# Intergenerational Impact of Financial Reparations: Evidence from Holocaust Survivors

Yael Mishly

The Hebrew University of Jerusalem

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**Abstract**

This study examines how Holocaust reparations affected intergenerational mobility in Israel. Using linked administrative data on survivors and their children, I compare recipients of Germany's BEG and Israel's MOF programs. Both applied similar eligibility rules but differed sharply in generosity. Eligibility for BEG was determined primarily by passing an affiliation test confirming membership in the "German cultural group." The Holocaust itself weakened the usual correlation between ability and outcomes, creating a credible setting to identify the causal role of financial resources in shaping long-term mobility.

BEG recipients achieved higher household income (including the reparation payments) and lived in more affluent neighborhoods, advantages that extended to their children through higher educational attainment and greater upward mobility. A calibrated Becker–Tomes model supports these findings, showing that mobility responds strongly to initial endowments and that transfer effects depend on exposure intensity. These results imply that reparations generated meaningful intergenerational effects and can serve as effective policy instruments for compensating historically disadvantaged or harmed populations. At the same time, they underscore the importance of interpreting IGM estimates in light of historical shocks and compositional differences.

**Keywords:** IGM, Reparations, Holocaust, Human capital

## 1 Introduction

The Holocaust perpetrated by Nazi Germany was an unparalleled human tragedy. Millions of Jews were murdered, and the survivors were left stripped of their human and physical capital. In the wake of the war, Germany established an extensive reparation programme aimed at compensating Holocaust survivors for health damages and to aid them in rebuilding their lives. For the survivors—most of whom had relocated to the newly formed State of Israel—these funds were life-changing, constituting approximately 30 percent of the average earnings among employed individuals in Israel during that period.[1]

However, as a result of a sudden demand from Germany at the end of the negotiation between Germany and Israel, two distinct frameworks emerged for compensating Israeli citizens survivors. Survivors who could demonstrate their affiliation with the "German culture group" qualified for large and direct compensation from Germany under the Bundesentschädigungsgesetze laws (BEG).[2] Those denied compensation under the BEG were designated instead to receive reparations from Israel's Ministry of Finance (MOF), which was to offer significantly less generous awards, roughly 40 to 45 percent the size of those provided by Germany. Importantly, both programs applied the same criteria regarding persecution during the war and resulting health conditions. Thus, the only difference between the two groups was the somewhat arbitrary distinction of affiliation with the "German culture group."

In this dissertation, I examine the impact of reparations on the economic outcomes of survivors, and the intergenerational mobility (IGM) of their descendants.[3] My analysis focuses on comparisons between recipients of the more generous BEG funds and those who only qualified for funds from Israel's MOF—differences which I will argue are plausibly

[1] According to the *Social Security (Bituach Leumi) Annual Publication, 1968-1969*, the average monthly income was approximately 400 Israeli lira (ISL). Reparations from Germany amounted to DM 100, equivalent to about 125 ISL.

[2] The "German culture group" was typically defined by residency in Germany or in German ethnic minority enclaves outside of Germany, as well as by cultural affiliations such as language and education.

[3] This study was performed in the Israel Central Bureau of Statistics (ICBS) research room using de-identified Microdata (direct identifiers removed from data) in files prepared specifically for this project.

unrelated to the latent ability. This setting allows me to address three distinct research questions. First, how did the Holocaust and subsequent reparations shape the economic and social outcomes of survivors and their descendants? Second, what insights can these reparation programs provide about the role of exogenous income shocks in fostering IGM? Third, how do these findings contribute to broader discussions of fairness and equality of opportunity?

The Holocaust provides an invaluable case study for understanding the long-term impacts of financial interventions on intergenerational mobility. First, it represented a massive shock to human and physical capital that affected survivors indiscriminately across socioeconomic backgrounds. This randomness enables clearer analysis of long-term outcomes without the usual confounding effects of pre-existing conditions. Put differently, the survivors all started with very limited human capital and virtually no physical capital, which is beneficial for assessing the causal impact of the reparations. Second, as discussed, the scale and structure of the reparation programs created substantial variation in the generosity of payments that is largely unrelated to latent human capital. This quasi-natural experiment offers a unique opportunity to study how exogenous income shocks influence mobility. Third, Israel's comprehensive administrative data make it possible to track survivors and their descendants, enabling me to consider the impact of reparations on both the recipients and their descendants' economic outcomes. Together, these factors make the Holocaust and its aftermath an ideal setting for studying the interplay between historical trauma, financial redress, and intergenerational mobility.

My empirical findings indicate that BEG recipients achieved significant improvements relative to MOF recipients. Their household income in 1983 was 17 percent higher (inclusive of the reparations) and they reside in 3.5 percentile higher socioeconomic status neighborhoods in the 1983 census, a gap that persists in the 1995 census. Importantly, their children also enjoyed better outcomes than the children of MOF recipients, lived in 3 percent higher socioeconomic neighborhoods in 1995, and experienced faster mobility compared to recipients of smaller payments under the Israeli law. In addition, within each reparation plan, children of survivors who immigrated at age 16 or older exhibited higher mobility than children of parents who immigrated at a younger age and had 0.3–1.1 more years of education than older arrivals.

These findings contribute to broader IGM research by showing that ongoing, predictable income flows, unlike lump-sum financial shocks, can generate substantial and sustained intergenerational impacts, particularly in contexts of extreme deprivation and trauma. These results highlight the value of reparations in addressing inequality and fostering mobility, particularly among the most vulnerable populations. These insights set the stage for theoretical exploration of these results in the next section.

In a final exercise, I estimated a calibrated model of intergenerational mobility based on the Becker-Tomes model of IGM (Becker and Tomes, 1979, 1986). The calibrated model reproduces several reduced form patterns I observe in the data, including the documented high mobility among older survivors. I then use the calibrated model to evaluate out-of-sample hypotheses regarding the potential efficacy of reparations to increase social mobility. This exercise links the observed outcomes to theoretical predictions about the role of income shocks in fostering mobility. The findings underscore the potential for reparations to mitigate the long-term effects of historical injustices and promote equality of opportunity when structured effectively. Understanding these dynamics is critical for designing policies that mitigate inequality and promote social mobility.

My dissertation represents a contribution to both the academic literature and a broader policy discussion regarding the potential efficacy of reparations to address historical injustice. A burgeoning academic literature has focused on declining social mobility in the US and other developed countries as cause for concern (Chetty et al., 2017).[4] However, a more recent literature has called into question whether the decline in social mobility is related to a decline in 'opportunity' or in the skill composition of lower SES children. My study contributes to a growing literature that estimates IGM in a context wherein the initial distribution has a plausibly exogenous component (Holmlund and Nybom, 2023; Björklund and Salvanes, 2011; Black and Devereux, 2011). In this study, social mobility variation appears highly sensitive to endogeneity concerns, supporting those who are disinclined to rush to judgment regarding proper interpretation of declining social mobility in the US and elsewhere.

[4] A positive correlation between intergenerational mobility and inequality is commonly observed and referred in the literature as the "Great Gatsby Curve" (Corak, 2013; Durlauf et al., 2022). Adermon et al. (2025) provide empirical evidence linking mobility measures to equality of opportunities.

More broadly, my results weigh into a policy debate regarding the potential efficacy for reparations to improve the socioeconomic outcomes of victims of historical injustice. Currently, there are over 120 million displaced persons worldwide, who were forcibly displaced from their region of residence and find themselves, like the survivors, in new countries with little or no physical capital (UNHCR, 2025). A similar argument can (and has) been made supporting reparations for African American descendants of slaves in the US or victims of Apartheid in South Africa (California DOJ, 2023; Darity et al., 2024). The experience of the Holocaust survivors suggests that reparations can be an effective mechanism for helping disadvantaged populations experience higher levels of upward mobility. The remainder of the dissertation is organized as follows: Section 2 reviews the relevant literature, covering (1) existing research on reparations, (2) evidence on the impact of exogenous income shocks and (3) theoretical and empirical challenge in interpreting IGM measures. In Section 3, I describe the institutional details of the reparation programme. Section 4 presents my theoretical framework, based on Becker and Tomes (1979, 1986). Section 5 outlines the data sources, my sample selection criteria, and how I construct my main variables for the empirical analysis. In Section 6, I examine the impact of reparations on key indicators such as education, income, and socioeconomic status. In Section 7, I present my analysis of the impact of reparations on the educational and economic outcomes of survivors' children. In Section 8, I present and estimate a calibrated model of intergenerational mobility, similar in spirit to the model described in Section 4. This model integrates my theoretical and empirical findings. Section 9 concludes the dissertation and outlines potential avenues for future research.

## 2 Literature Review

In this section, I summarize the existing literature as it pertains to my dissertation, separated into three sub-sections corresponding somewhat closely to the three main research questions that my dissertation attempts to answer. First, I summarize the existing scholarship on reparations in general and on Holocaust survivors in particular. Second, I focus on empirical and theoretical concerns in studies of the intergenerational mobility of education, which is a key outcome in my analysis. Third, I describe some of the challenges related to interpreting IGM estimates of education.

### 2.1 Reparations

Reparations have drawn the attention of scholars in multiple disciplines, including history, social science, and law. However, much of the existing literature focuses on the legal, philosophical, and historical dimensions of reparations (e.g., Torpey, 2006; Greiff, 2008; Immler, 2021).[5] In addition, the studies that examine the impact of reparations empirically generally focus on short-term outcomes. To my knowledge, this dissertation provides the first systematic assessment of Holocaust reparations and their intergenerational consequences.

The existing studies of reparations to Holocaust survivors are extremely limited. Landsberger (1969) utilized Israeli data to examine the impact of lump-sum reparations paid to Holocaust survivors in the late 1950s. His study, which analyzed changes in consumption and saving patterns using the Savings Survey,[6] primarily captured the short-term effects, as it was conducted shortly after the disbursements. Hazan and Tsur (2023) examine the effect of reparations on fertility decisions within households, comparing families in which either the husband or the wife received reparations at fertility age. Their findings suggest that reparations, through changes in intra-household bargaining dynamics, led to a decline in fertility. Tsur (2022), in a study more similar in spirit to mine, examined the impact of reparations on the second generation's human capital. He analyzed differences in educational attainment among children of survivors who received compensation at different points in time. His findings suggest that children whose parents began receiving compensation in the 1950s attained more years of schooling compared to those whose parents only became eligible in the 1990s, when they were already adults. The effect was particularly pronounced among daughters, with an increase ranging from 0.07 to 0.42 years of schooling, depending on household compensation levels.

Several recent projects have identified promising episodes of reparation programs for analysis, this includes Guarin et al. (2023), who examines the outcomes of a one-time reparation payment to victims of human rights violations in Colombia. They find

[5] A useful summary of qualitative studies can be found in Edwards et al. (2024).

[6] The Central Bureau of Statistics and the Bank of Israel conducted a survey of 3,200 households between 1963 and 1965. The sample was designed to be representative of the Jewish urban population in Israel. The microdata include demographic characteristics, labor market variables, and housing attributes.

significant improvements in a variety of outcomes, but since the reparations were only distributed in the last decade, they cannot make any claims regarding how they influenced social mobility. In a study that is still in the data collection stage, Advaryu et al. (2024) are studying the immediate and extended impacts of reparations to the Cherokee Nation, focusing on metrics such as school enrollment, employment, home ownership, and migration patterns among recipients and their descendants.

### 2.2 Intergenerational Mobility

In this section, I describe the empirical literature that has examined the IGM as it pertains to educational attainment—a key outcome in my analysis. A central challenge in the study of IGM is establishing causality in the transmission of education across generations. A growing literature has focused on 'natural experiments,' wherein the scholar can exploit historical events, policy modifications, or lotteries as exogenous shocks that influence the initial distribution of parental attributes. I further separate these studies into those that (1) examine shocks to parental education, (2) focus on lump-sum benefits received by parents, and (3) studies of parents who received annual income support.

I. *Exogenous Shocks to Parental Education*

Page (2006) attempt to establish causality in educational IGM by exploiting variations in fathers' education induced by the World War II G.I. Bill. Utilizing between-cohort variation in the probability of military service and G.I. take-up rates as instruments, Page identified the effect of fathers' educational attainment on their children's educational progress. The findings revealed a one-year increase in father's education reduces the likelihood of his child being held back in school by two to four percentage points, suggesting that parental education levels exert an independent influence on children's outcomes, irrespective of their innate abilities.

Althoff and Reichardt (2024) study the long-run effects of emancipation among freed American slaves and their descendants. They find that the socioeconomic status of descendants is heavily influenced by the state in which their ancestors were freed. State-level factors, such as the presence of Jim Crow laws (1877-1964), played a significant role in perpetuating racial inequality, with families emancipated after the Civil War

showing lower socioeconomic status by 1870. However, by 1940, this gap had narrowed depending on the state of ancestral residence. Utilizing a border discontinuity design, the authors highlight how state-specific policies impacted access to education, with the restricted opportunities under Jim Crow laws severely affecting long-term socioeconomic outcomes. Programs like the Rosenwald Initiative (1914-1931), which built thousands of schools, helped close 80 percent of the education gap caused by the Jim Crow regime, illustrating the critical role of institutional environments in shaping IGM.

Chetty et al. (2016) took a different approach to examine the same question by estimating the effects of randomly relocating families to better neighborhoods through housing vouchers. In the Moving to Opportunity (MTO) experiment, families residing in high-poverty housing projects were provided with housing vouchers to move to lower-poverty areas. This randomized relocation created a unique opportunity to examine the impact of environmental changes on children's long-term outcomes. They find that children who moved to better neighborhoods at young ages experienced substantial improvements in college attendance, earnings, and overall life outcomes.

Policy reforms, such as changes in compulsory schooling laws and the minimum school leaving age, also serve as a sources of exogenous variation in parental initial characteristics. Chevalier (2004) exploited a reform in Britain in the 1970s and found maternal and paternal education to have a causal and similar effect on children's education, measured by the probability of remaining in post-secondary schooling, but only among natural parents. Conversely, Black et al. (2005) examined reforms in Norway that altered the school-leaving age in primary and middle schools. They found negligible and statistically insignificant estimates for paternal effects on children's education and a modest positive effect of maternal education on sons' education, measured by years of schooling. Holmlund (2006) employed a similar identification strategy with Swedish data and found that an additional year of maternal education raised children's education by 0.15 years with an insignificant estimation of paternal impact. Unfortunately, as Holmlund found, the estimated impact of parental education on that of their child depends on the identification strategy.

Although school-leaving age design is constrained to parents with a lower inclination towards education, as they are the ones most influenced by the law change, it nevertheless provides valuable insights into the potential impacts of policy changes.

In conclusion, leveraging exogenous shocks has been a key strategy for identifying causal effects in intergenerational mobility. Studies like Page (2006), Althoff and Reichardt (2024) or Chetty et al. (2016) illustrate how external shocks, such as the G.I. Bill, institutional frameworks, and neighborhood relocation, influence socioeconomic outcomes for children. These shocks, which are random or quasi-random, allow researchers to isolate the impact of parental education, wealth, and policies on children's futures. Together, these studies underscore the critical role of external circumstances in shaping IGM and provide insights into how targeted interventions can promote social mobility.

II. *Lump-Sum Income Shock*

The Civil War represented an exogenous wealth shock for Southern slave-holding households, as the nullification of slavery drastically reduced their wealth. Ager et al. (2021) compared households with equal pre-war wealth but varying levels of slave ownership and found that, despite significant losses, the sons of slave-holding families nearly recovered. This persistence in IGM was attributed to non-financial endowments, such as social connections and marriage networks, which compensated for reduced investment in human capital.

Lotteries provide a unique lens to examine exogenous wealth shocks, as winnings are presumed uncorrelated with ability, initial wealth, or education. Bleakley and Ferrie (2016) studied Georgia's 1892 land lottery, where white male participants had near-universal eligibility. Winners received land valued at the median wealth level of the time, yet their descendants showed no significant educational advantages over non-winners, except for slightly larger family sizes. This suggested that wealth constraints were not the primary determinant of human capital accumulation, reinforcing the role of cultural and genetic endowments.

More recent evidence comes from modern state lotteries. Bulman et al. (2021) examined state lottery winners and found modest educational benefits for children of small to moderate winners, particularly in credit-constrained households. However, large winnings did not universally translate into higher college attendance, especially among lower-income families, who exhibited a higher marginal propensity to consume non-education-related goods. These results again underscore the role of cultural factors, alongside family spending priorities, in shaping IGM.

Cesarini et al. (2016) analyzed Swedish lottery winners and found that while wealth shocks improved adult health and life satisfaction, they had minimal impact on children's educational attainment. Their findings align with prior research, emphasizing that financial windfalls alone do not drive human capital formation across generations. Instead, non-financial factors, such as family culture and social networks, play a dominant role in shaping intergenerational mobility. The limited and inconsistent effects of lump-sum windfalls stand in contrast to ongoing transfers, which provide predictable and stable income support. Since Holocaust reparations followed the latter structure, the literature on sustained payments offers a more direct point of comparison for my study.

III. *Ongoing Payments*

Ongoing exogenous income shocks have been shown to significantly impact intergenerational mobility. Akee et al. (2010) examined the effects of a permanent increase in household income through a Cherokee tribal government transfer, where casino profits were distributed equally among adult members. This additional income, amounting to 20-40 percent of household earnings, led to notable improvements in child outcomes, particularly among the poorest households. An average increase of $4,000 annually was associated with an additional year of education for children below the poverty line. Enhanced parental engagement was identified as a key mechanism behind these gains.

Evidence from the US Earned Income Tax Credit (EITC) reinforces the role of ongoing transfers. Dahl and Lochner (2012) found that EITC expansions improved children's cognitive outcomes, particularly in math and reading, with larger benefits for disadvantaged children. Bastian and Michelmore (2018) extended these findings, showing that adolescent exposure to EITC increased high school and college completion, employment, and earnings. Manoli and Turner (2018) found that a $1,000 tax refund during a student's senior year in high school increased college enrollment among low-income families by 1.3 percentage points.

While EITC studies offer robust insights, their focus on low-income households raises questions about generalizability to middle- and high-income families, given cultural and institutional differences. Similarly, the positive effects observed in the Cherokee study may not be fully replicable in broader populations due to cultural differences. Overall, research suggests that ongoing income transfers significantly improve educational and long-term

socioeconomic outcomes for low-income families, reinforcing the role of financial stability in reducing intergenerational poverty. However, findings vary across populations: Ager et al. (2021) demonstrated the resilience of Southern slave-holding families post-Civil War due to non-financial factors, while studies on lottery winnings (Bleakley and Ferrie, 2016; Bulman et al., 2021; Cesarini et al., 2016) found limited effects on educational attainment, emphasizing the dominant role of family culture over financial windfalls. These studies collectively highlight the heterogeneous impact of income and wealth shocks on IGM, with targeted, sustained income support proving most effective for disadvantaged households.

Like many studies, my research leverages an exogenous shock to examine its impact on children's outcomes. Similar to natural experiments such as the G.I. Bill (Page, 2006) and neighborhood relocation (Chetty et al., 2016), reparations serve as an external and largely random intervention, enabling causal inference. By focusing on ongoing reparation payments, my study aligns with research on sustained financial transfers, such as Akee et al. (2010) and EITC studies, which demonstrate that income stability positively influences education and socioeconomic mobility, particularly for lower-income families.

