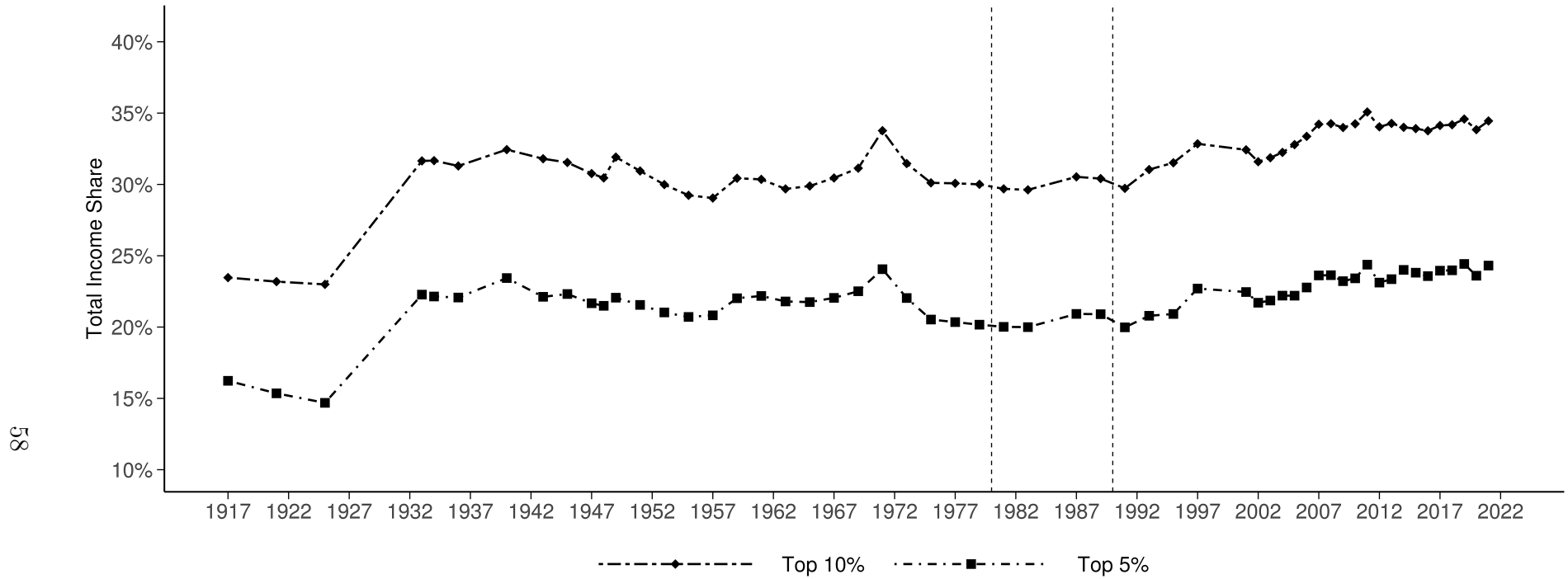
Notes: The figure plots the evolution of pre-tax top income shares in Switzerland (1980–1990), based on the Swiss Inequality Database (SID) (2024) and official tax data from the Swiss Federal Tax Administration (FTA). Additional analyses—including long-run trends (1917–2021), breakdowns by specific top-income shares, and growth metrics are also provided in the Appendix. See Appendix, Table A6 and Figures B1, B2, B4, B5 or B6.

Figure B4: 0.1% and 1% Income Shares in Switzerland in the Long-run, 1917-2021



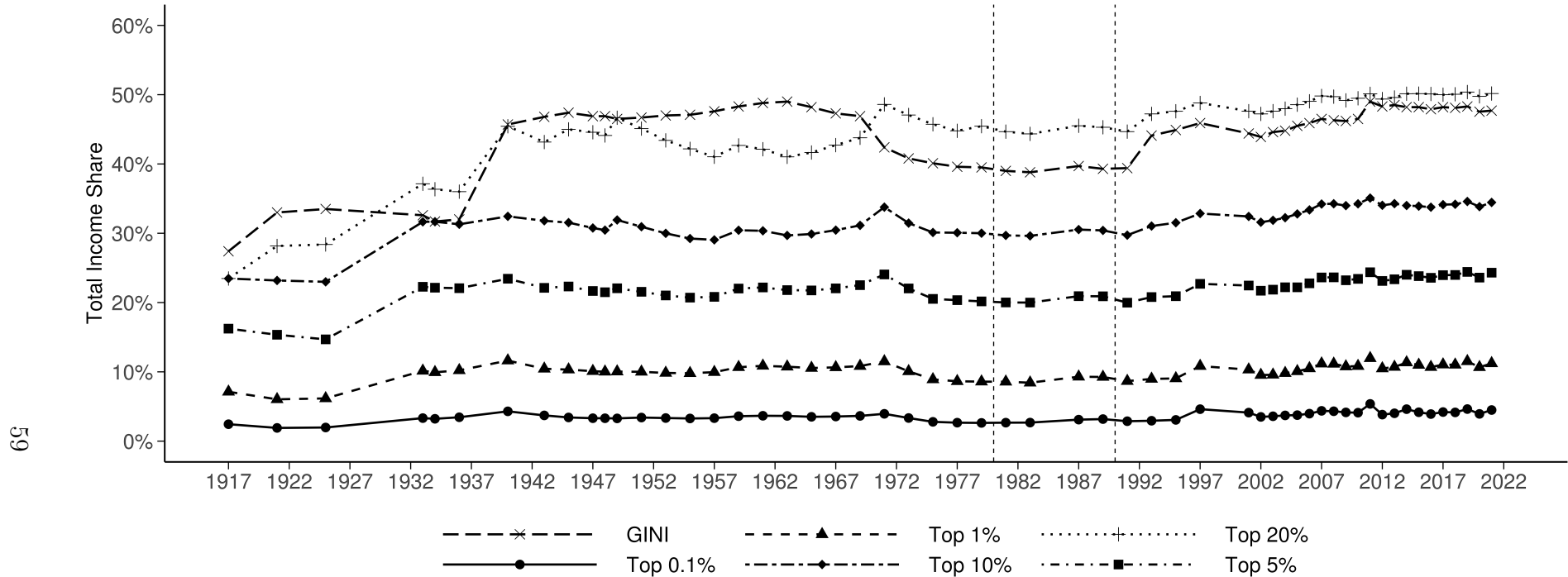
Notes: The figure plots the evolution of pre-tax 0.1% and 1% top income shares in Switzerland (1917–2021), based on the Swiss Inequality Database (SID) (2024) and official tax statistics from the Swiss Federal Tax Administration (FTA).