Nevertheless, data limitations constrain my ability to explore heterogeneity—especially regarding children's age at the time of reparations—compared to studies like Chetty et al. (2016), which examine multiple dimensions such as race and socioeconomic status. Additionally, unlike large-scale studies such as Dahl and Lochner (2012) or Chetty et al. (2016), which precisely quantify income effects using extensive datasets, my research faces challenges in fully measuring the impact of reparations on child outcomes.

Despite these limitations, my study has a key advantage: it is less affected by endogeneity between parental ability and education. The Holocaust significantly disrupted survivors' educational opportunities, weakening the typical correlation between parental characteristics and child outcomes. This distinction allows for a clearer assessment of the causal effects of reparations on intergenerational mobility, overcoming a common challenge in studies of financial interventions.

## 3 Institutional Details of the Reparation Programme

Following the conclusion of World War II, it became evident in West Germany that there was a pressing need to provide compensation for the victims of the National Socialist regime. Initially, the Western occupying powers (US, Britain, and France) and local authorities devised the first legal provisions, which primarily focused on addressing the welfare needs of the recipients. Subsequently, in 1953, these provisions evolved into federal laws governing compensation. The significance of establishing a compensation program was underscored by Konrad Adenauer, the Federal Chancellor, who declared in 1951 that the German people had a moral and material obligation to provide compensation for victims of the Nazi regime.

Following Germany's acceptance of responsibility for the crimes of the Nazis, negotiations commenced between the newly established state of Israel, West Germany, and the Conference on Jewish Material Claims Against Germany (Claims Conference) as representatives of worldwide Jews.[7] These negotiations led to the signing of the Luxembourg Agreement on September 10$^{th}$, 1952, also known as the "Reparation Agreement."

The agreement was comprised of two main provisions. First, it specified compensation to the State of Israel. Under the agreement, Germany pledged DM 3 billion ($715 million) in goods and services to support Israel's absorption of hundreds of thousands of Holocaust refugees. Second, it provided an immediate DM 450 million ($107 million) payment to assist in the "reconstruction" of Jewish victims worldwide. These funds would be distributed partly in collaboration with the Claims Conference and directly to survivors. Additionally, the protocols established a framework for future restitution and compensation legislation across the Federal Republic of Germany. However, shortly before the agreement was signed, Israel was asked to waive the right of its citizens who had arrived in Palestine/Israel before October 1953 to file direct compensation claims

[7] Following a request from the State of Israel conveyed in a confidential meeting between the Chancellor, David Horowitz and Moritz Fischer in April 1951, on September 27, 1951, Chancellor Adenauer made a historic declaration in the Bundestag in Bonn, stating: "The Federal Government and the vast majority of the German people are aware of the immeasurable suffering inflicted upon Jews in Germany and the occupied territories.... However, on behalf of the German people, unimaginable crimes were committed, necessitating both moral and material redress—regarding both the individual harm caused to Jews and the Jewish property that today lacks owners or heirs," (Segev, 1991, pg. 183-184).

with Germany for health damages caused by the Nazi regime. Israel accepted, thereby forgoing the ability to seek individual compensation for health-related harm on behalf of these citizens.[8]

In 1953, the Federal Compensation Act (BEG) was enacted, expanding on the 1949 Act on the Treatment of Victims of National Socialist Persecution in the Area of Social Security. It extended support not only to expellees but also to stateless persons and refugees as defined by the Geneva Convention (Federal Ministry of Finance, 2023).[9] Despite Israel's commitment, some Israeli survivors successfully claimed compensation under the BEG and its amendments in 1956 and 1965. Israeli citizens who could prove affiliation with the "German culture group" were exempted from the waiver, and therefore eligible. This group included (1) survivors born or residing within Germany's 1937 borders; (2) those who lived in displaced persons (DP) camps in West Germany after the war; and (3) individuals from Poland, Czechoslovakia, Hungary, Yugoslavia, Romania, or Bulgaria who fled between January 31, 1933, and October 1, 1953.

This eligibility standard excluded thousands of Jewish Polish survivors and others from Nazi-occupied territories, even if they had been deported or interned in concentration camps. To address this gap, Israel introduced the Victims of Nazi Persecution Act, 5717 – 1957, offering monthly compensation to those who did not meet BEG's territorial criteria. However, these payments amounted to only about forty percent of the compensation provided directly by Germany. The Israeli act adopted the German eligibility framework, evaluating applicants based on their wartime experiences and the officially certified degree of disability resulting from those experiences.

By 1957, over 200,000 Israeli citizens had applied for compensation under the BEG program, but fewer than half of these claims were approved (Brunner and Nahum, 2009; Segev, 1991; Teitelbaum, 2008).[10] Those denied BEG payments could apply for Israel's

[8] Exchange letters between Moshe Sharett, Israeli Minister for Foreign Affairs, and Konrad Adenauer, Chancellor and Minister for Foreign Affairs of the Federal Republic of Germany from September 10, 1952, https://treaties.un.org/doc/Publication/UNTS/Volume%20162/volume-162-I-2137-English.pdf.

[9] Expellees as defined in the Federal Expellees Act: ethnic German refugees and expellees who fled or were expelled after World War II from the former eastern territories of the German Reich and other areas of Central and Eastern Europe.

[10] This figure includes individuals who applied for one-time BEG payments related to loss of freedom or property, which are not included in the present analysis.

less generous benefits, while individuals rejected by both systems remained without formal compensation until policy changes in the 1990s.

My study focuses on two specific groups of survivors: those who received ongoing reparations from Germany and those who received payments from Israel under the 1957 Act. Appendix Figure A.1 illustrates the disparity in the generosity between the two programs, as documented in the Report of State Investigative Committee on the Subject of Assisting Holocaust Survivors (Dorner Committee, 2008). Additional details on the reparation programs are provided in Appendix A.

## 4 Conceptual Framework

### 4.1 The Becker-Tomes Model (BT)

The canonical model examining family influence on IGM presented by Becker-Tomes (1979; 1986). It characterizes the persistence and distribution of income across dynasties. In their framework, income in each generation is derived from three sources: (1) endowments, including genetics and social factors such as ability, connections, inspirations; (2) parental financial investment in children's human capital, and (3) a stochastic component, or "luck".[11]

Assuming a single parent and a single child, parents face an optimization problem where they allocate their resources between own consumption ($C_t$) and investments in their children ($I_{t+1}$), with the latter affecting the future stock of their child's human capital and utility:

$$\max U(C_t, U_{t+1}) \tag{1}$$

Subject to the parent's budget constraint, where $Y_t$ denotes parental income:

$$Y_t = C_t + I_{t+1} \tag{2}$$

[11] In the words of Becker and Tomes (1986), endowments are "determined by the reputation and 'connections' of their families, the contribution to the ability, race, and other characteristics of children from the genetic constitutions of their families, and the learning, skills, goals, and other 'family commodities' acquired through belonging to a particular family culture. Obviously, endowments depend on many characteristics of parents, grandparents, and other family members, and may also be culturally influenced by other families."

Resolving Equation 1 leads to the child's income, $Y_{t+1}$, expressed as:

$$Y_{t+1} = w_{t+1} f\left(I_{t+1},\ A_{t+1}\right) + \left(1 + r_{t+1}\right) X_{t+1} + \epsilon_{t+1} \tag{3}$$

where $w_{t+1}$ is the return to the child's human capital and $r_{t+1}$ is the return to physical capital $X_{t+1}$. The child's human capital depends on both parental investments $I_{t+1}$ and the child's endowment $A_{t+1}$ through a human capital accumulation function. Finally, $\epsilon_{t+1}$ captures a stochastic component that can influence child's income, "market luck" in the phraseology of Becker and Tomes. Parents choose the share of income allocated to child investment ($\delta$) based on their preferences, the expected return to human capital $w_{t+1}$, and child's known endowments:

$$I_{t+1} = \delta(Y_t) \tag{4}$$

The transmission of endowments across generations is assumed to follow a linear heritability process:

$$A_{t+1} = \theta \bar{A}_t + hA_t + \mu_{t+1} \tag{5}$$

where child's endowments depend on $h$, heritability rate or the fraction of parent's endowments transmitted to child, $\theta \bar{A}_t$ which reflect influence of social capital of other families in generation $t$ and $\mu_{t+1}$ denotes "endowed luck".

Hence, the child' human capital accumulation function can be written as follows:

$$H_{t+1} = hA_t + \delta I_t + \epsilon_{t+1} \tag{6}$$

Key structural parameters in the model are $h$, the heritability rate of parental endowments and $\delta$ a coefficient capturing parental tastes for their children's utility, or their 'altruism.'

A variation of BT model is used by scholars to estimate IGM of human capital. In this setting, human capital function depends on heritability ($h$), initial endowments ($A$), parental education or human capital, investment propensity ($\delta$) and a stochastic component ($\epsilon_{t+1}$) (Björklund and Salvanes, 2011; Holmlund and Nybom, 2023).

The human capital production function is assumed to be concave in $I$ (Holmlund and Nybom, 2023). Therefore, under diminishing returns to human capital, low-income families are more responsive to marginal increases in income. In the next section, I adapt

these general associations in specific terms that I can estimate empirically.

### 4.2 Human Capital Transmission to Survivor Offspring

To accurately reflect the context of this study, some modifications are made to the formula for human capital accumulation (Eq. 6) For the first generation:

$$Educ_{i,1} = h_1 A_{i,0} + \ \delta_1 I_{i,0} + \varepsilon_{educ,i,1} \tag{7}$$

Let $I_0$ depends on age of arrival, as a proxy to the negative impact of the Holocaust on parental investment in Holocaust survivors' education:

$$y = \begin{cases} 0 & \text{if arrival age} \leq 15 \\ 1 & \text{otherwise} \end{cases}$$

This variable $y$ distinguishes individuals who arrived at or before age of 15 from those who arrived later, a cutoff that substantially affected parental ability to invest in children's education. This categorization is explored in depth in section 7.2. Finally, I can express the second generation's human capital accumulation:

$$Educ_{i,2} = h_2 A_{i,2} + \delta_2 Educ_{i,1} + rep + \varepsilon_{educ,i,2} \tag{8}$$

Let $rep$ be an indicator variable defined as follows:

$$y = \begin{cases} 1 & \text{if family received high reparation} \\ 0 & \text{otherwise (low reparation)} \end{cases}$$

### 4.3 Intergenerational Mobility Estimation Regression

Estimates of IGM are taken from calculation of rank-rank association (Chetty et al., 2014), which measures correlation between education rank within birth cohort for the two generations instead of years of education, thus abstracting from shifts in marginal

education distributions:

$$Rank_{i,2} = \alpha + \beta Rank_{i,1} \tag{9}$$

In this context, the regression's estimate of $\hat{\alpha}$ is defined as 'absolute' and $\hat{\beta}$ as 'relative' mobility. Absolute mobility measures the mean rank attained by children whose parents were in the lowest decile of the education distribution (Chetty et al., 2014). Relative mobility, captured by the slope coefficient, measures the expected increase in a child's rank associated with a one-rank higher parent. It is worth noting that higher values of $\hat{\beta}$, can be interpreted as reflecting a society with lower social mobility, as the predictive power of parental rank is larger. Hence, higher $\hat{\alpha}$ and lower $\hat{\beta}$ are indicative of greater social mobility, as they indicate that (a) children born to the lowest decile have greater upward mobility; and (b) parental decile is less predictive of child outcomes.

### 4.4 Identification Strategy

The identification strategy exploits a natural experiment created by two groups of individuals who received different levels of reparations under distinct eligibility rules. The first rule, which determined the source of reparations, was place of residence prior to the war. Based on this assignment, individuals were either "treated" with the more generous German program or assigned to the "control" group receiving the less generous Israeli program. The second rule, applied uniformly across both groups, concerned the type of persecution, its location, and the associated health damage.

In both groups, restrictive laws during childhood disrupted the usual relationship between ability and achievement. This exogenous disruption—unrelated to initial ability—helps isolate the effect of additional income from reparations on IGM. Importantly, reparations represent an unexpected and externally determined income shock: eligibility and benefit size were set by geopolitical agreements, not by individual choices. The quasi-random assignment of treatment therefore provides plausibly exogenous variation in parental income, allowing estimation of the causal effect of reparations on children's later-life educational outcomes.

## 5 Data

Data for this study are taken from administrative datasets managed by the Israeli Central Bureau of Statistics (ICBS). My sample was prepared by ICBS with de-identified microdata prepared specifically for this project. The primary dataset is the 2019 Population Registry, compiled by the Ministry of Interior, which records the year of birth, country of birth, year of immigration, parents' identification numbers, and the current or last known address for every Israeli citizen. My dataset includes all individuals who were ever assigned an Israeli identification number and were born between 1901 and 2000.

The population registry is supplemented with additional datasets that provide demographic, educational, and economic outcomes. These datasets include Israel's census samples (1972, 1983, 1995), administrative records from the Ministry of Education (covering educational attainment), and income data from the Tax Authority for 1988–2019. Altogether, this database offers comprehensive demographic, educational, and economic information on 8,547,498 Israeli citizens.

The base sample from ICBS was supplemented with administrative records provided by the Holocaust Survivors' Rights Authority and the Claims Conference. The Holocaust Survivors' Rights Authority, a branch of the Ministry for Social Equality, administers allowances, benefits, and other entitlements to Holocaust survivors. It generously provided records on recipients of reparations under Israel's laws and regulations concerning Holocaust survivor compensation. This is the main source of data on survivors who received compensation from Israel. The Claims Conference prepared an extract for my project containing information on a subset of recipients, including the compensation they received and the type of persecution they endured during the Holocaust.

### 5.1 Sample Selection

The main sample consists of individuals born in European countries where the two reparation plans were implemented as part of the Luxembourg Agreement: Poland, Romania, Czechoslovakia, and Hungary.

These countries had significant populations of ethnic Germans before the war and were

therefore potentially eligible for compensation under the German BEG laws. However, not all Israeli residents qualified for (or even applied for) German reparations, due to the institutional and eligibility constraints described earlier (Section 3). Those who did not receive BEG compensation instead received smaller reparations from the Israeli Ministry of Finance (MOF).

The study concentrates on cohorts born between 1926 and 1935. These cohorts are ideal for my study for two reasons. First, they had relatively higher survival rates compared with younger cohorts who were children during the war. Second, given that education is a key focus of the research, and limited education data is available for earlier cohorts, those born before 1920 are dropped from the analysis (see Appendix Table B.1).

To identify Holocaust survivors, the sample was restricted to individuals who immigrated to Palestine/Israel between 1946 and 1952. This cutoff is also relevant because, under the Luxembourg Agreement, Israeli citizens who arrived before October 1953 were required to waive their right to file individual compensation claims in Germany.

After restricting the main sample to cohorts born between 1926 and 1935 in the reference countries, I then match the sample with their children. This was facilitated by an identifier generated by ICBS, which constructs this variable carefully using a collection of government records including birth records. This is a higher quality and more reliable identifier relative to what is often used in studies of IGM.[12] [13] Nevertheless, this variable is imperfect and not all parent-child records are matched, though it appears not to be a systematic bias. Details are available in Appendix Tables B.2, and B.3.

The final step in sampling involved selecting reparation recipients based on data availability; I kept only individuals with available data from the BEG, MOF, or the other compensation plans (e.g., Article 2 Fund, MOF Late). The focus of this research is on BEG and MOF recipients, with data on other programs used only to improve

[12] Other linkage approaches include Abramitzky et al. (2014), who link parents and children by name, year of birth, and state of birth restricted the sample to males, or Chen et al. (2017) who defined parent-child links based on dependent claims in tax records.

[13] A key advantage of using administrative data, relative to survey-based studies, is the avoidance of the 'cohabitation problem,' in which parent–child links are observed only when both reside in the same household. his limitation can bias estimates of intergenerational mobility, as discussed by Fletcher and Han (2019) and Munoz and Siravegna (2021).

identification of BEG and MOF recipients.

My analysis sample consists of 18,672 individuals from the "First Generation", of which 2,732 received the BEG and 15,940 who were compensated through the MOF. The "Second Generation" is composed of all linked children of the First Generation, identified by having either a father or a mother in the original sample. The Second Generation is composed of 30,367 children across 13,294 families, of which 3,637 were children of BEG recipients and 26,730 children of MOF recipients.

### 5.2 Main Variables

I. *Human Capital Measurement*

My analysis focuses on educational attainment because of its critical importance in determining wages and the consistency with which it is measured over time in my data. The primary measure of educational attainment used in this research is years of education, drawn from the education registry compiled by the Israeli Central Bureau of Statistics (ICBS). The ICBS has years of education information for individuals from the 1919 cohort onward, offering a comprehensive view of education across different generations using a consistent method of measurement.

The ICBS compiles education data from several governmental sources to construct this variable, including the Ministry of Education, the Ministry of Labor, and universities. Supplementary information on educational attainment is obtained through surveys and self-reports and includes degrees earned abroad, which is particularly important for older individuals and immigrants. The registry distinguishes between the varying levels of reliability of the data sources and uses a hierarchy to choose the 'best' measure for each individual.

II. *Neighborhood Socioeconomic Status (SES)*

The ICBS also provides a measure of the socioeconomic status of statistical areas. The areas are small and relatively homogeneous geographic units designed to reflect the unique characteristics of different regions within a settlement. In localities with over 10,000 residents, the population is divided into neighborhood statistical areas, each typically comprising 3,000-5,000 people. These statistical areas serve as a geographic basis for

analysis because they are small enough to maintain a level of homogeneity, yet large enough to provide reliable estimates of socioeconomic characteristics based on sample surveys, as was customary until 2015.

An index ranking neighborhoods is calculated using a variety of demographic and socioeconomic factors, including median age, dependency ratio, average years of education, percentage of individuals with academic degrees, employment data, and living standards indicators such as average income per capita, number of vehicles per 100 residents, and average household size. The final index, which expresses the socioeconomic level of each geographic unit, is computed as a weighted average of linear combinations of the variables, with the weights assigned according to the percentage of variance explained by each combination. Each statistical area is then classified into one of 20 'percentile rankings' based on the SES index score.

For each census year, I can observe where the individual resides and the rank of the neighborhood at the time of the census. For the First Generation, I use the 1983 census to measure SES while they were 50-60 years old. For the Second Generation. I use the 1995 census to measure SES while they were 30-34 years old. Because this measure was unavailable in the 1972 Census, for children born before 1983 but living in the same location in 1972 and 1983, I assign them the 1983 location rank, which serves as a proxy for their childhood environment.

III. *Income*

Income data for the First Generation were obtained from the long-form questionnaires of the 1972 and 1983 national census surveys, each of which had coverage for 20 percent of the overall population. The income variables include individual income in 1972, as well as household income for both 1972 and 1983. Individual income represents earnings from labor, while household income encompasses a broader range of sources, including domestic and foreign pensions, social security and welfare benefits, capital income (such as from real estate, interest, and dividends), and other recurring income (excluding one-time gains like inheritance, compensation, or lottery winnings).

For the Second Generation, higher quality income data is available from the Tax Authority, which has a universal sample of wage-earners from 1988–2019. Adult earnings estimates are generated by taking the average income for full-time workers, which I define

as individual who worked at least 10 months of the calendar year.

Finally, note that all income data is reported in New Israeli Shekels (NIS) indexed to the 2023 CPI.

## IV. *Educational Rank*

Despite the advantages of using education as an outcome variable, several limitations must be addressed. A key challenge is distinguishing changes in mobility from shifts in the overall distribution of education, since educational attainment levels evolve over time. Additionally, the discrete nature of years of education variable reflects an underlying continuous but unobserved latent rank distribution, as education is reported in predefined bins.

Beyond its discreteness, the distribution of years of education is neither normal nor uniform (Appendix Figure B.1). This lack of uniformity in bin definitions introduces potential bias, the extent of which depends on how much the within-bin latent distribution for each subgroup deviates from a uniformity.

To address these limitations, this study replaces years of education with an education rank approach, ranking children and parents relative to others of the same sex and birth cohort (following Chetty et al., 2014; Dahl and DeLeire, 2008). This method allows estimation of the conditional expectation function of a child's education rank given a parent's rank. By analyzing education deciles within cohorts, it accounts for shifts in overall education levels over time. Moreover, the conditional expectation function enables a more directly interpretable comparison of mobility measures across subgroups.[14]

Since many observations are concentrated at a few specific values (8, 10, 12, and 15 years of education), I applied a break-ties method to allocate individuals into deciles. To ensure estimates were not driven by random variation, each decile estimate was computed 50 times using 50 different random draws, following Narayan et al. (2018). The final estimate represents the average of these 50 iterations, rounded to deciles 1–10 (Appendix Table B.4 reports the means and standard deviations of this repeated process).

To break ties among individuals with identical reported years of education, I applied a

[14] Alternative measures of educational mobility vary by data availability and research objective. For example: Azam and Bhatt (2015) normalized years of education by standard deviations; Asher et al. (2024) focus on bottom-half mobility; and Black et al. (2005) and Chevalier (2004) examine years of schooling in the context of changes in compulsory education legislation.

jittering procedure, adding a very small random value to each observation. Specifically, for every individual $i$, I adjusted the reported years of education $E_i$ by adding $u \sim U[-0.5, 0.5]/100,000$ where $U[a, b]$ denotes a uniform distribution on the interval $[a, b]$. This minimal perturbation preserves the original education scale while ensuring a unique ranking of all observations.

I focused on addressing tie-breaking in parent rank data for several reasons. First, it is typically a greater source of bias than tie-breaking in child rank data. Second, given the correlation between parent and child education ranks, independently jittering each variable could introduce bias into the result. Lastly, the discrete nature of parental human capital poses a greater challenge in the parent variable (the regressor) than in the child variable (the dependent variable).

V. *Identifying Reparation Recipients*

Reparation recipients were identified using several sources. First, the long form of Israel's 1983 census included a question asking whether the household received any foreign reparation income. In the 1995 census, this was refined to ask whether the individual respondent had received such income. Any individual in my sample of survivors who reported household reparation income in 1983 or individual reparation income in 1995 is classified as a direct German BEG recipient.

For Israel's reparation program, I am able to directly identify all recipients using a specially-prepared data extract provided by the Holocaust Survivors' Rights Authority for this study. These data provide information on beneficiaries of Israel's reparation programs, including more recent programs that not analyzed here. They also enable identification of additional BEG recipients who were not captured in the census long forms, as Israel began issuing BEG recipients' quarterly payments since April 2018. The additional number of recipients is modest, however, as many sample members had already passed away by 2018, and this administrative file does not include information on original BEG recipients.

Another source was a unique file prepared by the Claims Conference, which identified the specific reparation program for each claimant. Because recipients of one program were generally excluded from receiving others, I utilized data on other reparation programs (Article 2, MOF due to later settlements and annual payments) to improve the accuracy of identifying BEG recipients. This was particularly important for the 1983 Census, where

reparation information was reported at the household level rather than for individuals. Note sources allow me to identify reparation recipients and classify them by program, but unfortunately do not provide information on amount and initial date of the payments. Additional information on the data sources used to identify reparation recipients are reported in Appendix Table B.5.

### 5.3 Summary Statistics

Table 1 presents summary statistics comparing socioeconomic outcomes for recipients of different reparation plans: BEG, MOF, A2, and MOF Late. The 'A2' group refers to those who received reparations in the late 1990s, and 'MOF late' includes those who became eligible following the expansion of eligibility criteria in 2001. Focusing on the comparison between BEG and MOF recipients, Panel A indicates that BEG recipients were slightly older at the time of arrival (18.6 years) compared to MOF recipients (17.7 years). Reassuringly, both groups had an average of 11.0 years of education, supportive of my identification strategy.

However, BEG recipients enjoyed modestly higher earnings, with personal income in 1972 averaging 102 thousand NIS compared to 96 thousand NIS for MOF recipients. Similar patterns are observed for household income in 1972. In 1983, BEG recipients' household income was about 17% higher, reflecting the additional resources provided by the reparation program. BEG recipients also resided in slightly higher socioeconomic status neighborhoods in 1983, with an average SES score of 14.6, compared to 13.9 for MOF recipients. These differences suggest that BEG recipients achieved significantly better economic outcomes than their MOF counterparts, despite similar levels of educational attainment.[15]

Similar patterns emerge when focusing on the sample of women, with female BEG recipients having similar education levels as compared to female MOF recipients but having better economic outcomes. The table does, however, indicate that men earn higher incomes, and so it is plausible that variability in male income is the primary driver of social mobility. Consequently, the remainder of the paper will primarily focus on analyzing men's outcomes to better understand the broader implications of these reparation plans

[15] Appendix Table B.6 describes the distribution of birth country by reparation plan and gender.

**Table 1: Summary Statistics for Holocaust Survivors by Reparation Program**

| | Fathers | | | | Mothers | | | |
|---|---|---|---|---|---|---|---|---|
| | BEG | MOF | A2 | Late | BEG | MOF | A2 | Late |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Birth Year | 1929 | 1931 | 1930 | 1931 | 1929 | 1931 | 1930 | 1931 |
| | (2.7) | (2.8) | (2.8) | (2.8) | (2.7) | (2.8) | (2.8) | (2.7) |
| Arrival Year | 1948 | 1949 | 1948 | 1948 | 1948 | 1949 | 1948 | 1948 |
| | (1.2) | (1.4) | (1.4) | (0.8) | (1.2) | (1.4) | (1.4) | (0.8) |
| Age at Arrival | 18.6 | 17.7 | 18.4 | 16.8 | 18.8 | 18.1 | 18.4 | 17.2 |
| | (2.8) | (2.8) | (2.7) | (2.7) | (2.8) | (2.9) | (2.9) | (2.7) |
| No. of Children | 2.4 | 2.6 | 2.6 | 2.7 | 1.9 | 2.1 | 2.1 | 2.1 |
| | (1.2) | (1.2) | (1.3) | (1.1) | (0.9) | (1.0) | (1.1) | (1.0) |
| Deceased by 2020 | 0.48 | 0.54 | 0.68 | 0.50 | 0.39 | 0.48 | 0.60 | 0.44 |
| | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) |
| Education (years) | 11.0 | 11.0 | 10.6 | 11.3 | 9.8 | 10.0 | 10.0 | 9.8 |
| | (3.8) | (3.8) | (3.8) | (3.6) | (3.4) | (3.5) | (3.4) | (3.8) |
| Education Rank | 5.2 | 5.2 | 4.9 | 5.3 | 5.0 | 5.1 | 5.2 | 4.9 |
| | (2.5) | (2.5) | (2.5) | (2.5) | (2.3) | (2.3) | (2.3) | (2.4) |
| Individual Income, 1972 | 102 | 96 | 92 | 104 | 64 | 49 | 49 | 72 |
| | (74) | (57) | (51) | (91) | (98) | (65) | (62) | (136) |
| Household Income, 1972 | 127 | 121 | 117 | 118 | 142 | 124 | 133 | 131 |
| | (64) | (66) | (76) | (58) | (90) | (73) | (96) | (80) |
| Household Income, 1983 | 204 | 178 | 194 | 177 | 170 | 154 | 141 | 147 |
| | (110) | (132) | (158) | (85) | (144) | (129) | (93) | (123) |
| SES, 1983 | 14.6 | 13.9 | 14.0 | 13.8 | 14.8 | 13.6 | 13.8 | 13.9 |
| | (3.6) | (3.8) | (3.8) | (3.8) | (3.6) | (3.8) | (3.9) | (3.7) |
| Observations | 958 | 7,165 | 1,418 | 632 | 1,774 | 8,775 | 1,020 | 554 |

*Source:* Israel Central Bureau of Statistics (1983 and 1995 Census), Ministry of the Interior (2019 Population Registry), Israel Tax Authority (1988–2019), Ministry for Social Equality (2019).

*Notes:* Entries are means of demographic and economic variables.The sample includes The sample includes my First Generation: Holocaust survivors born between 1926 and 1935 who emigrated from Poland, Romania, Czechoslovakia, and Hungary between 1946 and 1952 .The sample is further restricted to individuals who are successfully linked to a child. Survivors are stratified by their source of reparations: Germany's BEG (columns 1 and 5), Israel's Ministry of Finance (columns 2 and 6), Article 2 fund recipients who received reparations after 1990s, and Late MOF recipients (columns 4 and 8) who received reparation from MOF after 2001 eligibility extension. Income is taken from the 1972 and 1983 census samples, and reported in thousands of shekels (NIS), indexed to Israel's CPI (2023). Standard deviations are reported below the means in parentheses.

on family well-being and socioeconomic mobility.

In Table 2 I repeat this exercise of stratifying the sample by reparation source, but focus on the children of male recipients. Interestingly, the summary statistics for the Second Generation in Table 2 reveal persistent gaps between the children of BEG versus MOF reparation recipients suggesting that the variation in funding had consequences for the Second Generation. The table also reveals differences between sons and daughters across the BEG and MOF reparation plans. Sons in the BEG group have slightly more years of education (14.7) compared to their MOF counterparts (14.4), and they also tend to live in neighborhoods with higher SES both at childhood in 1972 and adulthood in 1995. For daughters, the SES disparities are less pronounced. Additionally, sons consistently earn higher average incomes at ages 30-35 across all groups, with BEG sons earning slightly more than MOF sons (235 vs. 233 thousand in 2023 NIS), same as the income gap between BEG and MOF daughters. This data suggests that the reparation plans may have had a similar impact on the socioeconomic outcomes of sons and daughters.

## 6 Outcomes

### 6.1 First Generation: Exogenous Negative Shock to Human Capital

In the 1930s, European Jewry became increasingly subject to discriminatory laws that restricted access to education and other critical resources.[16] German's invasion of Poland in 1939 resulted in an almost-complete cessation of normal schooling for Jewish children. Parents were preoccupied with their own survival, and understood that they were at grave risk of deportation and separation from their families. These circumstances severely hindered their capacity to provide a stable and supportive upbringing, limiting their ability to invest time and resources in their children's development. This has the consequence of both (a) constraining children's educational opportunities and (b) weakening the correlation between parental and child skills.

In light of a growing body of evidence showing that early childhood is critical to human capital development, it is not surprising that the timing of the war has a significant

[16] In Poland, Jews faced restrictions on education and employment from the early 1930s, which intensified by severe economic depression (Cherniavski, 2015).

**Table 2: Summary Statistics of Children by Fathers' Reparation Program**

| | Sons | | | | Daughters | | | |
|---|---|---|---|---|---|---|---|---|
| | BEG (1) | MOF (2) | A2 (3) | Late (4) | BEG (5) | MOF (6) | A2 (7) | Late (8) |
| Birth Year | 1962 | 1963 | 1963 | 1964 | 1963 | 1963 | 1963 | 1963 |
| | (4.8) | (4.6) | (4.8) | (4.6) | (4.7) | (4.7) | (4.7) | (4.6) |
| Born in Israel | 98% | 99% | 98% | 99% | 99% | 99% | 98% | 99% |
| (1=yes) | (0.2) | (0.1) | (0.1) | (0.1) | (0.1) | (0.1) | (0.1) | (0.1) |
| Education (years) | 14.7 | 14.4 | 14.2 | 14.6 | 14.9 | 14.5 | 14.3 | 14.7 |
| | (2.9) | (2.8) | (2.8) | (3.0) | (2.5) | (2.6) | (2.6) | (2.9) |
| SES, 1972 | 14.6 | 13.8 | 13.7 | 14.0 | 14.6 | 13.8 | 13.8 | 13.7 |
| | (3.7) | (3.9) | (4.0) | (3.6) | (3.5) | (3.9) | (3.8) | (3.8) |
| SES, 1995 | 14.2 | 13.4 | 13.3 | 13.7 | 14.3 | 13.6 | 13.5 | 13.9 |
| | (3.7) | (3.7) | (3.9) | (3.4) | (3.6) | (3.6) | (3.8) | (3.4) |
| Employment rate (30–35) | 81% | 81% | 78% | 81% | 82% | 84% | 81% | 83% |
| | (0.4) | (0.4) | (0.4) | (0.4) | (0.4) | (0.4) | (0.4) | (0.4) |
| Income (30–35) | 235 | 233 | 221 | 240 | 110 | 108 | 108 | 120 |
| | (198) | (305) | (182) | (179) | (93) | (98) | (97) | (121) |
| Observations | 1,019 | 8,190 | 1,592 | 764 | 932 | 7,658 | 1,498 | 707 |

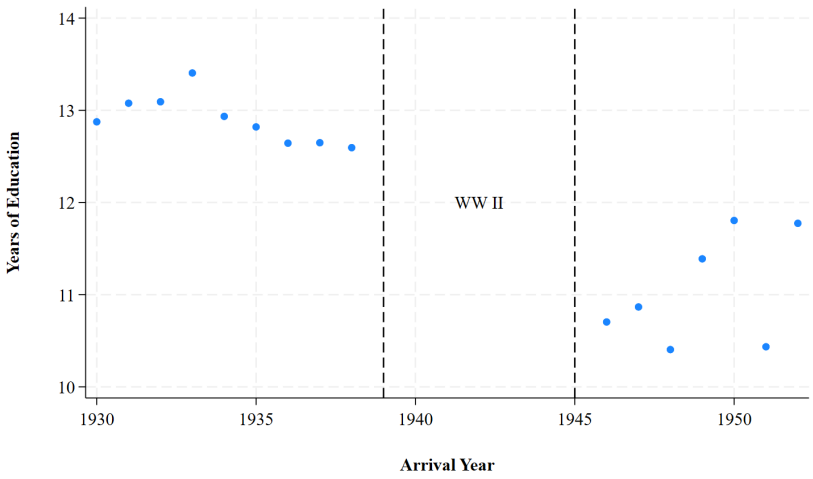
*Notes:* Entries are means of demographic and economic variables. The sample is my Second Generation: sons and daughters born between 1955 and 1972 to male Holocaust survivors. Children are stratified by by their father's reparation program. Neighborhood SES in 1972 is assigned using the 1983 SES variable as described in the appendix G.Income at ages 30–35 is average income, reported in thousands of NIS indexed to the 2023 CPI. See Table 1 for definition of reparation groups. Standard deviations in parentheses.

impact on a child's education (Heckman and Mosso, 2014; Francesconi and Heckman, 2016; Bono et al., 2016).

As shown in Figure 1, men who were born between 1926 and 1935 and arrived before the war, exhibit higher average years of education, hovering around 12.6 to 13.4 years. In contrast, post-war arrivals show a noticeable drop in educational attainment, particularly among those who immigrated immediately after the war (1946-1948), averaging roughly 10.4 years.

This phenomenon is expressed in a different measure in Figure 2, in which I plot the education levels of cohorts who arrived in Palestine before the war versus those who survived the Holocaust. Pre-war immigrants born between 1926 and 1935 attained on average 11.9 to 13.5 years of schooling, while survivors of the same cohorts achieved only

**Figure 1: Education By Year of Arrival**




*Notes:* The plot presents years of education by year of arrival to Palestine/Israel. The sample is my First Generation: men born between 1926 and 1935 who emigrated from Poland, Romania, Czechoslovakia and Hungary. Vertical dashed lines mark the years 1939 and 1945 for World War II.

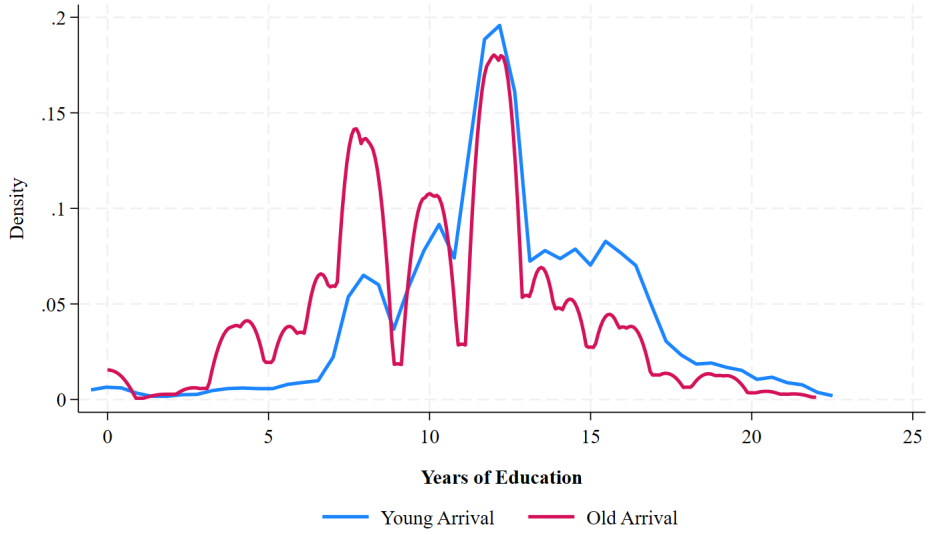
10.1 to 10.9 years. This gap highlights the disruption to schooling caused by the Holocaust, particularly for adolescents. For those born after 1932, the educational gap narrows, suggesting younger survivors had slightly better opportunities to resume education post-war, though their attainment still remained below that of pre-war immigrants. Overall, the plot reveals the profound impact of parental decisions to immigrate before or after the war on the human capital of their children.

**Figure 2: Education by Birth Year: Holocaust Survivors and Pre-war Immigrants**


*Notes:* The plot presents mean years of education by birth year for male Holocaust survivors and pre-war immigrants from Poland, Romania, Czechoslovakia, and Hungary.

Another striking pattern is shown in Figure 3, where I stratify the sample of survivors by age at arrival in Israel (age $\leq 15$ versus age $> 15$ ). Younger arrivals were more likely to complete their education, as they had the opportunity to integrate into the Israeli educational system and compensate for earlier disadvantages. In contrast, adolescents who arrived struggled to make up for the lack of earlier investment in their education. One interpretation is that for older arrivals, spending their formative years in war-ravaged Europe left persistent gaps in their foundational knowledge and skills, resulting in lower educational attainment, irrespective of their innate capabilities.