Figure B5: 5% and 10% Income Shares in Switzerland, 1917-2021



Notes: The figure plots the evolution of pre-tax 5% and 10% top income shares in Switzerland (1980–1990), based on the Swiss Inequality Database (SID) (2024) and official tax statistics from the Swiss Federal Tax Administration (FTA).

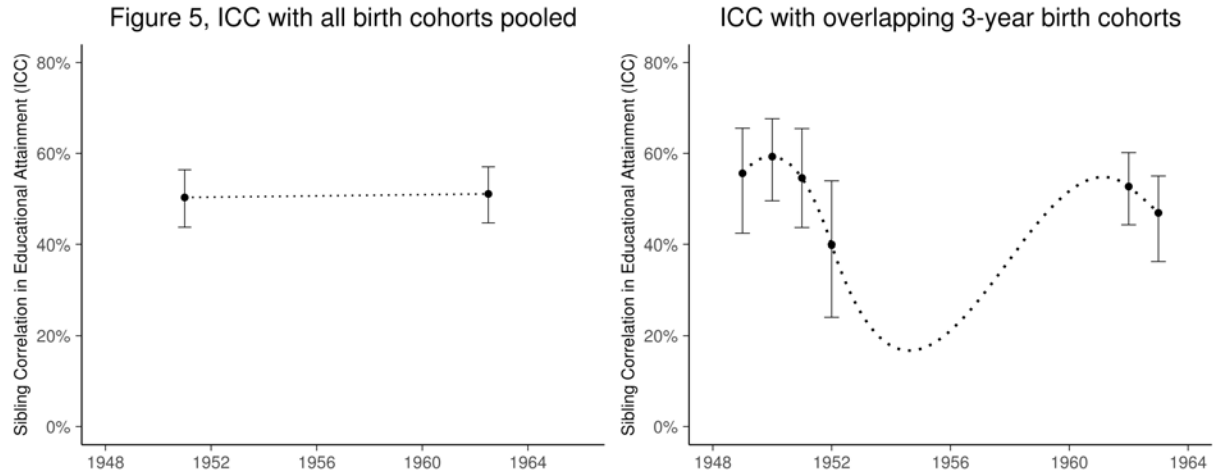
Figure B6: Top Income Shares in Switzerland in the Long-run, 1917-2021



Notes: The figure plots the evolution of pre-tax top income shares in Switzerland (1917–2021), based on the Swiss Inequality Database (SID) (2024) and official tax statistics from the Swiss Federal Tax Administration (FTA). This includes the Gini-coefficient, 0.1%, 1%, 5%, 10% and 20% income shares over the time period between 1917 and 2021.

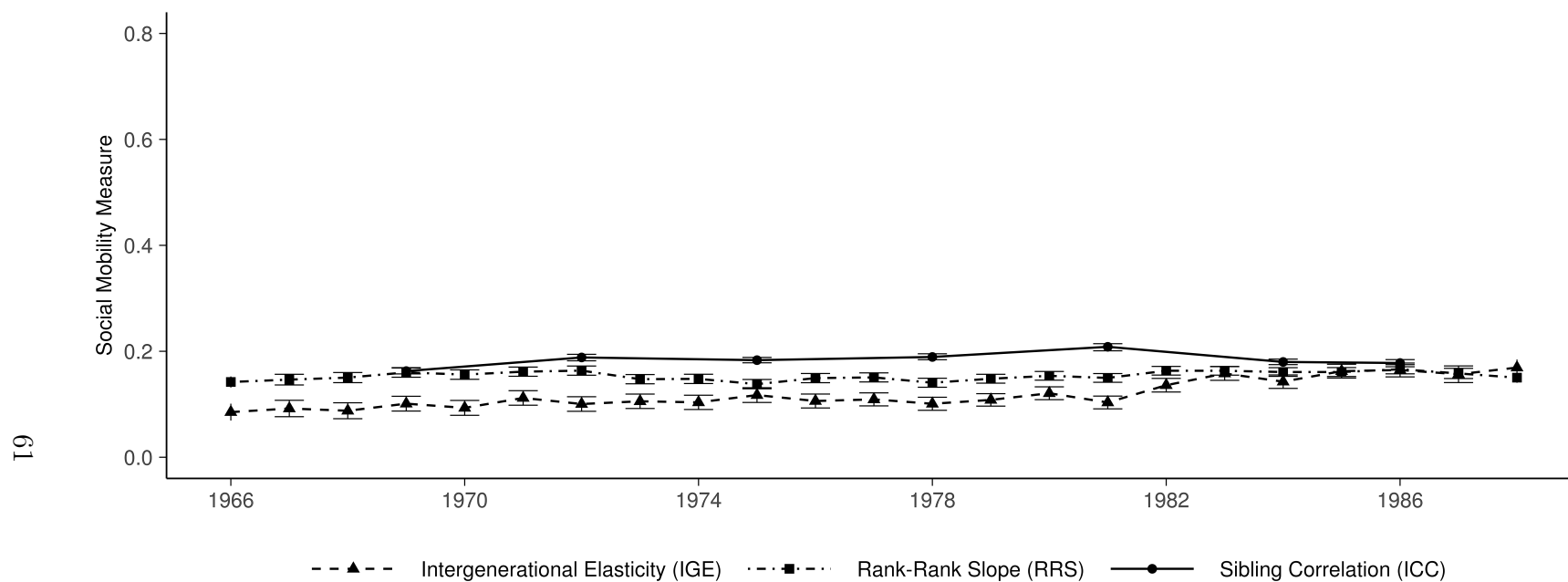
## B.2 Social Mobility in the 1980s and the Long-run (1981-2021)

Figure B7: Intergenerational Educational Mobility in the United States: Overlapping Three-Year Birth Cohorts



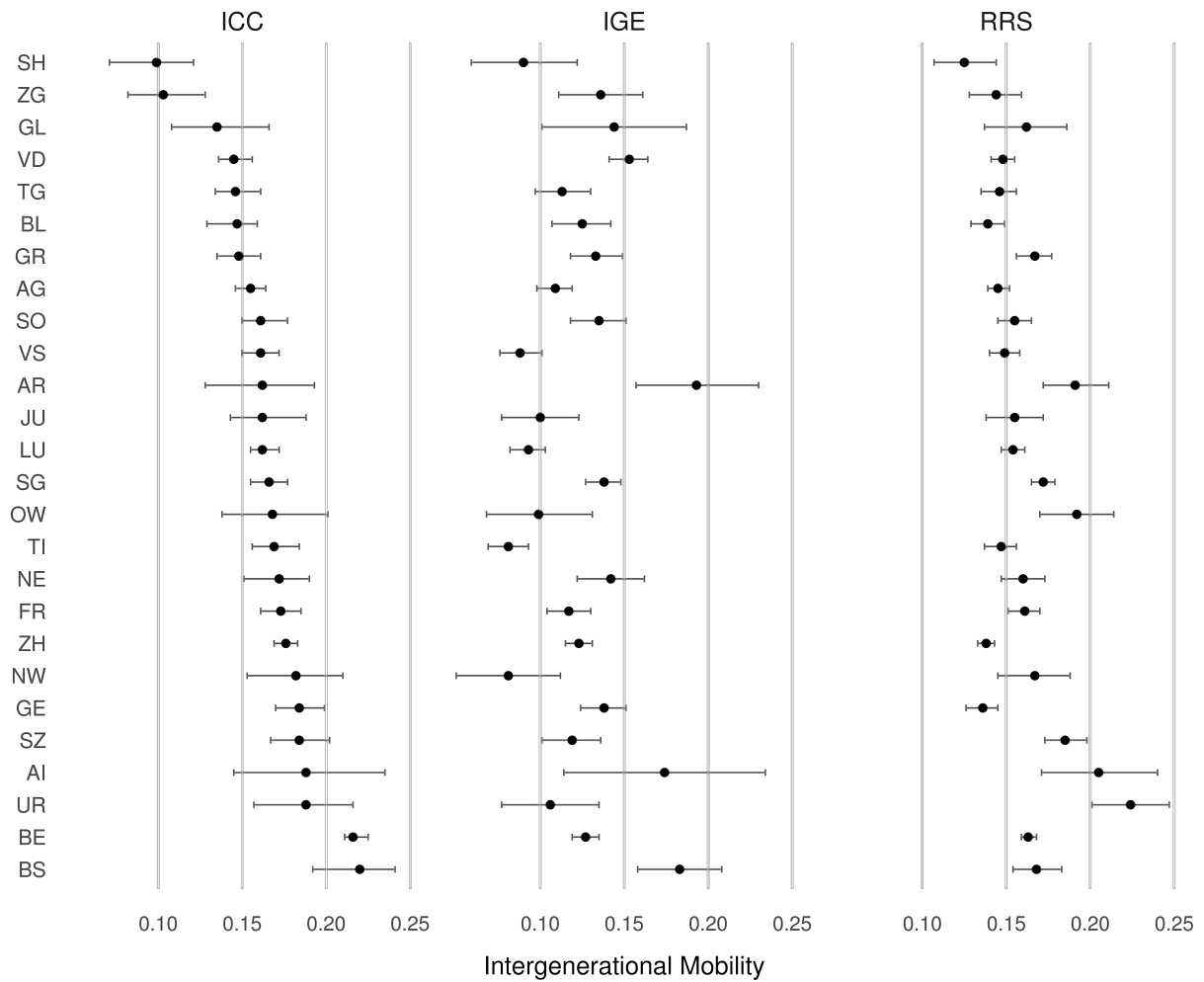
*Notes:* The figure reports sibling correlations (Intraclass Correlation Coefficients, ICC's) in years of education for the United States, estimated separately for overlapping three-year birth cohorts, analogous to the Swiss specification in the main text. ICC's are estimated using linear mixed-effects models via REML. Parametric bootstrap procedures (100 replications with fixed random seed) are used to compute 95% confidence intervals. Black dots indicate cohort-specific ICC estimates, vertical lines represent the corresponding bootstrap confidence intervals, and a LOESS smoothing curve (dotted line) is added for visual trend approximation.

Figure B8: Long-run Trends in Intergenerational Mobility between 1996 to 2021 using different Mobility Measurements (ICC, IGE, RRS), Cohorts 1966-1988