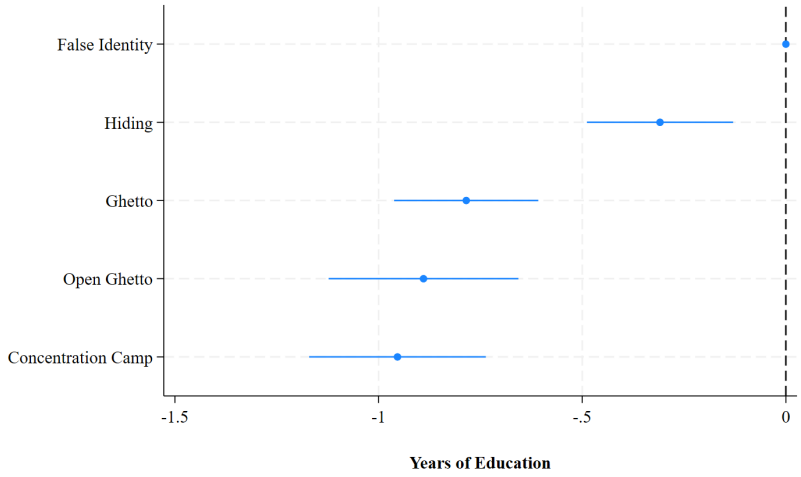
**Figure 3: Holocaust Survivors' Education by Age at Arrival**




*Notes:* This figure present non-parametric estimation of probability density function of years of education. The sample is my First Generation (see Table 1 for the definition). This figure uses men only. The sample is separated by age at arrival, with Young defined as age 15 or younger at arrival.

Finally, in Figure 4 I explore one mechanisms behind human capital differences in survivors using an extract from the Claims Conference in which I observe persecution type. The plot reports differences in years of education across persecution groups after accounting for birth year, birth country, sex, and age at arrival in Israel. The plot indicates that survivors of concentration camps attained, on average, nearly one fewer year of education than survivors who endured the 'lesser' hardship of taking on a false identity or surviving in hiding.

**Figure 4: Persecution Impact on Human Capital**




*Notes:* The figure presents gap in years of education by type of persecution during the Holocaust, controlling for birth year, birth country, and age at arrival to Palestine/Israel. Estimates are relative to the "False Identity" reference group. The sample includes 46,230 Article 2 recipients born between 1919 and 1942: Romania (34%), Soviet Union (28%), Poland (11%), Ukraine (5%), and others.

### 6.2 First Generation: Exogenous Positive Income Shock

During the late 1960s, Holocaust survivors began receiving reparations either from Germany (BEG) or from the Israeli Ministry of Finance (MOF), as previously described. To assess the impact of reparations on the intergenerational mobility of the survivors' children, I compare outcomes between the two groups, which differ in the generosity of payments.

I. *Potential Selection*

A key assumption is that the two groups of recipients are otherwise similar along unobservable dimensions. Put differently, my identification strategy requires that the generosity of reparations is exogenous to other determinants of mobility, such as innate ability or non-reparation wealth. It is worth noting that there are in fact plausible reasons why this may not hold perfectly. Three particularly compelling concerns are worth mentioning.

First, education quality in the German-governed areas of pre-war Europe may have been superior to areas governed by other Eastern European groups (e.g. Poland). Second, the test for proving affiliation with the "German culture group." (and therefore qualifying for

the BEG) involved questions related to knowledge of German culture. As such, individuals familiar with German literature and art may have been more likely to qualify for the BEG and could also have been of higher socioeconomic status. Third, lawyers played an important role in the BEG application process. Therefore, wealthier or more sophisticated survivors who could afford better legal representation may have been more likely to qualify for BEG.

While these hypotheses are not directly testable, in Table 3 and Table 4 I present evidence broadly supportive of my research design. Table 3 reports regression results comparing the two groups along a range of outcomes, after controlling for birth year and birth country. Among male survivors, BEG recipients have somewhat higher education—about 0.30 additional years, corresponding to 0.16 deciles higher in the education-rank distribution. However, they appear similar to MOF recipients in terms of income in 1972, both at the individual and household levels. Although BEG recipients had higher SES in 1983, this measure was recorded after the reparations had already begun,suggesting that the difference may reflect the effect of the payments themselves.

As such, while I cannot entirely rule out differences between the two groups, the relatively small gaps in income and education *prior* to reparations are reassuring.

In Table 4, I examine the labor income patterns of the two groups further and find that returns to education are similar. If the earlier concerns about 'class' being different between BEG and MOF recipients were substantial, one would have expected this would have resulted in either differences in income levels or in the returns to education. This does not appear to be the case. Given the pronounced difference in reparation levels between the two group, any violation of the exclusion restriction is likely to have only a modest effect on the parameter estimates.

II. BEG Effect on First Generation

As a preliminary exercise, in this section I establish that the BEG recipients enjoyed better economic outcomes than recipients of the MOF. First, as shown in Table 3 (columns 5-6), BEG recipients have higher total household income by a margin of 16.8 percent than recipients of the MOF. Second, BEG recipients lived in significantly higher SES neighborhoods in 1983, with the effect being especially pronounced for women, who exhibited an SES gap of 1.1 (on a 1–20 clusters scale) compared to MOF recipients,

**Table 3: Estimated Differences and Effect of BEG Receipt (vs. MOF) on First-Generation Outcomes**

| | Educ. (yrs) (1) | Educ. rank (2) | Income 1972 (3) | HH inc. 1972 (4) | HH inc. 1983 (5) | SES 1983 (6) |
|---|---|---|---|---|---|---|
| *Panel A: Men* | | | | | | |
| BEG | 0.290** | 0.165* | 0.018 | 0.016 | 0.168*** | 0.670*** |
| | (0.15) | (0.10) | (0.05) | (0.05) | (0.05) | (0.14) |
| Observations | 5,587 | 5,587 | 1,085 | 1,254 | 966 | 6,795 |
| R-squared | 0.04 | 0.03 | 0.01 | 0.01 | 0.04 | 0.01 |
| *Panel B: Women* | | | | | | |
| BEG | -0.015 | -0.020 | 0.173 | 0.102*** | 0.125** | 1.078*** |
| | (0.10) | (0.07) | (0.11) | (0.04) | (0.05) | (0.10) |
| Observations | 6,995 | 6,995 | 595 | 1,639 | 1,277 | 8,795 |
| R-squared | 0.05 | 0.02 | 0.01 | 0.02 | 0.03 | 0.02 |
| *Controls:* Birth year, Birth year squared, Birth country FE | | | | | | |

*Notes:* Each cell reports the coefficient on a BEG recipient dummy variable from separate regressions; MOF is the omitted category. The table shows the gaps in years of education, education rank, 1972 income, 1972 and 1983 household income and neighborhood SES in 1983 between BEG and MOF recipients. Men and women are estimated separately in Panels A and B. The models are estimated with birth year, birth year squared, and birth country fixed effects. See Table 1 for for details on how the samples and variables are defined. Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

while men experienced a slightly smaller gap of 0.7.

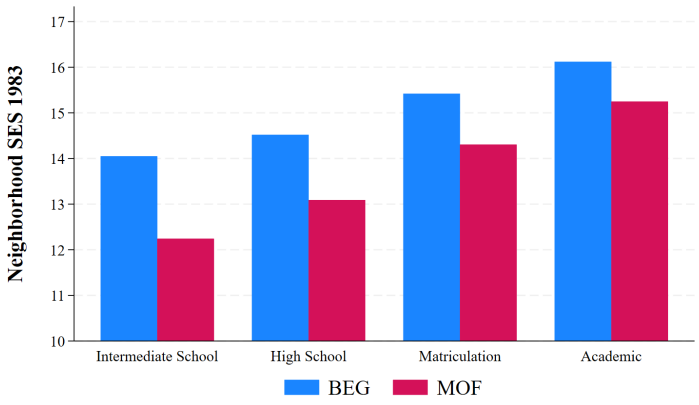
The neighborhood SES variable is particularly informative because it reflects both the relative economic standing of the individual, and likely provides insight into the quality of schooling available to their children. Indeed, as shown in Figure 5, which reports neighborhood SES stratified by BEG vs. MOF and by their level of education, a persistent and statistically significant advantage for BEG recipients is observed. This suggests that even among individuals with relatively similar earnings capacity, BEG recipients resided in better neighborhoods and enjoyed all the associated benefits.

**Table 4: Estimated Returns to Education by Reparation Program (First Generation)**

| | BEG (1) | MOF (2) | Pooled (3) | Pooled (4) |
|---|---|---|---|---|
| Years of education | 0.025** | 0.034*** | 0.033*** | 0.035*** |
| | (0.01) | (0.01) | (0.00) | (0.01) |
| BEG | | | -0.016 | 0.133 |
| | | | (0.05) | (0.14) |
| BEG×Education | | | | -0.013 |
| | | | | (0.01) |
| Observations | 125 | 660 | 785 | 785 |
| R-squared | 0.05 | 0.07 | 0.06 | 0.06 |
| *Controls:* Age 1972, Age squared, Arrival age, Birth country FE | | | | |

*Notes:* Entries are OLS coefficients from regressions of log income in 1972 on years of education. Columns 1–2 estimate returns to education separately for BEG and MOF. Column 3 pools both groups; column 4 adds an interaction term BEG×Education to test differential returns. All models include control for age (1972), age squared, arrival age, and fixed effects for father's birth country. Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

**Figure 5: Neighborhood SES by Education**




*Notes:* The figure presents mean neighborhood socioeconomic status in 1983 by education level, reported separately for BEG and MOF recipients.

### 6.3 Second Generation

In Table 5, I examine the impact of receiving the BEG (as opposed to MOF) on the children of male recipients—the Second Generation. The table reveals that for both sons (Panel A) and daughters (Panel B), children of BEG recipients attained higher levels of

education: sons and daughters of BEG recipients completed, on average, 0.30 and 0.34 additional years of schooling, respectively, compared with their MOF counterparts. For further details on Second Generation educational attainment see Appendix C.

Furthermore, the BEG sons are observed in 3.5 percentile higher SES neighborhoods in 1972, a gap that diminishes somewhat by the 1995 census, but remains 3.2 percentiles. This pattern highlights the long-term and persistent advantages enjoyed by the children of more generous reparations, in spite of little to no differences observed among the fathers of the two groups.

Similar patterns are observed among daughters, further supporting an interpretation that the reparations enabled parents to invest greater resources in both sons and daughters, thereby improving their long-term socioeconomic outcomes.

**Table 5: Estimated Effect of Parental BEG Receipt (vs. MOF) on Children's Outcomes**

| | Educ. (years) (1) | SES 1972 (2) | SES 1995 (3) | Log inc. 30-35 (4) | Log inc. 36-40 (5) |
|---|---|---|---|---|---|
| *Panel A: Sons* | | | | | |
| BEG | 0.305*** | 0.702*** | 0.638*** | -0.022 | 0.012 |
| | (0.10) | (0.15) | (0.14) | (0.04) | (0.04) |
| Observations | 9,209 | 8,513 | 6,420 | 6,925 | 7,495 |
| R-squared | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 |
| *Panel B: Daughters* | | | | | |
| BEG | 0.336*** | 0.694*** | 0.612*** | -0.032 | 0.017 |
| | (0.09) | (0.15) | (0.14) | (0.04) | (0.04) |
| Observations | 8,223 | 6,121 | 6,803 | 7,234 | 7,048 |
| R-squared | 0.01 | 0.01 | 0.01 | 0.03 | 0.00 |
| *Controls:* Birth year, Birth year squared, Birth country father FE | | | | | |

*Notes:* Each entry is the coefficient on a dummy variable for receiving BEG reparation. The table showed the gaps in years of education, neighborhood SES (1972, 1995), and log average income at ages 30–35 and 36–40 among children of BEG vs. MOF recipients. The sample is my Second Generation (children born between 1955 and 1972) linked to First Generation fathers (see Table 1 for father's sample definitions).All models include controls for birth year and birth year squared, and fixed effects for father's birth country. Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

In columns 4 and 5, I examine whether the children of BEG recipients earned higher wages and find no significant difference. A possible explanation for the absence of significant wage differences, despite the clear educational gains, lies in the high rate of organized labor

in Israel during the 1980s, reaching up to 80 percent of the labor force, when wages were largely determined by centralized agreements rather than by individual human capital (Cohen et al., 2004). This institutional context likely muted the translation of educational advantages into earnings for some groups.

## 7 Educational Intergenerational Mobility

In this section, I analyze intergenerational mobility in education using rank–rank regressions. Specifically, the estimations follow Equation 9 presented in Section 4.

### 7.1 BEG versus MOF Recipients

In Table 6, I examine the impact of reparations on educational mobility by estimating a rank-rank regression, where the child's education rank is regressed on the parent's rank. The ranking is given as the child's decile in the education distribution relative to his birth cohort. A similar procedure is done for the parent, and then the regression is estimated using these parent–child pairs. As mentioned, this approach has the desirable feature of abstracting from changes in average education levels over time.

As reported in column 1 (Panel A), the regression for BEG fathers and sons yields an intercept of 5.2 and a slope of 0.2. Performing the exact same procedure for the MOF recipients yields a lower intercept (4.4) but a higher slope. This indicates that among lower decile parents, the BEG children were more likely to achieve higher education levels—reflecting a higher level of 'absolute mobility.' Furthermore, the lower slope for the BEG sample indicates that parents and children were less similar to each other (weaker intergenerational persistence), implying higher 'relative mobility.'

As such, the results indicate that BEG children enjoyed higher mobility along both dimensions. The results are statistically significant and are robust to estimating this separately for mothers (Panel B) and for daughters (columns 4-6). However, daughters exhibit somewhat lower absolute mobility than sons, possibly indicating sons received favorable investments from parents of lower earning capability.

In Table 7, I express these results in a different manner by reporting the average decile

**Table 6: Intergenerational Mobility by Reparation Program: BEG vs. MOF**

| | Sons | | | Daughters | | |
|---|---|---|---|---|---|---|
| | BEG | MOF | Both | BEG | MOF | Both |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| *Panel A: Fathers* | | | | | | |
| Relative mobility | 0.20** | 0.27*** | 0.27*** | 0.27** | 0.31*** | 0.31*** |
| | (0.05) | (0.02) | (0.02) | (0.05) | (0.03) | (0.03) |
| BEG | | | 0.79* | | | 0.53 |
| | | | (0.32) | | | (0.36) |
| BEG×Parent rank | | | -0.08 | | | -0.03 |
| | | | (0.06) | | | (0.06) |
| Absolute mobility | 5.21*** | 4.43*** | 4.43*** | 4.67*** | 4.14*** | 4.14*** |
| | (0.27) | (0.08) | (0.08) | (0.39) | (0.24) | (0.24) |
| Observations | 750 | 5,184 | 5,934 | 700 | 4,901 | 5,601 |
| R-squared | 0.02 | 0.05 | 0.04 | 0.05 | 0.06 | 0.06 |
| *Panel B: Mothers* | | | | | | |
| Relative mobility | 0.27*** | 0.25*** | 0.25*** | 0.21*** | 0.28*** | 0.28*** |
| | (0.03) | (0.03) | (0.03) | (0.03) | (0.01) | (0.01) |
| BEG | | | 0.59*** | | | 0.77** |
| | | | (0.09) | | | (0.18) |
| BEG×Parent rank | | | 0.01 | | | -0.06* |
| | | | (0.02) | | | (0.03) |
| Absolute mobility | 5.44*** | 4.85*** | 4.85*** | 5.49*** | 4.73*** | 4.73*** |
| | (0.32) | (0.28) | (0.28) | (0.08) | (0.14) | (0.14) |
| Observations | 1,021 | 4,722 | 5,743 | 926 | 4,381 | 5,307 |
| R-squared | 0.05 | 0.04 | 0.05 | 0.04 | 0.05 | 0.05 |

*Notes:* The table reports the results of rank-rank regressions of of children's education decile rank on parental education decile rank. Relative mobility is the coefficient on father's rank and Absolute mobility is the intercept. In columns 1 and 2, the regressions are estimated separately for sons of BEG recipients (1) and MOF recipients (2), and the pooled sample in column 3. In columns 4-6, a similar estimation is performed for daughters. In pooled specifications the BEG coefficient shifts the intercept (absolute mobility) and BEG×Parent rank shifts the slope (relative mobility).Ranks for parents and children are constructed within their respective birth cohorts. Second Generation includes children of First Generation. Children in Panel A were born between 1955 and 1972, children in Panel B were born between 1951 and 1966 (to include in the sample 90% of parent's descendants). Robust SE in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

of children corresponding to the $25^{th}$, $50^{th}$, and $75^{th}$ percentiles of the parental education distribution. Two key findings emerge. First, children of BEG recipients outperform children of MOF recipients, and this holds for both sons (columns 1 and 2) and daughters (columns 4 and 5). This is also true whether the recipient is the child's father (Panel A) or mother (Panel B). Second, the largest gaps between BEG and MOF are generally observed at the lower end of the parental distribution. This is consistent with an interpretation that the incremental value of the reparation funds was most useful for liquidity constrained parents.