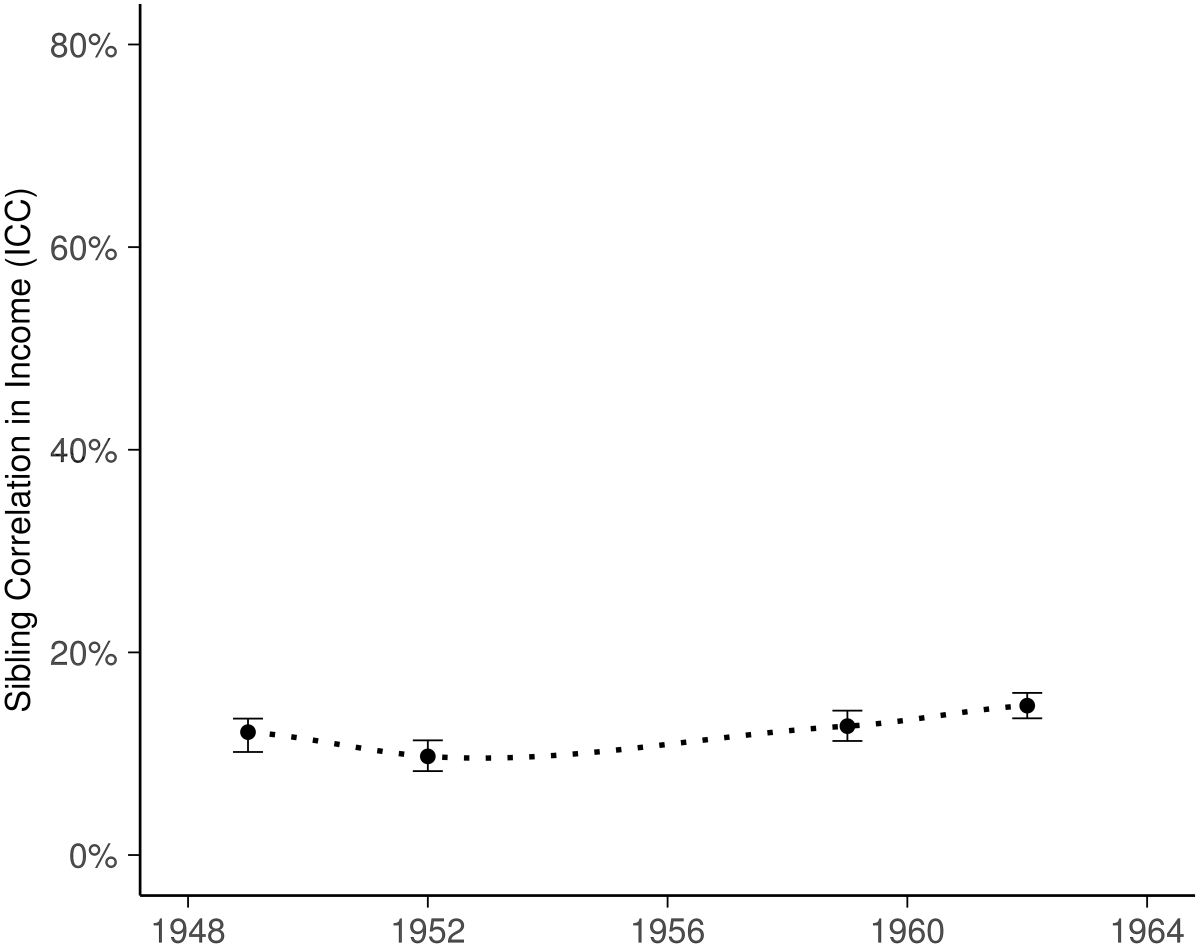
*Notes:* The figure presents long-run Trends in intergenerational mobility for Swiss birth cohorts 1966–1988, using three complementary measures: Sibling Correlation (ICC), Intergenerational Elasticity (IGE), and rank-rank slopes (RRS). Income is measured at ages 30–33 according to standard practice (Chetty et al., 2014a). Lines represent cohort-specific point estimates; vertical bars denote 95% confidence intervals.

Figure B9: Cantonal Differences in Intergenerational Mobility between 1996 to 2021 (pooled) using different Mobility Measurements (ICC, IGE, RRS)



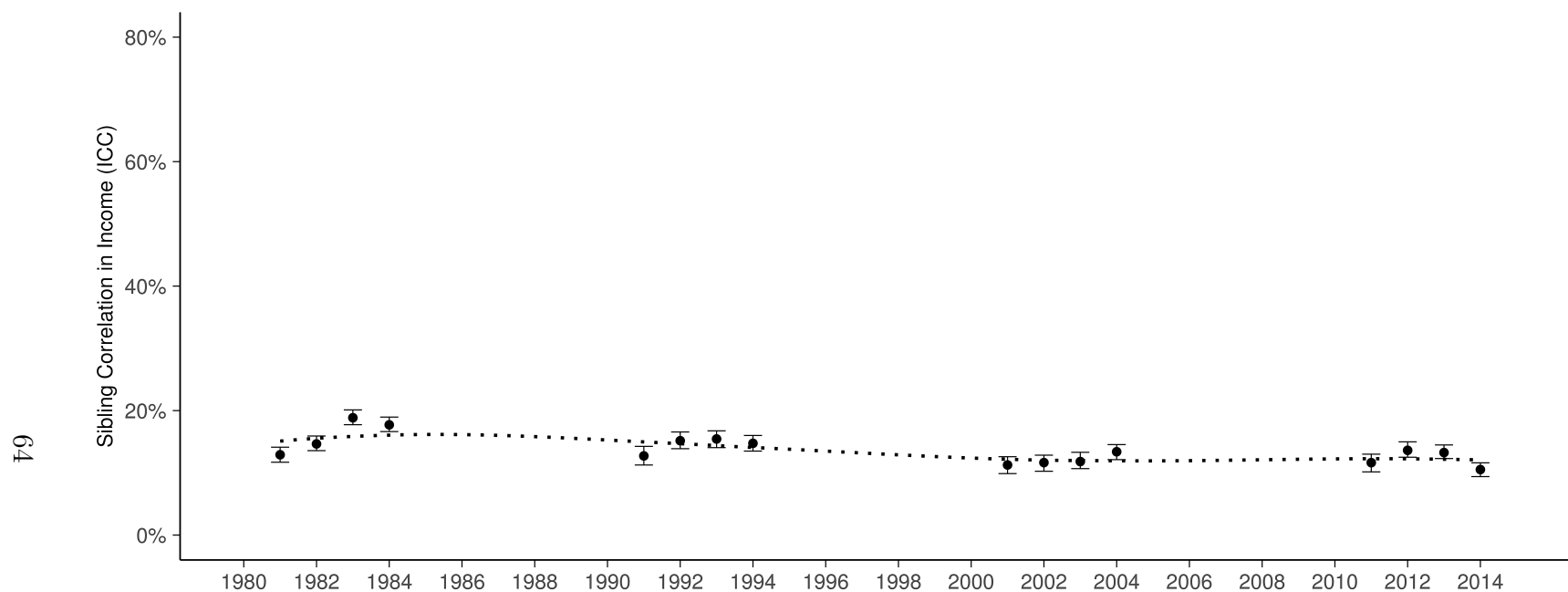
*Notes:* This figure reports pooled canton-level estimates of intergenerational income mobility in Switzerland. Each dot represents a single canton-specific estimate based on birth cohorts 1966–1988, with income measured at ages 30–33 (observed between 1996 and 2021). Panels display three complementary mobility measures: sibling correlations (ICC), intergenerational elasticities (IGE), and rank–rank slopes (RRS). Horizontal bars indicate 95% confidence intervals. Cantons are ordered by the level of sibling correlation.

Figure B10: Intergenerational Mobility Trends in Switzerland in the 1980s, by Birth Cohorts (1948-53 and 1958-63), non-overlapping Cohorts



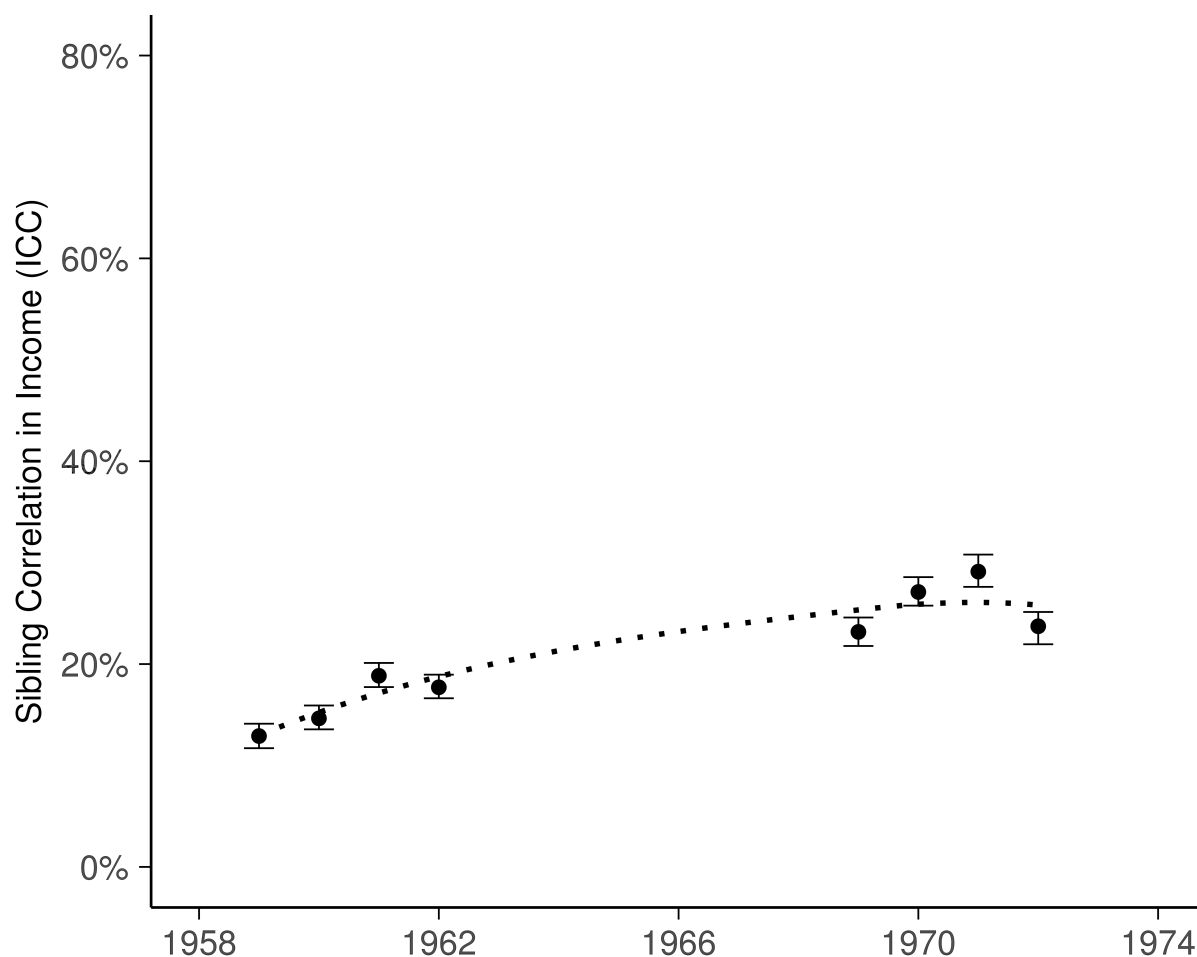
Notes: The figure shows trends in the intraclass correlation coefficient (ICC) for income, estimated separately for non-overlapping 3-year birth cohorts (1948–1950, 1951–1953 and 1958–1960, 1961–1963). Black dots represent point estimates; vertical lines denote 95% bootstrap confidence intervals. The analysis confirms that intergenerational income mobility remained stable across these cohorts during the 1980s, also when using non-overlapping cohorts.

Figure B11: Social Mobility across the Life Course of the same Cohort-group (Cohort 1958–1963), Income observed between 1981 and 2014