**Table 7: Mean Expected Education Rank of Children by Parental Reparation**

| | Sons | | | Daughters | | |
|---|---|---|---|---|---|---|
| | BEG | MOF | Diff | BEG | MOF | Diff |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| *Panel A: Fathers* | | | | | | |
| $\theta_{25}$ | 5.7 | 5.1 | 0.6 | 5.4 | 4.9 | 0.5 |
| | (0.1) | (0.1) | (0.2) | (0.3) | (0.2) | (0.3) |
| $\theta_{50}$ | 6.2 | 5.8 | 0.4 | 6.0 | 5.7 | 0.4 |
| | (0.0) | (0.1) | (0.1) | (0.2) | (0.1) | (0.2) |
| $\theta_{75}$ | 6.7 | 6.4 | 0.3 | 6.8 | 6.5 | 0.3 |
| | (0.2) | (0.1) | (0.2) | (0.1) | (0.0) | (0.2) |
| *Panel B: Mothers* | | | | | | |
| $\theta_{25}$ | 6.1 | 5.4 | 0.7 | 6.0 | 5.4 | 0.6 |
| | (0.3) | (0.1) | (0.2) | (0.1) | (0.1) | (0.2) |
| $\theta_{50}$ | 6.8 | 6.1 | 0.6 | 6.6 | 6.1 | 0.5 |
| | (0.2) | (0.1) | (0.3) | (0.1) | (0.1) | (0.2) |
| $\theta_{75}$ | 7.4 | 6.8 | 0.7 | 7.1 | 6.8 | 0.3 |
| | (0.2) | (0.1) | (0.2) | (0.2) | (0.1) | (0.2) |

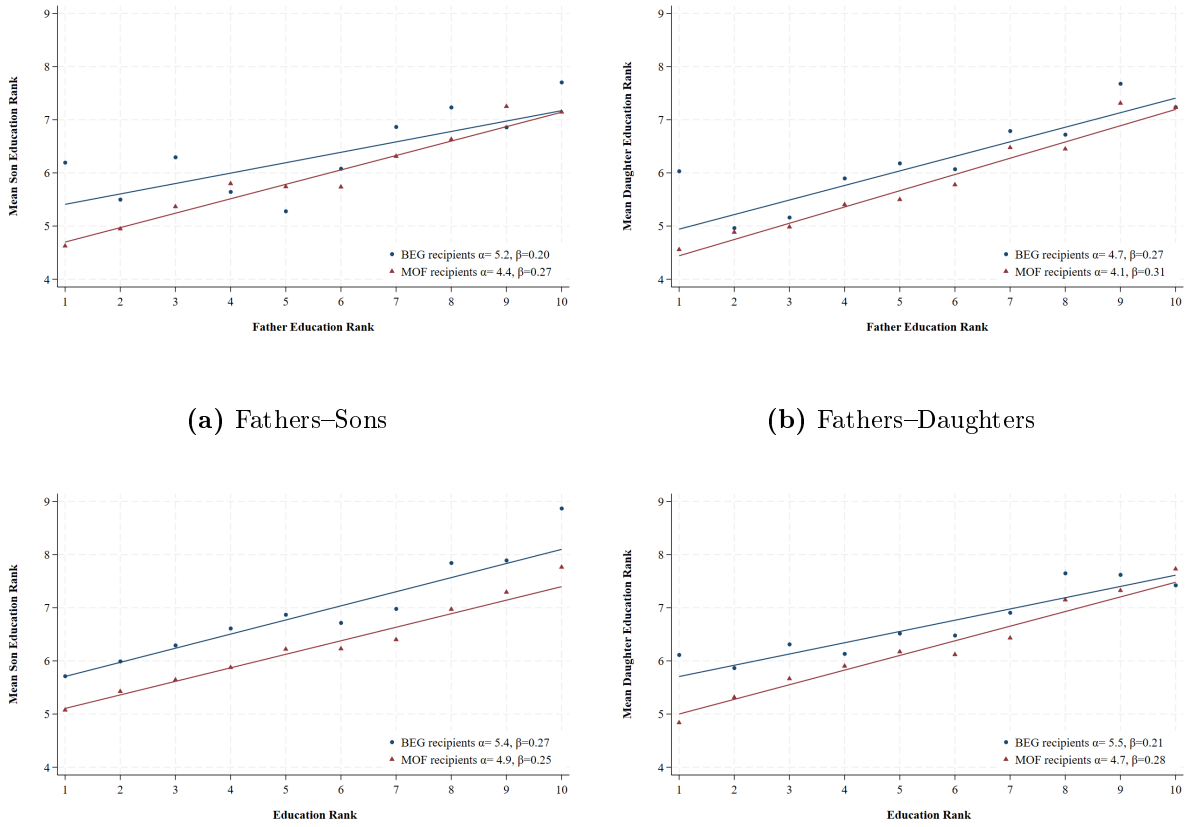
*Notes:* Entries are mean expected child education ranks at parental education ranks$\theta_{25}$, $\theta_{50}$, $\theta_{75}$, where $\theta_p$ denotes the parent at the $p^{th}$ percentile of the parental education distribution within birth cohort. Sons and daughters are reported separately; Panel A conditions on fathers and Panel B on mothers. Columns 3 and 6 report BEG−MOF differences (Diff). Values are implied by the rank-rank regressions in Table 6. Standard errors are in parentheses.

These findings are illustrated in Figure 6, revealing higher mobility regarding mothers' education than fathers', but interestingly, it is gender dependent, as presents in panel B.

Appendix D replicates the mobility analysis at the household level, examining how differences in parental reparation combinations affect children's educational outcomes. Appendix E further explores gender-specific mobility patterns across all four parent–child

dyads, providing complementary evidence on differences by parental and child gender.

**Figure 6: IGM BEG vs. MOF Recipients**




**(a)** Fathers–Sons

**(b)** Fathers–Daughters

**(c)** Mothers–Sons

**(d)** Mothers–Daughters

*Notes:* The figure presents nonparametric binned scatter plots of the relationship between child and parent education deciles. Sample includes fathers (mothers) born 1926–1935 in Poland, Romania, Czechoslovakia, and Hungary with their sons (daughters). Parents are grouped into 10 bins; the figure plots mean child decile vs.parent decile within each bin. Relative mobility is the rank–rank slope; absolute mobility is the rank–rank intercept. Mobility statistics estimated on the underlying data rather than the binned means.

Building on these foundational findings, the subsequent subsection will explore the heterogeneity in the effects of reparations on intergenerational mobility, examining how reparations may have different impacts across diverse groups.

## 7.2 Heterogeneity in Initial Conditions

As discussed earlier, Holocaust survivors varied considerably in the extent to which the war disrupted their schooling. Younger survivors immigrated to Palestine/Israel at an

early age and therefore had a greater opportunity to resume their education. In Figure 3, I compare educational attainment between "Young" versus "Old" survivors, classified by whether they arrived in Palestine/Israel younger than age 16. The density function clearly indicates that Young survivors achieved higher levels of education, in spite of the fact that there is no reason to expect any differences in ability between the two groups. This represents a unique opportunity to explore the determinants of mobility, as Old survivors were forced to restart their lives with less formal education—even among the even among the highly capable.

For this exercise, I work with an expanded sample that includes men born between 1920 and 1945 to ensure sufficient observations for each group. Summary statistics for the expanded sample are available in Appendix Table F.1.

In Table 8 I compare Young and Old survivors separately for BEG recipients (Panel A) and MOF recipients (Panel B). The coefficient reported is a dummy on Old, after controlling for birth year, birth year squared, and birth country. The results indicate that Old survivors completed 1.09 and 0.27 fewer years of education among BEG and MOF recipients, respectively. The groups are otherwise similar in terms of income and neighborhood SES in 1983. One interpretation is that while early immigration may have positively influenced educational attainment, its effect on economic outcomes and neighborhood SES later in life was marginal.

Building on these findings, the subsequent analysis delves deeper into the intergenerational mobility of sons, comparing Old versus Young survivors. Table 9 compares the intergenerational mobility of Young and Old recipients under MOF and BEG programs. The first result from this exercise confirms that absolute mobility is higher for BEG recipients than for MOF recipients, and this holds across both the Old and Young subgroups. But the second result is that absolute mobility is higher for Old versus Young survivors within *both* reparation programmes. Furthermore, intergenerational similarity is *lower* for the Old survivors in both groups.

This supports an interpretation that mobility is highest when the parents' circumstance is closer to exogenous. Put differently, when parents' outcomes were heavily disrupted, and thus less reflective of their true ability, their children were more likely to experience

**Table 8: Estimated Effect of Age at Arrival into Palestine/Israel**

| | Age at arrival (1) | Educ. (yrs) (2) | Log HH inc. 1972 (3) | Log HH inc. 1983 (4) | SES 1983 (5) |
|---|---|---|---|---|---|
| *Panel A: BEG recipients* | | | | | |
| Old | 0.65*** | -1.09** | -0.01 | -0.02 | -0.06 |
| | (0.12) | (0.44) | (0.14) | (0.13) | (0.44) |
| Observations | 2,053 | 1,693 | 349 | 531 | 1,839 |
| R-squared | 0.95 | 0.13 | 0.01 | 0.08 | 0.02 |
| *Panel B: MOF recipients* | | | | | |
| Old | 0.80*** | -0.27** | -0.01 | -0.06 | -0.21* |
| | (0.04) | (0.12) | (0.04) | (0.06) | (0.12) |
| Observations | 13,974 | 9,617 | 2,139 | 1,519 | 11,531 |
| R-squared | 0.96 | 0.09 | 0.01 | 0.06 | 0.01 |
| *Controls:* Birth year, Birth year squared, Birth country FE | | | | | |

*Notes:* The table reports the gaps between "Old" and "Young" survivors for the variable listed in the columns. Entries are coefficients from separate regressions where *Old* equals 1 if the survivor was at least 15 at arrival in Palestine/Israel (0 otherwise).Panel A reports estimates for BEG recipients; Panel B for MOF recipients. Sample is restricted to those born 1920–1945. Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

higher mobility.

As such, this table ties together two key results from my analysis on mobility. First, money matters. Absolute and relative mobility are highest among BEG recipients. Second, the First Generation's formative experience matters as well; Old survivors whose outcomes contain very little information about their talent, were almost mechanically more likely to have children with higher mobility.

The finding highlights the risk of interpreting low or high mobility measures as a straightforward reflection of a society's "fairness." Instead, observed mobility may simply reveal the relative fairness or unfairness inherited from the previous generation. The tighter the connection between latent ability and outcomes in the First Generation, the less likely it is for the Second Generation to enjoy high upward mobility.

A visual illustration of IGM differences across the four groups is presented in Figure 7. It shows the expected child's education decile conditioned on the father's education being in the $25^{\text{th}}$, $50^{\text{th}}$, or $75^{\text{th}}$ percentile of his educational distribution.

**Table 9: Sons' Intergenerational Mobility by Fathers' Age at Arrival into Palestine/Israel**

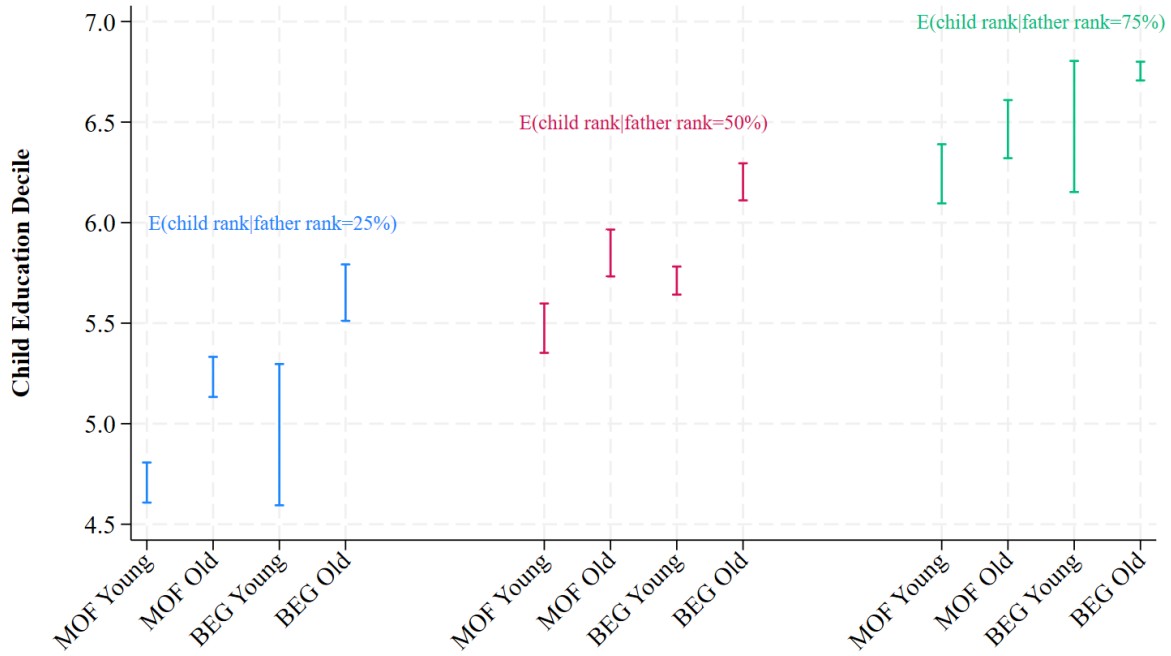
| | MOF | | | BEG | | |
|---|---|---|---|---|---|---|
| | Old | Young | Both | Old | Young | Both |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Relative mobility | 0.25*** | 0.31*** | 0.31*** | 0.22** | 0.31*** | 0.31*** |
| | (0.02) | (0.08) | (0.02) | (0.02) | (0.13) | (0.02) |
| Old | | | 0.68** | | | 0.92 |
| | | | (0.14) | | | (0.76) |
| Old×Rank | | | -0.06*** | | | -0.09 |
| | | | (0.01) | | | (0.14) |
| Absolute mobility | 4.62*** | 3.94*** | 3.94*** | 5.10*** | 4.18*** | 4.18*** |
| | (0.10) | (0.08) | (0.08) | (0.19) | (0.68) | (0.68) |
| Observations | 4,691 | 5,854 | 10,545 | 1,062 | 351 | 1,413 |
| R-squared | 0.04 | 0.05 | 0.05 | 0.04 | 0.06 | 0.04 |

*Notes:* Entries are coefficients from rank-rank regressions of sons' education decile rank on fathers' education decile rank. Columns 1-3 report MOF samples for fathers classified as Old and Young, and a pooled specification that includes indicators for Old and Old×Rank; columns 4-6 repeat the same structure for BEG. Ranks are constructed within birth cohorts; the Old/Young definition follows Table 8. Relative mobility is the slope on Parent rank; Absolute mobility is the intercept. Standard errors are in parentheses. Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Younger MOF recipients tend to have lower expected educational outcomes for their children compared to older MOF recipients, particularly among fathers is in the $25^{\text{th}}$ percentile. The gap between Young and Old BEG recipients is more pronounced,although the estimates are less statistically significant. The figure highlights how the father's amount of reparation and the age at which he arrived in Palestine/Israel affect the intergenerational transmission of education, reinforcing the idea that early-life conditions play a significant role in shaping long-term IGM.

In conclusion, the analysis of IGM highlights that both the generosity of reparations received and the age at immigration significantly influence the educational outcomes of the second generation. Larger reparation amounts, under the BEG program, are associated with higher IGM, with older arrivals, those most affected by wartime disruptions, generally achieving better socioeconomic outcomes for their children. These findings underscore the long-term implications of early-life circumstances and financial restitution in shaping intergenerational educational and socioeconomic trajectories.

**Figure 7: Expected Child Decile by Fathers' Reparation and Arrival Age**




*Notes:* The plot presents expected child education deciles at parental ranks $\theta_{25}$, $\theta_{50}$, and $\theta_{75}$, where $\theta_p$ denotes the $p^{\text{th}}$ percentile of the parental education distribution within birth cohort. The sample is stratified by reparation type and age at arrival; Young defined as arrival at age 15 or younger. Fathers were born 1920–1945 and emigrated from Poland, Romania, Czechoslovakia, and Hungary between 1946–1952. Values are implied by rank-rank regressions as in Table 6, with ranks defined within birth cohorts. Vertical bars show 95% confidence intervals

### 7.3 Moving to Opportunity – Neighborhoods and Social Mobility

In this section, I examine the role of neighborhood quality in determining educational mobility. There are several reasons to consider neighborhoods as potential mediator in the relationship between reparations and education mobility.

First, children in Israel attend schools within their residential neighborhood. Although wealthier and poorer neighborhoods are funded equally at the national level, children in better neighborhoods are typically exposed to higher-caliber peers. Second, there is reason to believe that reparations were often used by survivors to relocate to better neighborhoods (Landsberger, 1969). This is found in my data as well, where 87 percent of BEG recipients owned apartments, as compared to only 82 percent of MOF recipients and lived in higher SES neighborhoods as Figure 5 present. Third, neighborhoods have empirically been identified by recent scholarship as particularly critical in influencing

social mobility (Chetty et al., 2016; Chetty and Hendren, 2018; Holmlund and Nybom, 2023). Chyn and Katz (2021) review of experimental and quasi-experimental studies finds studies on children to provide strong evidence that longer exposure to better neighborhood environments during childhood results in improved long-term outcomes.

As such, I explore this possibility in Appendix Figure G.1 which provides descriptive representations of correlation between neighborhood SES in childhood and IGM in Israel.The figure displays a clear positive gradient: children raised in higher-SES neighborhoods achieve substantially higher educational ranks than those from lower-SES areas. The strongest gains appear in the upper SES clusters (around ranks 9–12), where the average difference in children's outcomes reaches roughly one to two deciles. These patterns suggest that neighborhood quality constitutes an important channel through which reparations may have enhanced intergenerational mobility. Further evidence on the relationship between childhood neighborhood SES and IGM is provided in Appendix G.

To conclude, my empirical findings indicate that Holocaust reparations had a large and significant impact on increasing social mobility, with meaningful heterogeneity in intergenerational mobility with respect to (1) the generosity of reparations and (2) the extent to which the survivor's human capital was harmed by the war (which I proxy by age at immigration). Children of BEG recipients exhibit higher educational mobility than those of MOF recipients, particularly among families with the lowest initial level of education. These results align with the theory proposed by Becker and Tomes (1979), who propose that there should be an increasing, concave relationship between family income and child outcomes; in this context, it is expected that the impact of the additional reparations should be largest when parents are less educated and have lower levels of income to fund child investments. This result is also remarkable in light of the education system's design which dictates that education is virtually free for all age groups. [17]

A model capturing the empirical insights will be presented in the next section.

[17] Between 1970 and 1974, grades 9–10 were added to Israel's framework of compulsory free education, followed by grades 11–12 in 1979.

## 8 Interpreting IGM – A Calibration Exercise

In this section, I present and calibrate a model of the intergenerational transmission of human capital, emphasizing the roles of endowments, investment, and external shocks. The model follows the spirit of the Becker–Tomes framework, which focuses on the role of human capital in determining economic outcomes (Becker and Tomes, 1979, 1986).

The model initializes a population with heterogeneous endowments and simulates educational investments, which are determined by child's known endowments and external shocks. The model assumes heritability of endowments, capturing the contribution of genetics and culture to persistence in human capital accumulation across generations. As an adjustment to my context, I assume that child investments can be either (a) constrained by the Holocaust or (b) funded by reparations.

This setup yields the equation below, which represents the investment in the First Generation's education by their parents, referred to as the "Zero Generation." Importantly, this generation faced potentials constraint on their investment due to the Holocaust.[18] As such, parental investment in education depends on parental resources ($I_0$), the child's endowment ($E_1$), and the level of disruption experienced during the Holocaust ($holo$):

$$I_1 = (1 - holo) * (I_0 + \delta A_1) \tag{10}$$

The equation captures the historical constraint that even parents with substantial resources were often unable to invest in their children's education under extreme circumstances. The second term captures 'typical' parental investment in this setup, where investment is constant with respect to parental resources and increases with the child's endowment of talent.[19] Parents allocate more to children with higher endowments, reflecting complementarity between endowments and investment ($\lambda > 0$); see Becker and Tomes (1986), Aizer and Cunha (2012) and Attanasio et al. (2020). Sensitivity analysis

[18] As a historical analogue, one can think of the First Generation as the cohorts born between 1920 and 1930. Their education was financed by the Zero Generation, their parents, who were born approximately between 1880 and 1900. Finally, the model is completed by modeling the Second Generation, children of the survivors who were born between 1950 and 1970.

[19] Note that this assumption implies that parental resources played a relatively smaller role in determining educational attainment among European Jews in the late $19^{\text{th}}$ century than in modern Israel.

for alternative values of $\lambda$ are provided in Appendix H.2.3.

The educational outcome of the first generation is determined by parental investment, the child's endowment, and a stochastic component:

$$Educ_1 = \alpha I_1 + \beta E_1 + \varepsilon_1 \tag{11}$$

where $\epsilon_1 \sim \mathcal{N}(0,1)$ and is independent of the endowment. The parameter $\beta$ represents the direct effect of endowments on education, while $\alpha$ captures the productivity of parental investment in generating child's human capital.[20]

I imputed First Generation income as a function of education using a log-linear specification. Assuming a return to education of 6 percent ($\gamma$=0.06), I calibrated the income levels in the simulated data to approximate my empirical data. In my sample, an individual with an average education level of 11 years earns roughly 102 New Israeli Shekels; thus, I choose a constant ensuring that this result is replicated in the calibrated data. The explicit functional form for base income and the income of any individual are:

$$base\_income = \ln(\text{average income from data}) - \gamma \times \text{mean education}$$

$$Income_1 = \exp(base\_income + \gamma \times Educ_1)$$

The Second Generation's endowment is defined as a linear function of the First Generation's endowment and a stochastic component:

$$E_2 = hE_1 + \mu \tag{12}$$

where $h$ represents the degree of heritability and $\mu$ captures random variation.

Parental investment in the Second Generation depends on normalized parental income,

[20] In this framework, parental altruism is implicit in the decision to invest, while $\alpha$ governs the effectiveness of that investment. The interpretation differs from the original Becker and Tomes (1979, 1986) model, where $\alpha$ represents parental altruism.

child endowments, and the receipt of reparations:

$$I_2 = \frac{Income_1}{\text{mean}(Income_1)} + \lambda E_2 + Rr \tag{13}$$

where R is an indicator for reparation receipt (0 or 1) and r is the reparation amount as a percentage of mean income in the simulated data. Parental investment increases with both parental human capital and the child endowment.

The Second Generation's educational attainment is determined by a non-linear production function of parental investment, the interaction between parental education and investment, the child's endowment, and a stochastic component:

$$Educ_2 = \alpha \frac{I_2}{1 + I_2} + \rho I_2 Educ_1 + \beta A_2 + \varepsilon_2 \tag{14}$$

The production function assumes diminishing returns to parental investment, captured by the term $\frac{I_2}{1+I_2}$, consistent with the literature on decreasing marginal returns to human capital investment (Becker and Tomes, 1986; Solon, 1999; Becker et al., 2018; Holmlund and Nybom, 2023). Following Becker et al. (2018), $\rho$ is assumed to be positive, indicating that investments made by more educated parents are more effective in improving children's educational outcomes.

To simulate the dynamics of intergenerational human capital transmission, I generate a synthetic population of 10,000 family lineages, each consisting of three generations: a grandparent (Zero Generation), a parent (First Generation), and a child (Second Generation). Endowments for the Zero Generation are drawn from a log-normal distribution,where $ln(E_0) \sim \mathcal{N}(0, 1)$, ensuring strictly positive endowments.

Individuals are categorized based on their exposure to the external shock, and are assigned to one of two interruption levels: Lower (0.5) or Higher (1).[21] Reparations Status ($R$) was assigned probabilistically, producing four distinct groups, corresponding to the empirical categories used in the analysis:

[21] The interruption level reflects the individual's relative age at the time of the Holocaust, and serve as a proxy for constraints on parental investment. "Lower interruption" refers to individuals who were younger during the war, whereas "Higher interruption" refers to those who were older. This classification is model-based and does not imply any normative assessment of the severity of individual trauma.

1. Low Exp.–No: lower interruption without reparation (MOF Young)
2. High Exp.–No: higher interruption without reparation (MOF Old)
3. Low Exp.Yes: lower interruption with reparation (BEG Young)
4. High Exp.–Yes: higher interruption with reparation (BEG Old)

Educational outcomes are stratified into deciles for both generations, allowing for a structured assessment of intergenerational mobility.

The following subsections present the model outcomes, using the parameter values: $h = 0.7$, $\alpha = 0.5$, $\beta = 0.5$, $\lambda = 0.1$, and $\rho = 0.1$. Justification for these parameter choices and sensitivity analysis for alternative $\alpha$ and $\beta$ are provided in Appendix H.

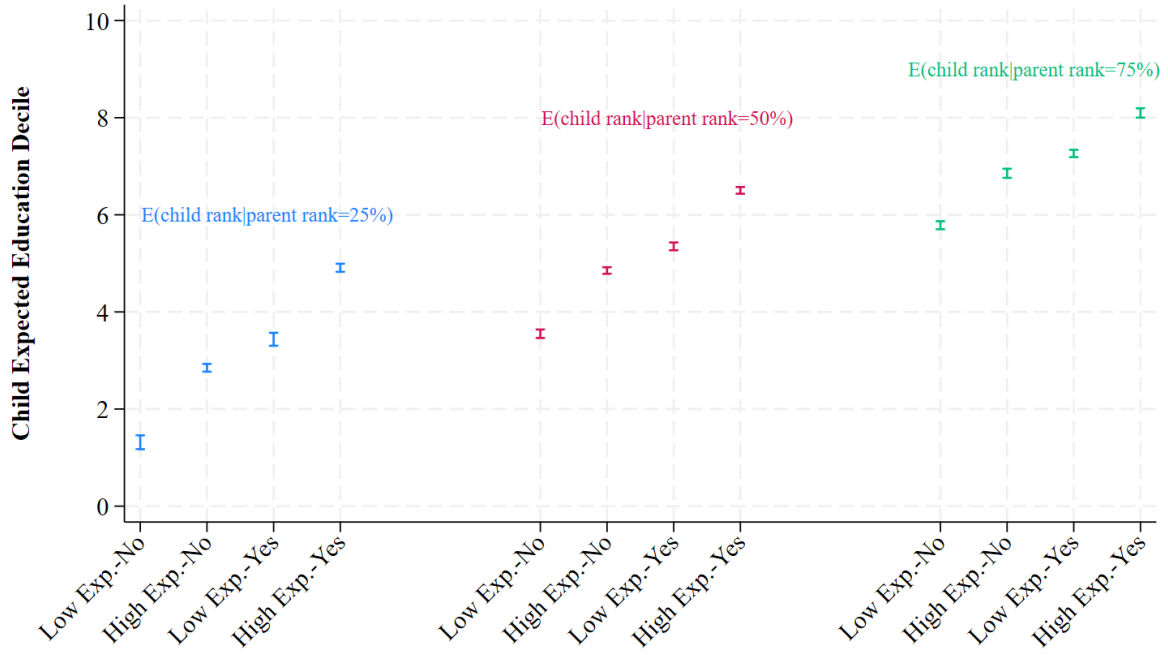
### 8.1 Comparison Between Reduced-Form Outcomes and the Model

Figure 8 presents the simulated outcomes of the structural model. The model produces several key patterns observed in the reduced-form analysis, suggesting that even in this simplified setup, mechanisms determining the social mobility of Holocaust survivors are effectively captured.

In particular, I highlight four main correspondences between the empirical *and* simulated results::

1. Parental Education and Child Outcomes: The model replicates the monotonic relationship between parental and child education, with higher child ranks associated with higher parental ranks.
2. Financial Transfers and Mobility: Children of reparation recipients exhibit greater upward mobility than those of non-recipients, consistent with the empirical evidence where children of BEG recipients experienced higher mobility than children of MOF recipients.
3. Disruption Severity and Mobility: The model captures the compensatory effect of reparations, as children of survivors with greater Holocaust exposure display higher mobility relative to those with comparable education but lower exposure.

**Figure 8: Simulated Expected Second Generation's Rank**




*Notes:* The figure presents simulated expected child education deciles at parental ranks $\theta_{25}$, $\theta_{50}$, and $\theta_{75}$, where $\theta_p$ denotes the $p^{\text{th}}$ percentile of the parental education distribution. The four groups correspond to those in the real data analysis: "Low Exp.–No" (Young MOF), "High Exp.–No" (Old MOF), "Low Exp.–Yes" (Young BEG), and "High Exp.–Yes" (Old BEG). Values are generated from the baseline structural model and correspond to the rank–rank framework used in Table 6. Vertical bars show 95% confidence intervals. Units are education deciles (1–10).

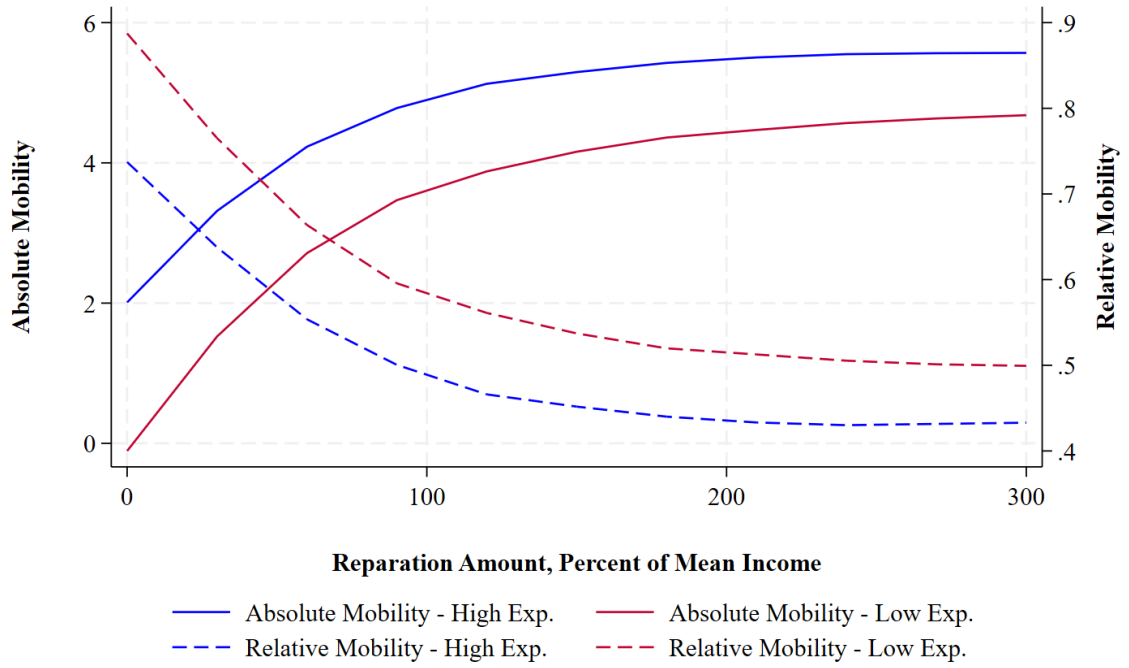
4. Diminishing Returns to Financial Transfers: Financial transfers substantially enhance mobility among children from lower-educated backgrounds, though marginal effects decline at higher parental education ranks.

### 8.2 The Gradient of Reparation: Simulating Varying Transfer Amounts

In this section, I examine how varying the amount of financial reparation affects educational mobility across exposure groups in the simulated data. This simulation isolates the effect of financial transfers by incrementally increasing the reparation amount from $r = 0$ to $r = 300\%$ of mean income in the First Generation, while holding all other parameters constant. My goal is to explore how changes in transfer size shape the relationship between reparations and social mobility within the model.

For each reparation level, I simulated second-generation education outcomes using updated investment values that incorporate the transfer amount. I then regress child's education decile on parental decile, separately for the High and Low exposure groups, yielding two key parameters: the **intercept** (absolute mobility) and the **slope** (relative mobility), as presented in Figure 9.

**Figure 9: Mobility Measures by Reparation Amount**



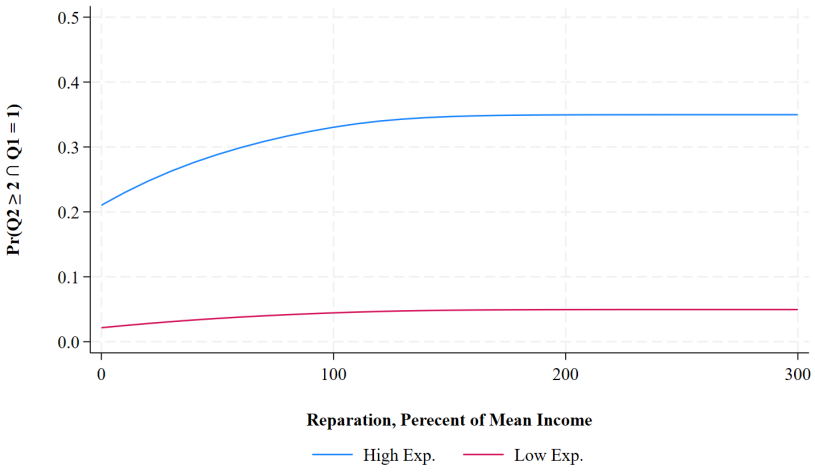

*Notes:* This figure displays simulated IGM coefficients across reparation levels from 0–300 percent of mean income. Results are shown separately for High and Low Holocaust exposure groups. For each reparation amount a rank-rank regression was estimated on a synthetic population of 10,000 families. The intercept measures absolute mobility and the slope measures relative mobility. All other parameters are at baseline values.

The intercept (solid lines) rises with small financial transfers, particularly for the High exposure group, before stabilizing at higher levels. This pattern indicates that even modest reparations substantially improve expected outcomes for children of less-educated parents, especially those whose families were most constrained by Holocaust-related disruptions. The slope (dashed lines) also varies over the full reparation range, suggesting that the structure of intergenerational persistence weakens somewhat as reparations increase. However, the difference in slopes across exposure groups implies that reparations do not fundamentally change the dependence of child outcomes on parental background.

Two patterns stand out. First, the absolute mobility (solid lines) of children in the High exposure group increases sharply with small increments in reparations but plateaus beyond a certain level. This reflects the high marginal returns to small transfers among historically constrained households, whose capacity to invest in education was severely limited by low income. In contrast, the Low-exposure group exhibits a more gradual increase in absolute mobility, consistent with weaker financial constraints. Second, relative mobility improves (i.e., slope declines) with increasing transfers in both groups, though the effect size remains modest. . Overall, the simulation suggests that reparations can reduce intergenerational persistence of disadvantage but do not in fact significantly alter the degree to which child outcomes depend on parental background.

In Figure 10, I examine the dynamics between reparation generosity and the probability of *upward mobility*, defines as the share of children who surpass their parents' education rank among those whose parents are in the lowest education quantile (Q1). The plot indicates that the probability of upward mobility is consistently higher for the High-exposure group across all reparation levels. This difference emerges despite identical structural parameters and reparation amount across groups, indicating that the observed divergence reflects differences in the composition of parental endowments. Put differently, the higher upward mobility of the High-exposure group does *not* result of a more generous transfer or stronger treatment effect, but rather from their higher average endowments.

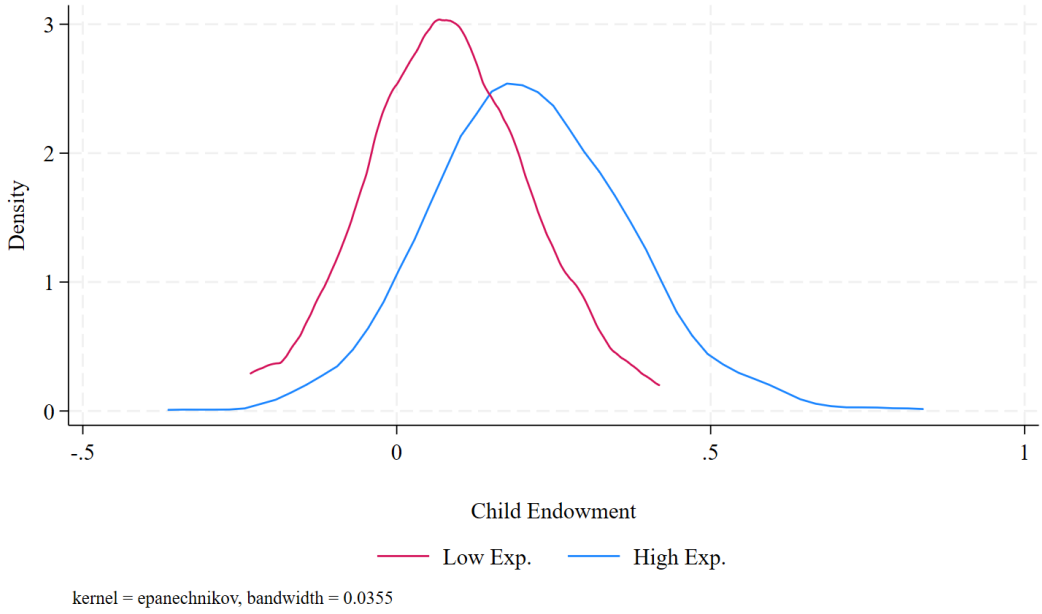
**Figure 10: Upward Mobility by Reparation Amount**




*Notes:* Probability of upward mobility, defined as joint probability of upward mobility $\Pr(\{q_2 \geq 2\} \cap \{q_1 = 1\})$. Parent and child education are measured in quantiles. Results are shown separately for individuals with low and high exposure to the Holocaust.

In Figure 11, I examine this interpretation by plotting the distribution of child endowments at the lowest quintile of parent's education separately for each exposure group. The empirical distribution functions reveal that the High-exposure group is shifted to the right: a larger share of their children inherit higher endowments even though observed parental education was suppressed by Holocaust-related constraints. Reparations in the second generation therefore unlock relatively larger gains for these children, explaining why upward mobility probabilities are higher despite lower observed parental education in the High-exposure group.

**Figure 11: Child Endowment Distribution at Lower Parental Education**




*Notes:* Distribution of simulated child endowments at the lowest parental education quintile and zero reparations ($r = 0$). Results are shown separately for individuals with Low and High Holocaust exposure.

Taken together, the simulations provide further support for an interpretation that mobility estimates are highly sensitive to the initial endowment levels at the lower end of the education distribution. Increases in educational mobility with rising reparation levels are not uniform across exposure groups because the High exposure group inherits a more favorable distribution of latent traits, even though their observed outcomes are lower. This insight aligns with Nybom and Stuhler (2024), who argues that long-run mobility differences often reflect persistent historical shocks, and extends the interpretation of Chetty et al. (2017), who emphasize the role of unequal growth distribution in explaining

declining absolute mobility under stable trait distributions. It also resonates with Ahrsjö et al. (2025), who show that shifts in the composition of skills and their labor-market valuation can generate apparent changes in intergenerational persistence, even in highly egalitarian contexts. The broader implication is that reparations, while effective in improving outcomes, operate on populations with different latent compositions, which in turn shape the observed trajectory of intergenerational mobility.

## 9 Conclusion

This study has explored the impact of reparations on intergenerational mobility among Holocaust survivors' descendants. The findings show that reparations facilitated social mobility among the children of survivors, mitigating the intergenerational impact of the Holocaust on economic outcomes.

Beyond the moral argument for reparations, the reparations generated a large positive return for society by improving the socioeconomic outcomes of survivors' children. The benefits were particularly pronounced among children of less-educated survivors, indicating a desirable distributive effect.

My study also represents a 'cautionary tale' for empirical researchers examining the determinants of social mobility. The estimated IGM in my data was consistently highest among survivors who experienced the most severe disruption to their own human capital. This implies that a decline in IGM may reflect either reduced fairness or changing endowment distributions at the lower end of the socioeconomic scale. As such, estimates of IGM should be interpreted cautiously when the initial distribution is endogenously determined.