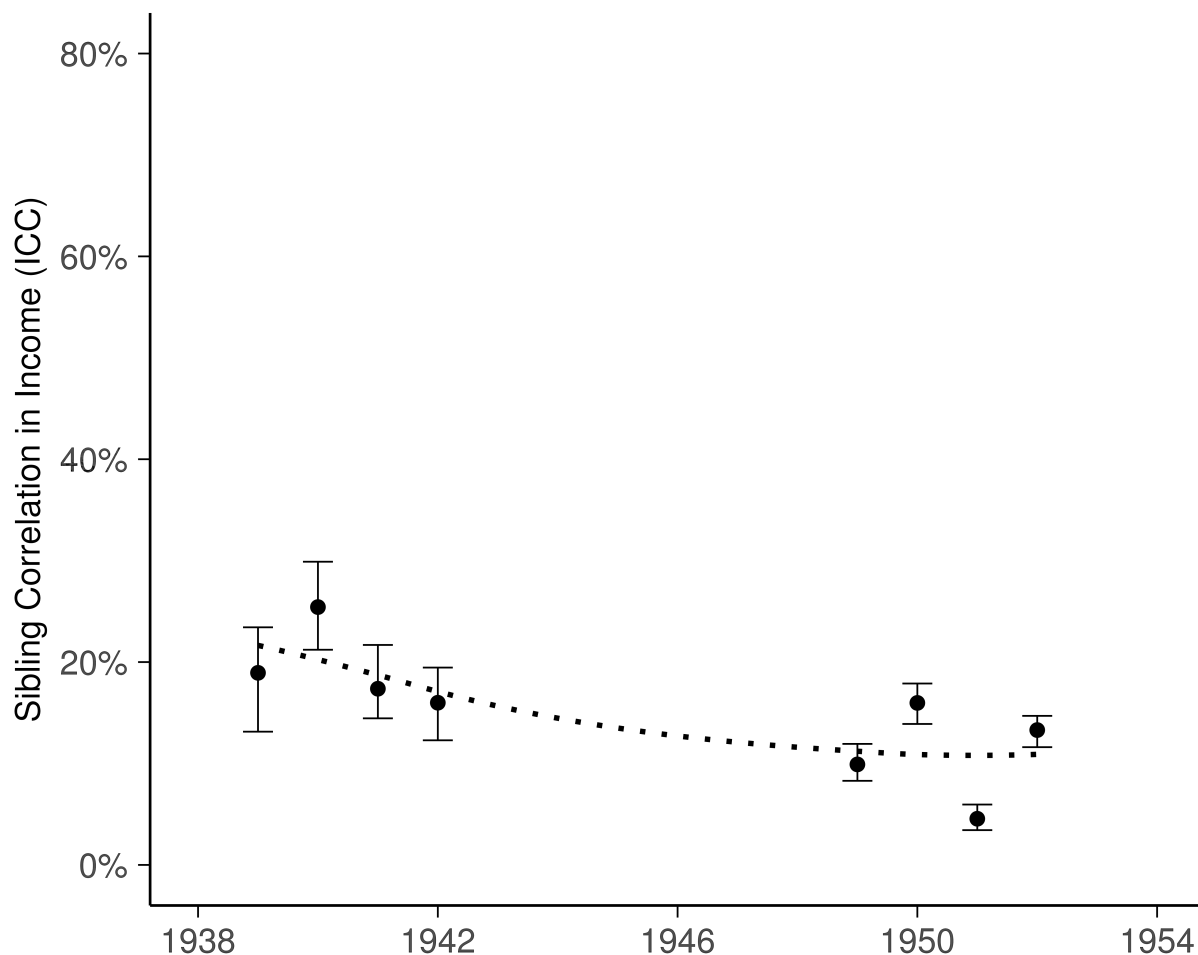
*Notes:* The figure depicts the development of the Intraclass Correlation Coefficient (ICC) in long-run income for the birth cohorts 1958–1963 over four decades. Income is measured at four distinct stages of the life course: around age 22 (1981–1984), age 32 (1991–1994), age 42 (2001–2004), and age 52 (2011–2014). Black dots represent point estimates; vertical lines denote 95% bootstrap confidence intervals.

Figure B12: Sibling Correlations in the 1980s based on younger Individuals (approx. 22 instead of 32 yrs)



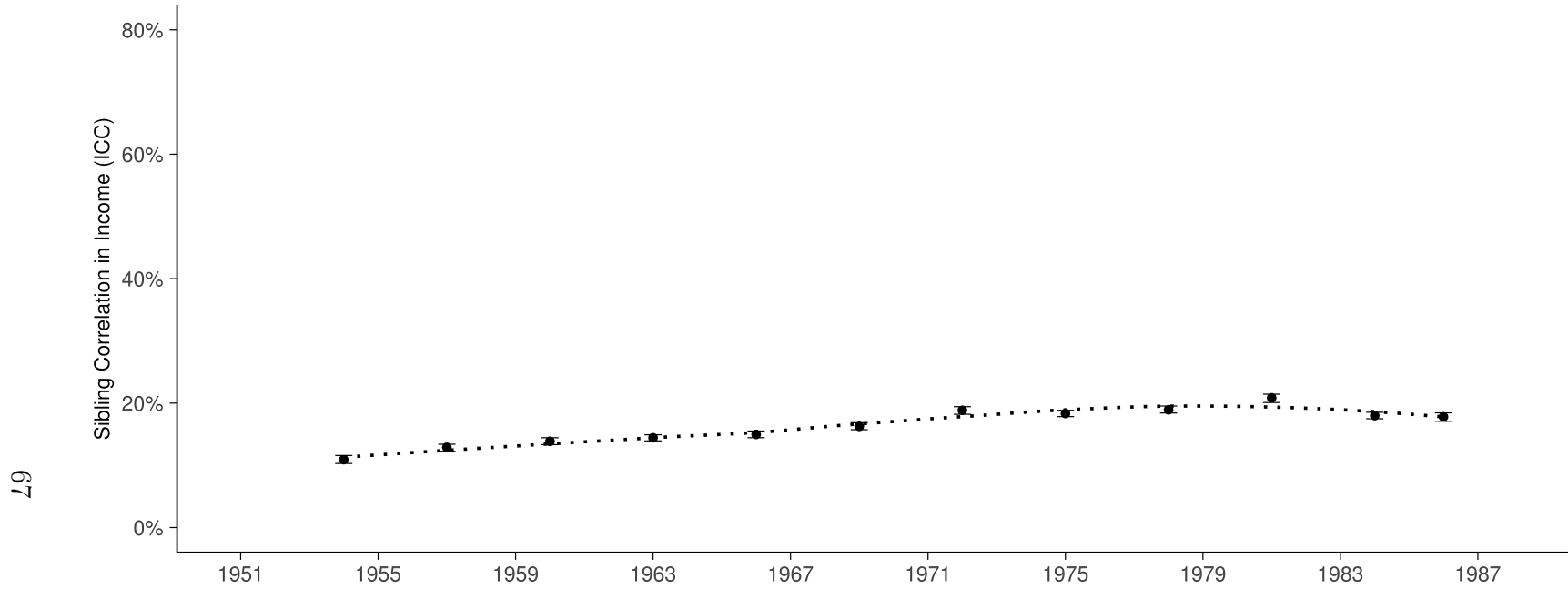
*Notes:* The figure displays the development of the Intraclass Correlation Coefficient (ICC) in income for younger individuals (aged 18–26 years) during the early 1980s and early 1990s. Each point represents the sibling correlation in income for overlapping 3-year birth cohorts (1958–1963 and 1968–1973). We measure long-run, 4 year average income of the 1958–1963 birth cohorts during the time between 1981–1984 and long-run, 4 year average income of the 1968–1973 birth cohorts during the time between 1991–1994. Black dots denote point estimates; vertical lines represent 95% bootstrap confidence intervals.