Several limitations should be acknowledged. First, my data on reparations are limited. As discussed, I can only observe low versus high levels of reparations, constraining my ability to fully quantify the relationship between transfer amounts and socioeconomic outcomes through the estimation of elasticities. Second, I lack precise information on the timing of payment initiation, which precludes an analysis of whether reparations had stronger effects for recipients with younger versus older children. Finally, it is worth noting that my study's external validity may be limited. The unique cultural context of Holocaust

survivors and their descendants may limit the generalizability of the findings.

Nevertheless, the core finding is that reparations positively affect social mobility. Policymakers should consider tailoring reparation programs to maximize impact on families with lower education or fewer resources, as they stand to benefit the most from such interventions. Lastly, these interventions will be most effective for populations that experienced an adverse shock to their physical and human capital, wherein their low economic status does not reflect their latent talent.

The consistency between the empirical evidence and the model simulations reinforces the interpretation of reparations as an exogenous and effective driver of intergenerational mobility.

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# Appendicis

## A Overview of Reparation Programme for Holocaust survivors

Building on the historical context detailed in Section 3, this appendix compares the design and implementation of the BEG and MOF programs.

As summarized in Appendix Table A.1, both programs required survivors to demonstrate Nazi persecution and undergo a medical evaluation to determine the degree of disability. The main distinction lay in geographic eligibility. The BEG extended compensation to individuals residing in Germany or affiliated with the "German culture group," whereas MOF limited eligibility to those who had immigrated to Israel before October 1953 and met residency and citizenship requirements.

Although both programs were founded on similar legal-medical principles, they diverged significantly in terms of generosity and accessibility. The BEG was more generous, offering higher and better-indexed payments, but imposed stricter eligibility conditions, particularly the requirement to belong to the "German culture group" or to have resided in postwar Germany. These constraints excluded many Holocaust survivors who had immigrated directly to Israel from Eastern Europe.

In contrast, the Israeli MOF program was more accessible to local survivors, particularly those excluded from the BEG due to geographic or cultural classifications. Survivors who arrived in Israel before October 1953 and held citizenship and residency since 1957 could qualify without needing recognition as "German." However, MOF payments were generally lower and less systematically adjusted.

Thus, the MOF served as a complementary mechanism, covering those outside the narrower criteria of the German scheme. This distinction is essential for understanding the variation in reparation exposure among Israeli survivors and for interpreting long-term socioeconomic outcomes in their descendants.

Appendix FigureA.1 illustrates trends in BEG disbursements by showing the ratio between German and Israeli reparation payments over time for survivors classified with 25 percent disability, the most common eligibility level in both programs, with German levels

normalized to 100 percent. During the relevant period (approximately the 1960s–1980s, when recipients' children were young), most survivors had relatively low disability rates (Dorner, 2018). At this level, Israeli payments averaged only about 40–45 percent of the German reparations. While this dissertation focuses on the BEG and MOF programs, it is useful to briefly mention other initiatives that later expanded support to Holocaust survivors in Israel. These programs are not part of the empirical analysis but help contextualize the broader policy environment.

The *Article 2 Fund*, launched in 1992, resulted from negotiations between the German government and the Claims Conference. It was established following the collapse of Soviet Union and the mass immigration of Holocaust survivors from the former USSR to the West, particularly to Israel. The fund provide quarterly pension payments to survivors excluded from earlier compensation schemes, often due to residence or timing.

In 2001, an amendment to the *Arrangements Law* marked a major policy shift. The state expanded monthly stipends to include survivors who had not received German reparations, building on the earlier framework established of the 1957 *Nazi Persecution Act*.

The 2007 *Benefits Law* introduced both a monthly allowance and a range of non-cash benefits. It applied to four groups: (1) survivors of camps and ghettos not eligible under the Nazi Persecution Law; (2) recipients of pensions from the *Article 2* Fund; (3) survivors receiving less than 1,000 NIS per month in compensation for Nazi persecution; and (4) former forced laborers receiving income support who had previously been compensated by the *Remembrance, Responsibility and Future* Foundation. The law aimed to broaden support to previously under-compensated groups and improve their material conditions in old age.

Together, these programs illustrate the evolving scope of Holocaust reparations in Israel, reflecting continuous efforts to close historical gaps in recognition and support, even if they fall outside the main analytical focus of this study.

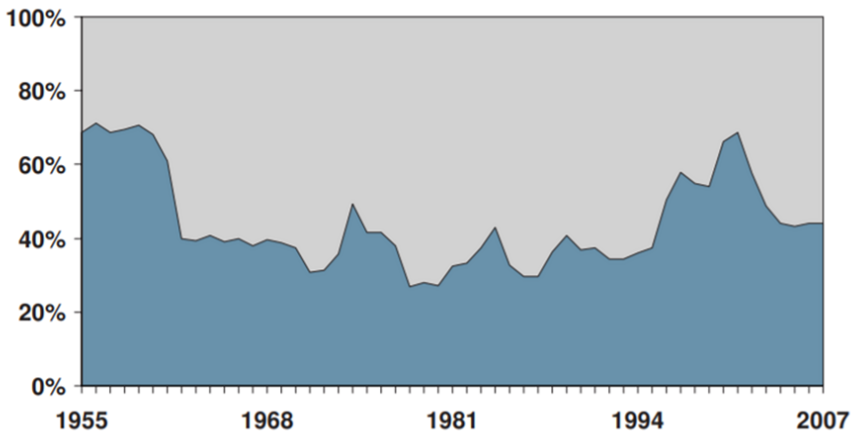
**Table A.1: Damage to Limb or Health — Monthly Payment Programs**

| | BEG (1953–1958) (1) | MOF (1957) (2) |
|---|---|---|
| Eligibility | – Resided in Germany (1937 borders) and left after 1933.<br>– In DP camps in West Germany on 1 Jan 1947 and left.<br>– Immigrated post-war and left before 31 Dec 1952.<br>– Cultural group members from Eastern Europe who left 31 Jan 1933–1 Oct 1953. | Immigrated to Israel before Oct 1953, proven Nazi persecution, and Israeli citizenship and residency since 1957. |
| Last Application Date | 31 Dec 1969 | 16 Apr 1960; Apr–Oct 1969; from 1 Oct 1995– |
| Retroactive Payment | From date of damage | From 1 Apr 1954 |
| Payment in 1956 | 100 DM (≈ 42.9 ILS) | 31.1 ILS |
| Payment in 1998 | 480 USD | 250 USD |
| Adjustment Mechanism | German public sector wages; exchange rate | Israeli mean income until 2014; government decision thereafter |
| Approx. Recipients in Israel | 72,000 | 11,744 (as of 1996) |

*Sources:* Teitelbaum (2008); Federal Ministry of Finance (2023); Dorner Committee (2008).

*Notes:* Entries compare the German BEG (Federal Compensation Act) and Israel's Ministry of fFnance monthly payments (Victims of Nazi Persecution Act, 5717 – 1957). Figures for "Payment in 1956" and "Payment in 1998" refer to a 25% disability rating. Recipient counts from Federal Ministry of Finance (2023) and Teitelbaum (2008, 228).

**Figure A.1: MOF vs. BEG Reparation Amounts**




*Source:* Report of the State Commission of Inquiry on Assistance to Holocaust Survivors (2008).

*Notes:* Ratio of MOF to BEG monthly payments for a 25% disability rate, expressed as a percent of the BEG amount, by year.

# B Sample Selection and Variable Construction

This appendix describes the construction of the analytical dataset, including data coverage, sample selection, and definition of key variables. It draws on administrative and census sources to construct intergenerational links and classify individuals by educational attainment and reparation program.

## B.1 Sample Selection

Building on Section 5.1, this appendix documents data coverage and linkage quality for all individuals born between 1901 and 1945 in Poland, Romania, Czechoslovakia, and Hungary who immigrated to Palestine/Israel between 1946 and 1952. These individuals constitute the broader dataset from which the analytical samples are drawn.The main analysis focuses on the 1926–1935 birth cohorts (*main sample*), while some supplementary analyses include individuals born between 1920 and 1945. These individuals constitute the First Generation in the analysis. Inclusion in the sample depends on the availability of educational data and the ability to link individuals to their children using administrative identifiers.

Data coverage by birth cohort is shown in Appendix Table B.1. The table reports the number of observations, the share with valid education records, and summary statistics for completed years of schooling. Education data are entirely missing for cohorts born before 1917 and gradually improve thereafter: 12 percent of the 1917 cohort have education data, compared to 49 percent in 1932 and over 70 percent in 1945. These trends reflect expanding administrative capacity and rising survival rates over time.

Information on parent-child linkage is presented in Appendix Table B.2, which reports linkage rates by parental birth year and gender. Linkage relies on a unique identifier constructed by the Israeli Central Bureau of Statistics (ICBS) from multiple administrative sources. Although not all parents could be linked to a child, there is no indication of systematic bias in the unmatched cases. Linkage rates improve steadily from the 1920s onward and are higher for males.

Differences in linkage by birth country are summarized in Appendix Table B.3. Panel A

includes all cohorts born between 1901 and 1945, while Panel B focuses on the 1926–1935 cohorts, which serve as the main analytical sample. Linkage is generally higher among males and later cohorts. While rates vary slightly by country, with higher linkage in Romania and Poland, these differences are relatively modest and do not suggest strong selection by origin.

Taken together, the results presented in these tables document the availability of education and linkage data, supporting the representativeness of the analytical sample used in this study.

### B.2 Variables Used in the Analysis

This section describes the construction of the two main variables used in the analysis: educational rank and reparation program classification.

I. *Validation of the Education Rank Construction*

Appendix Table B.4 summarizes the results of the education rank construction process, based on 50 repetitions of a jittering algorithm applied to years of education for males born between 1926 and 1935. For each individual, the final rank equals the mean across all repetitions, rounded to the nearest decile. The table reports the mean and standard deviation of computed ranks, along with the number of observations for each decile. In most cases, the standard deviation is well below 0.5, indicating stable assignment of individuals to the appropriate decile and limited sensitivity to random variation in the ranking process. A modest increase in variation appears in the $7^{\text{th}}$ decile (mean standard deviation of 0.74), reflecting the dense clustering of education levels around mid-range values.

II. *Classification of Reparation Program Recipients*

The second key variable captures exposure to reparation programs. Individuals in First Generation were classified into one of four mutually exclusive categories: MOF, BEG, A2, or MOF Late/Annual. Classification draws on administrative and census data, as summarized in Appendix Table B.5. These indicators define treatment and control groups used to estimate the long-term effect of reparations on intergenerational mobility.

To ensure accurate classification, a hierarchical assignment procedure was applied:

(a) Individuals appearing in the main MOF administrative records were first classified as MOF recipients.

(b) Those identified in either Claims Conference data or MOF records as A2 recipients were assigned to the A2 category and excluded from the analytical sample.

(c) Recipients of later MOF programs (MOF Late/Annual) were identified from MOF data and also excluded from the analysis.

(d) BEG recipients were identified sequentially from multiple sources: first from MOF files, then the Claims Conference dataset, followed by the 1995 Census long form, and finally from the 1983 Census, where BEG receipt was recorded at the household level.

Under the programs' eligibility rules, recipients could not obtain reparations from more than one source. The classification algorithm respects this restriction, ensuring that each individual is uniquely assigned to a single program.

### B.3 Additional Summary Statistics

Appendix Table B.6 provides additional descriptive statistics, showing the distribution of First Generation individuals by country of birth, gender, and reparation status. The table reports proportions, standard deviations (in parentheses), and total observations for each group.

The breakdown reveals key patterns in the composition of the reparation programs. Most recipients were born in Poland or Romania. Among BEG recipients, , roughly half of both males and females (48 percent) were Polish-born, while 26 percent of males and 29 percent of females were born in Romania. In contrast, standard MOF recipients were more likely to have been born in Romania (56 percent of males and 57percent of females-), whereas about one-third were born in Poland. These differences highlight the distinct geographic composition of the two reparation groups analyzed in the main text. To account for this heterogeneity, birth-country fixed effects were included in all relevant regressions.

**Table B.1: Educational Data Availability Across Birth Cohorts (1901–1945)**

| Birth Year | Obs. | With Educ. Data | % With Educ. Data | Mean Educ. (years) | Std. Dev. |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| 1901 | 8,902 | NA | NA | NA | NA |
| 1902 | 10,871 | NA | NA | NA | NA |
| 1903 | 11,184 | NA | NA | NA | NA |
| 1904 | 12,112 | NA | NA | NA | NA |
| 1905 | 13,183 | NA | NA | NA | NA |
| 1906 | 14,333 | NA | NA | NA | NA |
| 1907 | 14,903 | NA | NA | NA | NA |
| 1908 | 16,182 | NA | NA | NA | NA |
| 1909 | 16,081 | NA | NA | NA | NA |
| 1910 | 19,280 | NA | NA | NA | NA |
| 1911 | 17,104 | NA | NA | NA | NA |
| 1912 | 19,653 | NA | NA | NA | NA |
| 1913 | 17,168 | NA | NA | NA | NA |
| 1914 | 18,668 | NA | NA | NA | NA |
| 1915 | 14,609 | NA | NA | NA | NA |
| 1916 | 13,136 | NA | NA | NA | NA |
| 1917 | 10,923 | 1,331 | 12% | 10.44 | (3.82) |
| 1918 | 12,797 | 2,949 | 23% | 9.98 | (3.81) |
| 1919 | 14,675 | 3,456 | 24% | 10.04 | (3.74) |
| 1920 | 16,789 | 4,193 | 25% | 10.17 | (3.87) |
| 1921 | 15,166 | 4,081 | 27% | 10.43 | (3.95) |
| 1922 | 17,010 | 4,710 | 28% | 10.29 | (3.92) |
| 1923 | 16,448 | 4,719 | 20% | 10.45 | (3.90) |
| 1924 | 15,103 | 4,594 | 30% | 10.32 | (4.00) |
| 1925 | 13,734 | 4,230 | 31% | 10.26 | (4.03) |
| 1926 | 12,747 | 3,938 | 31% | 10.30 | (4.06) |
| 1927 | 11,488 | 4,284 | 37% | 10.47 | (4.09) |
| 1928 | 11,431 | 4,827 | 42% | 10.50 | (4.03) |
| 1929 | 9,925 | 4,372 | 44% | 10.79 | (4.04) |
| 1930 | 9,457 | 4,413 | 47% | 10.94 | (4.05) |
| 1931 | 8,264 | 3,921 | 47% | 11.06 | (4.02) |
| 1932 | 8,824 | 4,295 | 49% | 11.19 | (3.96) |
| 1933 | 7,659 | 4,019 | 52% | 11.62 | (3.89) |
| 1934 | 6,696 | 3,669 | 55% | 11.90 | (3.79) |
| 1935 | 6,224 | 3,531 | 57% | 11.92 | (3.81) |
| 1936 | 5,770 | 3,307 | 57% | 12.43 | (3.57) |
| 1937 | 5,714 | 3,423 | 60% | 12.66 | (3.52) |
| 1938 | 5,262 | 3,240 | 62% | 12.79 | (3.56) |
| 1939 | 4,238 | 2,650 | 63% | 12.88 | (3.33) |
| 1940 | 3,368 | 2,166 | 64% | 12.89 | (3.28) |
| 1941 | 2,890 | 1,887 | 65% | 12.86 | (3.19) |
| 1942 | 2,258 | 1,477 | 65% | 12.78 | (3.27) |
| 1943 | 2,252 | 1,508 | 67% | 13.02 | (3.25) |
| 1944 | 2,906 | 1,996 | 69% | 13.14 | (3.21) |
| 1945 | 5,419 | 3,855 | 71% | 13.37 | (3.21) |

*Notes:* Entries are counts and summary statistics by birth year. Columns report the total observations, the number with education data, the share with education data, the mean years of education, and the standard deviation of education.The sample includes individuals born between 1901 and 1945 in Poland, Romania, Czechoslovakia, and Hungary who immigrated between 1946 and 1952. Education data are unavailable for the 1901–1916 cohorts (NA). Highlighted rows mark the main sample cohorts (1926–1935). Standard deviations are in parentheses.

**Table B.2: Parent–Child Linkage Rates by Birth Year and Gender**

| Birth Year | Males | | | Females | | |
|---|---|---|---|---|---|---|
| | All | Linked | Linked (%) | All | Linked | Linked (%) |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| 1901 | 1,773 | 459 | 26% | 1,702 | 54 | 3% |
| 1902 | 2,252 | 674 | 30% | 2,040 | 64 | 3% |
| 1903 | 2,193 | 694 | 32% | 1,981 | 76 | 4% |
| 1904 | 2,337 | 768 | 33% | 2,061 | 100 | 5% |
| 1905 | 2,601 | 989 | 38% | 2,158 | 109 | 5% |
| 1906 | 2,992 | 1,149 | 38% | 2,266 | 138 | 6% |
| 1907 | 2,928 | 1,231 | 42% | 2,302 | 187 | 8% |
| 1908 | 3,042 | 1,298 | 43% | 2,565 | 224 | 9% |
| 1909 | 3,058 | 1,346 | 44% | 2,263 | 221 | 10% |
| 1910 | 3,996 | 1,953 | 49% | 2,987 | 333 | 11% |
| 1911 | 3,291 | 1,672 | 51% | 2,341 | 308 | 13% |
| 1912 | 3,610 | 1,866 | 52% | 3,116 | 491 | 16% |
| 1913 | 3,112 | 1,668 | 54% | 2,488 | 468 | 19% |
| 1914 | 3,268 | 1,801 | 55% | 3,106 | 632 | 20% |
| 1915 | 2,818 | 1,605 | 57% | 2,696 | 626 | 23% |
| 1916 | 2,714 | 1,580 | 58% | 2,774 | 738 | 27% |
| 1917 | 2,445 | 1,471 | 60% | 2,258 | 671 | 30% |
| 1918 | 3,090 | 1,933 | 63% | 3,012 | 971 | 32% |
| 1919 | 3,432 | 2,142 | 62% | 3,330 | 1,295 | 39% |
| 1920 | 4,341 | 2,767 | 64% | 4,146 | 1,761 | 42% |
| 1921 | 3,975 | 2,619 | 66% | 3,311 | 1,514 | 46% |
| 1922 | 4,458 | 2,961 | 66% | 4,382 | 2,148 | 49% |
| 1923 | 4,302 | 2,911 | 68% | 4,511 | 2,311 | 51% |
| 1924 | 3,785 | 2,621 | 69% | 4,562 | 2,486 | 54% |
| 1925 | 3,528 | 2,486 | 70% | 4,312 | 2,489 | 58% |
| 1926 | 3,296 | 2,366 | 72% | 4,227 | 2,583 | 61% |
| 1927 | 2,930 | 2,185 | 75% | 3,707 | 2,348 | 63% |
| 1928 | 2,879 | 2,210 | 77% | 3,698 | 2,433 | 66% |
| 1929 | 2,550 | 1,923 | 75% | 3,002 | 2,090 | 70% |
| 1930 | 2,687 | 2,084 | 78% | 2,783 | 2,036 | 73% |
| 1931 | 2,185 | 1,672 | 77% | 2,621 | 1,917 | 73% |
| 1932 | 2,612 | 2,051 | 79% | 2,907 | 2,245 | 77% |
| 1933 | 2,314 | 1,849 | 80% | 2,283 | 1,784 | 78% |
| 1934 | 2,096 | 1,682 | 80% | 1,889 | 1,478 | 78% |
| 1935 | 1,928 | 1,574 | 82% | 1,753 | 1,414 | 81% |
| 1936 | 1,613 | 1,308 | 81% | 1,627 | 1,291 | 79% |
| 1937 | 1,539 | 1,229 | 80% | 1,583 | 1,299 | 82% |
| 1938 | 1,386 | 1,154 | 83% | 1,496 | 1,233 | 82% |
| 1939 | 1,106 | 904 | 82% | 1,140 | 921 | 81% |
| 1940 | 838 | 691 | 82% | 829 | 658 | 79% |
| 1941 | 685 | 558 | 81% | 741 | 599 | 81% |
| 1942 | 472 | 380 | 81% | 561 | 434 | 77% |
| 1943 | 516 | 418 | 81% | 449 | 350 | 78% |
| 1944 | 629 | 502 | 80% | 605 | 478 | 79% |
| 1945 | 1,185 | 947 | 80% | 1,216 | 1,007 | 83% |

*Notes:* Entries are parent–child linkage counts and rates by birth year and gender. Males and females are shown separately. Columns report cohort size, the number linked to at least one child, and the linked share. Individuals born 1901–1945 in Poland, Romania, Czechoslovakia, and Hungary who immigrated to Palestine/Israel during 1946–1952; linkage is constructed from the population registry. Highlighted rows mark the main sample cohorts (1926–1935).