Figure B13: Sibling Correlations in the 1980s based on older Individuals (approx. 42 instead of 32 yrs)



*Notes:* The figure displays the development of the Intraclass Correlation Coefficient (ICC) in income for younger individuals (aged 38–46 years) during the early 1980s and early 1990s. Each point represents the sibling correlation in income for overlapping 3-year birth cohorts (1938–1943 and 1948–1953). We measure long-run, 4 year average income of the 1938–1943 birth cohorts during the time between 1981–1984 and long-run, 4 year average income of the 1948–1953 birth cohorts during the time between 1991–1994. Black dots denote point estimates; vertical lines represent 95% bootstrap confidence intervals.

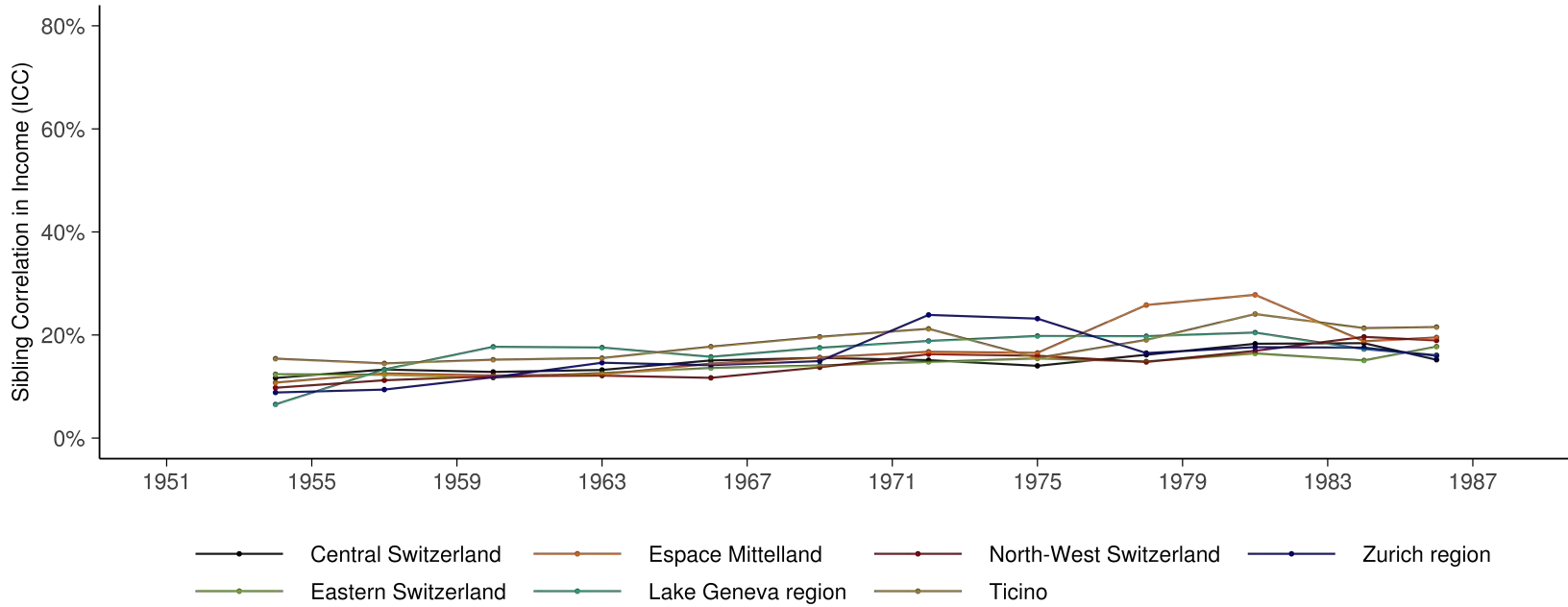
Figure B14: Long-run Trends in Intergenerational Income Mobility between 1981 and 2021



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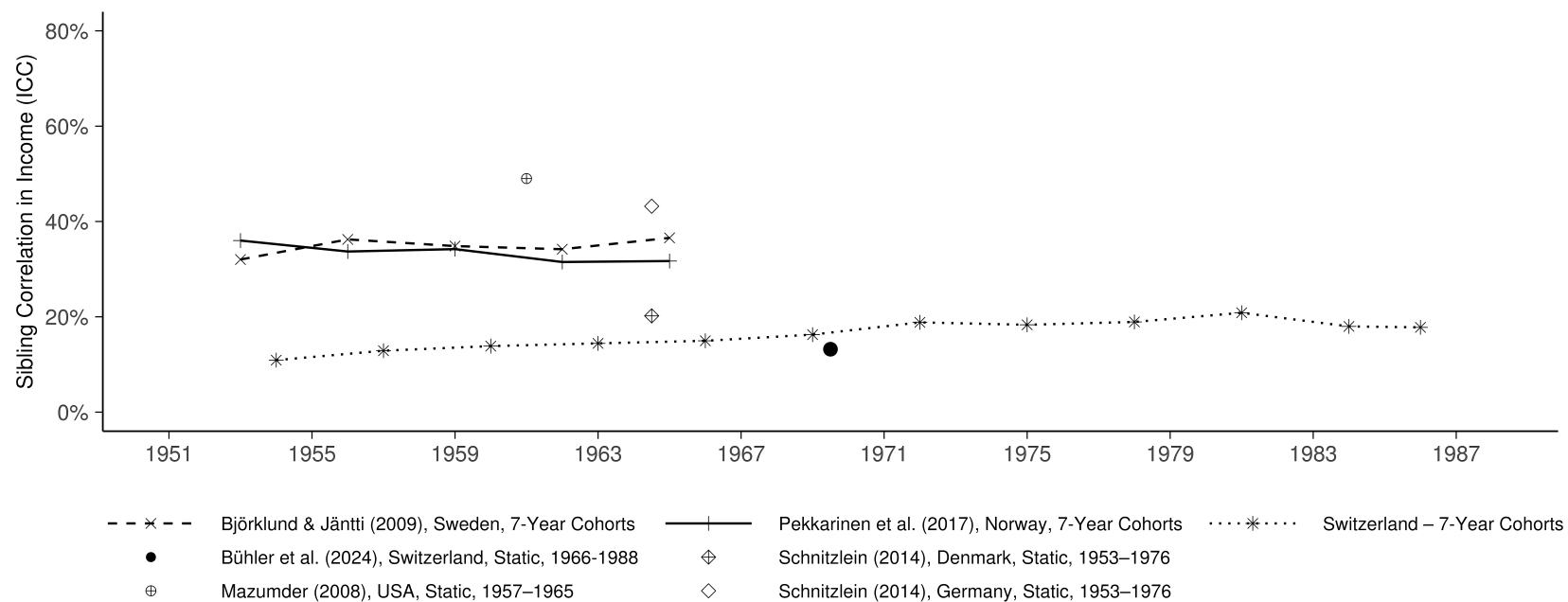
*Notes:* The figure depicts long-run trends in intergenerational income mobility in Switzerland for birth cohorts 1951–1988 ( $n = 2,033,618$ ), using overlapping 7-year cohorts according to the existing literature (see Björklund et al. (2009) and Pekkarinen et al. (2017) for details). The y-axis shows the estimated Intraclass Correlation Coefficient (ICC) based on long-run income measured at ages 30–33, observed between 1981 and 2021. Black dots represent cohort-specific point estimates; vertical lines denote 95% bootstrap confidence intervals.

Figure B15: Regional Long-run Trends in Intergenerational Mobility between 1981 to 2021



*Notes:* The figure presents regional trends in intergenerational mobility for Swiss birth cohorts 1951–1988, using sibling correlations. As in Figure 4, the 26 Swiss cantons were divided into the seven major regions of Switzerland according to the FSO. To estimate ICC's, we use 7-year overlapping cohorts as in Figure B14.

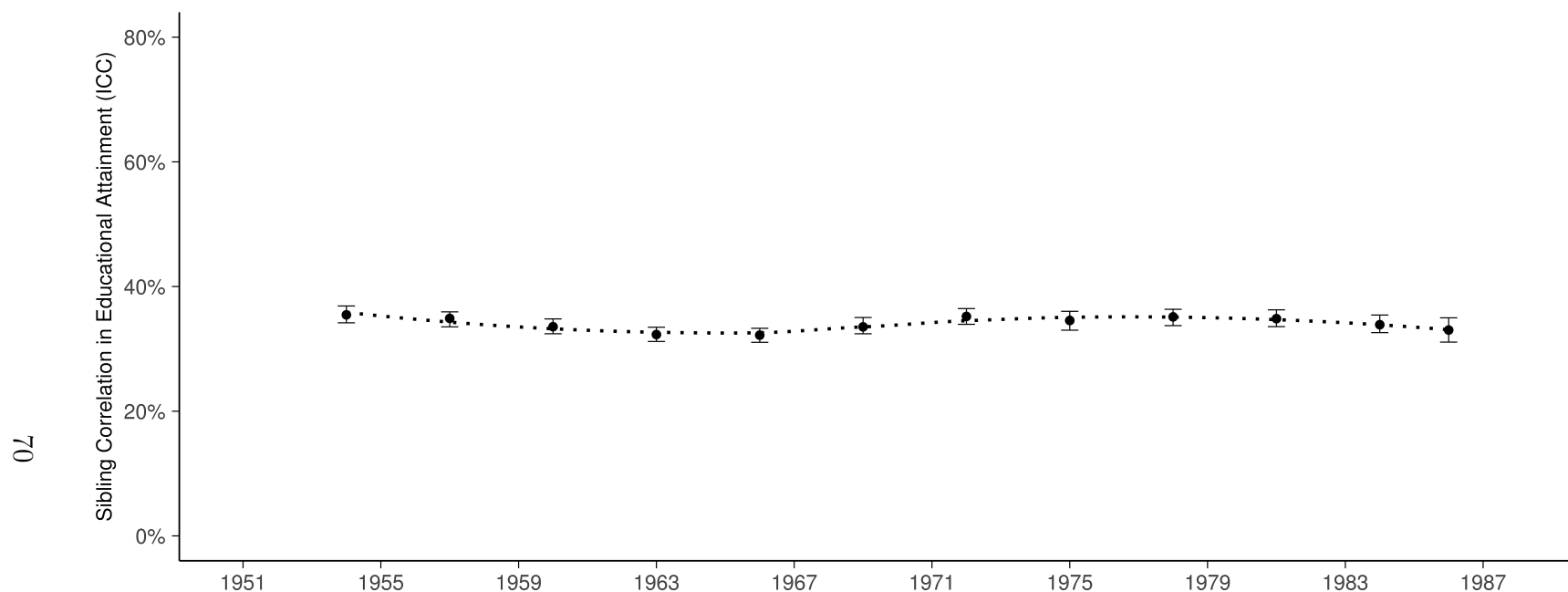
Figure B16: International Long-run Trends in Intergenerational Income Mobility between 1981 and 2021



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*Notes:* The figure compares international trends in intergenerational income mobility between 1981 and 2021. It plots cohort-specific sibling correlations in income (ICC) for Switzerland, Sweden, Norway, the United States, Germany, and Denmark, based on harmonized 7-year cohort definitions where available. Swedish and Norwegian trends are based on 7-year overlapping cohorts from Björklund et al. (2009) and Pekkarinen et al. (2017), respectively, while static estimates for the United States, Germany, and Denmark are drawn from Mazumder (2008) and Schnitzlein (2014). The figure highlights Switzerland's uniquely high and stable level of income mobility relative to other advanced economies.

Figure B17: International Long-run trends in Educational Intergenerational Mobility between 1981 and 2021



Notes: The figure shows the development of the Intraclass Correlation Coefficient (ICC) in educational attainment (years of education) for Swiss birth cohorts 1951–1988. As for income, each point estimate represents a 7-year overlapping birth cohort. Black dots depict point estimates, and vertical lines indicate 95% bootstrap confidence intervals. Again, a dotted LOESS (Locally Estimated Scatterplot Smoothing) curve is added to visualize potential trends. The ICC is estimated using linear mixed models, following the same methodological approach as in the main analysis for income.