**Table B.3: Parent–Child Linkage by Birth Country**

| | Males | | | Females | | |
|---|---|---|---|---|---|---|
| Birth Country | All | Linked | Linked (%) | All | Linked | Linked (%) |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| *Panel A: 1901–1945 Birth Cohorts* | | | | | | |
| Poland | 52,151 | 31,784 | 61% | 44,176 | 18,857 | 43% |
| Romania | 44,936 | 27,949 | 62% | 50,898 | 22,345 | 44% |
| Czechoslovakia | 9,014 | 5,379 | 60% | 8,705 | 4,008 | 46% |
| Hungary | 8,686 | 5,239 | 60% | 8,008 | 3,803 | 47% |
| All | 114,787 | 70,351 | 61% | 111,787 | 49,013 | 44% |
| *Panel B: 1926–1935 Birth Cohorts* | | | | | | |
| Poland | 8,366 | 6,429 | 77% | 9,515 | 6,616 | 70% |
| Romania | 12,243 | 9,717 | 79% | 13,768 | 10,029 | 73% |
| Czechoslovakia | 1,919 | 1,412 | 74% | 2,674 | 1,731 | 65% |
| Hungary | 2,949 | 2,038 | 69% | 2,913 | 1,952 | 67% |
| All | 25,477 | 19,596 | 77% | 28,870 | 20,328 | 70% |

*Notes:* Entries are parent–child linkage counts and rates by parental birth country and gender. Panel A reports cohorts 1901–1945; Panel B restricts to the main analysis cohorts 1926–1935. Columns report cohort size, the number linked to at least one child, and the linked share. Panel A reports cohorts 1901–1945; Panel B restricts to the main analysis cohorts 1926–1935.Individuals were born in Poland, Romania, Czechoslovakia, or Hungary and immigrated to Palestine/Israel during between 1946 and 1952; linkage is constructed from the population registry.

**Table B.4: Construction of the Education Rank Variable**

| Education Rank | Mean (std.) | Std. Dev. | Frequency |
|---|---|---|---|
| | (1) | (2) | (3) |
| 1 | 0.03 | 0.12 | 4,848 |
| 2 | 0.11 | 0.19 | 4,348 |
| 3 | 0.57 | 0.13 | 6,759 |
| 4 | 0.42 | 0.21 | 3,467 |
| 5 | 0.40 | 0.10 | 6,124 |
| 6 | 0.09 | 0.16 | 1,756 |
| 7 | 0.74 | 0.06 | 11,021 |
| 8 | 0.36 | 0.16 | 1,792 |
| 9 | 0.15 | 0.21 | 4,741 |
| 10 | 0.10 | 0.18 | 4,944 |

*Notes:* Entries summarize the construction of education ranks using 50 jittering repetitions. The final rank is the average across repetitions, rounded to the nearest integer. Column 1 reports, for each final rank $r$, the within–rank mean standard deviation. Column 2 reports the standard deviation across the 50 regressions for the share assigned to rank $r$. Column 3 reports the number of individuals whose final rank equals $r$. The sample is men born between 1925 and 1936; ranks are defined within birth cohorts.

**Table B.5: Information Sources for Reparation Recipient Classification**

| Group | Observations | Reparation Type | Data Source / Limitations | In Sample |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| BEG (1983) | 15,390 | Monthly payments from Germany | CBS 1983 Census. Household level reporting. 20% sample. Possible digitization errors. | Yes |
| BEG (1995) | 10,959 | Monthly payments from Germany | CBS 1995 Census. 20% sample. Possible digitization errors. | Yes |
| BEG (MOF registry) | 5,778 | Monthly payments from Germany. Quarterly updates from MOF since 2014 | MOF administrative data. Includes only recipients alive in 2015. | Yes |
| MOF (1957) | 23,402 | Monthly payments by disability rating and income test | MOF administrative data. Start date of payments not recorded. | Yes |
| MOF (2007) | 16,867 | Monthly payments by disability rating and income test | MOF administrative data. Includes only recipients alive in 2007. | No |
| Article 2 (MOF registry) | 19,164 | Monthly MOF payments. Quarterly payments from Germany | MOF administrative data. Includes only recipients alive in 2007. | No |
| MOF (2014) | 180,866 | Annual lump sum payments since 2014 | MOF administrative data. Includes only recipients alive in 2014. | No |
| Article 2 (Claims Conf.) | 48,970 | Monthly payments | Claims Conference registry. Includes only recipients alive in the 1990s. | No |

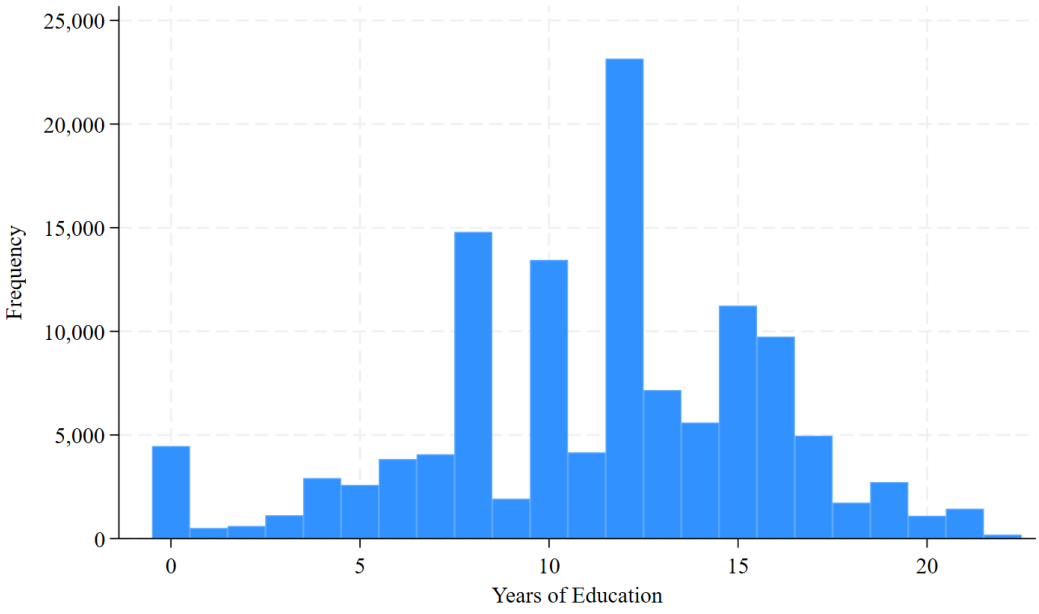
*Notes:* Entries are counts and indicators by information source and program status. CBS (Israel Central Bureau of Statistics) Census data were taken from 1983 and 1995 population survey long questionnaires. MOF data are administrative data from the Holocaust Survivors' Rights Authority in the Ministry for Social Equality, the government entity authorized to provide Holocaust Survivors allowances, benefits and additional rights. MOF (1957) recipients according to Israeli Victims of Nazi Persecution Act, MOF (2007) recipients due to Benefits Law. "In sample" indicates inclusion in the analysis sample.

**Table B.6: Country of Birth by Type of Reparation and Recipient Gender**

| | Males | | | | Females | | | |
|---|---|---|---|---|---|---|---|---|
| Birth country | BEG | MOF | A2 | MOF late | BEG | MOF | A2 | MOF late |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Poland | 0.48 | 0.26 | 0.31 | 0.79 | 0.48 | 0.26 | 0.40 | 0.84 |
| | (0.50) | (0.44) | (0.46) | (0.41) | (0.50) | (0.44) | (0.49) | (0.36) |
| Romania | 0.26 | 0.56 | 0.45 | 0.10 | 0.28 | 0.57 | 0.38 | 0.07 |
| | (0.44) | (0.50) | (0.50) | (0.30) | (0.45) | (0.49) | (0.49) | (0.26) |
| Hungary | 0.09 | 0.12 | 0.11 | 0.10 | 0.09 | 0.10 | 0.12 | 0.07 |
| | (0.29) | (0.32) | (0.32) | (0.30) | (0.28) | (0.30) | (0.33) | (0.26) |
| Czechoslovakia | 0.16 | 0.06 | 0.12 | — | 0.16 | 0.06 | 0.10 | — |
| | (0.37) | (0.23) | (0.32) | — | (0.36) | (0.24) | (0.31) | — |
| Observations | 958 | 7,165 | 1,418 | 632 | 1,774 | 8,775 | 1,020 | 554 |

*Notes:* Entries are shares by birth country within each gender–program group. Sample includes main analysis cohorts (1926–1935) of First Generation parents who immigrated to Palestine/Israel between 1946 and 1952 from Poland, Romania, Czechoslovakia, or Hungary. A dash indicates not observed for that cell. Standard deviations are reported in parentheses.

**Figure B.1: Distribution of Years of Education for First-Generation Men**




*Notes:* This histogram shows the distribution of years of education for First Generation men in the main sample (see Table 1 for the definition). Bin width is 1 year.

## C Education in the Second Generation

This appendix addresses an observed outcome in the main analysis: children of BEG recipients attain higher levels of education than those of MOF recipients, while exhibiting similar income levels.

One possible explanation for this pattern concerns the sources of educational data. Appendix Figure C.1 presents the distribution of education data sources, distinguishing between administrative records and self-reported information. Prior evidence from the Israeli Central Bureau of Statistics (ICBS, 2021), indicates that self-reported education data tend to overstate educational attainments. If BEG recipients were more likely to have self-reported records, their higher education levels might partly reflect reporting bias. However, the figure shows that the distribution of data sources is nearly identical for BEG and MOF descendants, for both sons and daughters. Differences in data quality therefore cannot account for the observed education gap.

Appendix Figure C.2 depicts the distribution of educational attainment by reparation group and gender. Among sons, educational outcomes are more favorable for BEG descendants: 48.2 percent completed a university degree, compared to 42.0 percent among MOF descendants, while the share with only primary or secondary education is lower (25.2 versus 31.7 percent). The shares with matriculation and post-secondary qualifications are similar, suggesting that the main divergence occurs at the upper and lower ends of the distribution. A similar pattern holds for daughters: 54.8 percent of BEG daughters completed a university degree, compared to 49.2 percent of MOF daughters, and 21.5 percent attained only primary or secondary education versus 27.4 percent among MOF daughters. These results indicate a systematic educational advantage for BEG descendants, particularly at the university level, consistent across genders, though with generally higher attainment among females.

Appendix Figure C.2 extends the analysis by examining the fields of study pursued by the second generation. Among males, engineering and management are the most common disciplines. Sons of BEG recipients are slightly more represented in engineering (23.8 versus 22.1 percent) and in the exact sciences (10.4 versus 7.7 percent), whereas MOF sons are more likely to study social sciences (13.3 versus 10.2 percent). For daughters,

BEG descendants are more represented in law (5.5 versus 3.6 percent) and engineering (4.1 versus 3.6 percent), while MOF daughters are more concentrated in education (17.2 versus 15.7 percent), humanities (12.0 versus 9.4 percent), and biology or agriculture (5.8 versus 4.1 percent). Overall, BEG descendants are somewhat more likely to pursue academic and professional fields associated with higher potential earnings, though the differences are modest.

Despite these educational advantages, BEG descendants do not exhibit higher income levels. As shown in Appendix Table C.1, regressions of log income at ages 30–35 reveal that, conditional on education, sex, and cohort, BEG descendants earn approximately 9–10 percent less than comparable MOF descendants. The inclusion of field-of-education fixed effects does not reduce the coefficient; in fact, it becomes slightly larger, suggesting that the gap does not arise from differences in field composition but from lower within-field returns to education. While the BEG coefficient captures the gap among academic-degree holders, the interaction terms (column 4) show how this difference varies across education levels. These interactions indicate that the income gap is concentrated among tertiary-educated individuals, whereas no significant differences are observed among those with lower education.

A follow-up analysis using the same individuals observed at ages 36–40 (column 5) shows partial convergence. The BEG coefficient declines to –0.07, and the interaction for the lowest diploma becomes positive (0.16) and statistically significant, indicating that income parity is achieved among low-educated individuals. The disadvantage among academic-degree holders, however, persists. These findings imply that reparations enhanced educational attainment and upward mobility, but the economic returns to education remained weaker for BEG descendants.

The lower income returns to education among BEG descendants may stem from differences in family background and resources. Coming from stronger economic positions, BEG families may have faced weaker incentives to maximize labor-market income, allowing greater choice of occupations emphasizing stability or status. Combined with sectoral sorting within fields (such as greater employment in academia or the public sector) and non-pecuniary motivations that treat education as symbolic restitution, these factors likely reduced the monetary returns to their higher educational attainment.

**Table C.1:** Return to Education -BEG vs. MOF Children

| | Log Mean Income | | | | |
|---|---|---|---|---|---|
| | 30–35 | 30–35 | 30–35 | 30–35 | 36–40 |
| | (1) | (2) | (3) | (4) | (5) |
| BEG | -0.03 | -0.05* | -0.05** | -0.10*** | -0.07** |
| | (0.02) | (0.02) | (0.02) | (0.03) | (0.03) |
| Years of Education | 0.10*** | | | | |
| | (0.00) | | | | |
| Matriculation | | 0.39*** | 0.38*** | 0.38*** | 0.36*** |
| | | (0.02) | (0.02) | (0.03) | (0.03) |
| Post Secondary | | 0.40*** | 0.40*** | 0.40*** | 0.45*** |
| | | (0.02) | (0.02) | (0.02) | (0.02) |
| University | | 0.72*** | 0.40*** | 0.40*** | 0.56*** |
| | | (0.01) | (0.05) | (0.05) | (0.04) |
| BEG × Primary or Secondary | | | | 0.11* | 0.16*** |
| | | | | (0.06) | (0.06) |
| BEG × Matriculation | | | | 0.06 | 0.07 |
| | | | | (0.08) | (0.09) |
| BEG × Post Secondary | | | | 0.08 | -0.01 |
| | | | | (0.07) | (0.08) |
| Daughters | -0.78*** | -0.81*** | -0.73*** | -0.73*** | -0.74*** |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Observations | 24,817 | 24,759 | 23,426 | 23,426 | 22,682 |
| R-squared | 0.18 | 0.21 | 0.23 | 0.23 | 0.25 |
| Field FE | No | No | Yes | Yes | Yes |
| *Controls:* Birth year, Birth year squared. | | | | | |

*Notes:* Entries are coefficients from regressions of log income on BEG receipt status and education variables for the second generation. Columns 1–4 report estimates for income at ages 30–35; Column 5 reports estimates for the same individuals observed at ages 36–40. All models control for birth year and birth year squared. Columns 3–5 include fixed effects for field of education. In Columns 4 and 5, where interactions between BEG and diploma categories are included, the BEG coefficient refers to individuals with university education (the reference category), and the interaction terms indicate how this gap varies across education levels. Robust standard errors are in parentheses. $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$.

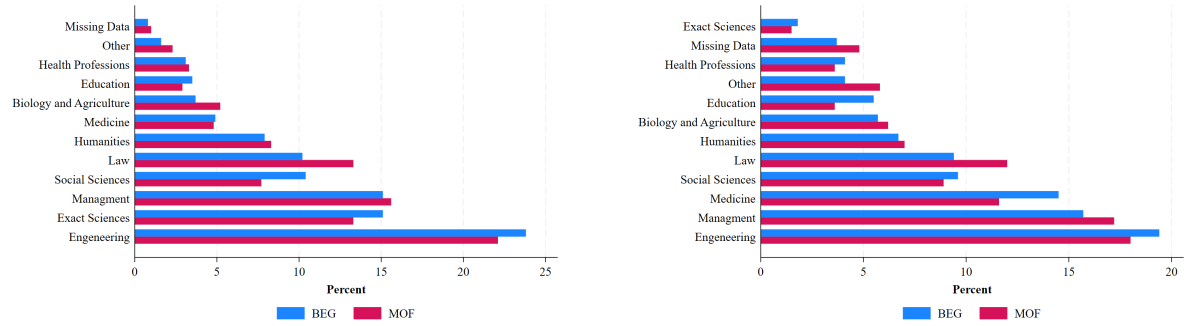
## Figure C.1: Education Data Source by Father's Reparation Program


**(a)** Male sample **(b)** Female sample

*Notes:* Distribution of education data sources for the second generation by gender. See Appendix Section C for variable definitions.

## Figure C.2: Distribution of Educational Level and Academic Field by Reparation Program


**(a)** Highest diploma — sons **(b)** Highest diploma — daughters




**(c)** Academic field — sons **(d)** Academic field — daughters

*Notes:* This figure shows the distributions of highest diploma for the Second Generation and, among those with academic studies, distributions of academic field. Results are reported by child gender and parental reparation program (BEG vs. MOF).

## D Intergenerational Mobility Across Households

As a robustness check, this appendix replicates the IGM analysis at the household level. It uses education rankings based on combined parental background and considers different combinations of reparation receipt. This approach tests whether results are sensitive to shared parental influence and cross-parental exposure. The focus is on differences in mobility outcomes across households with varying reparation profiles.

The appendix begins by examining the distribution of spousal reparation combinations. Spouses are defined as the reported parents of each child, regardless of marital status. These combinations indicate whether one or both parents in a household received compensation, and from which program. Appendix Table D.1 presents the reparation status of both parents, cross-classified by program. Most households include MOF or A2 recipients, with 3,155 cases where both mother and father received MOF benefits. Cross-program pairings, such as MOF and A2, are also common. This distribution reflects the diversity of household-level exposure to reparations.

The next section reports IGM estimates by reparation combinations. For each child, the household's educational rank is based on the higher of the two parents' ranks when both are available or the sole parent's rank if only one is identified. Households in which at least one parent received BEG are classified as BEG. Since BEG data cover only 20% of the population, some BEG households may be misclassified as MOF, potentially biasing MOF averages upward.

Appendix Table D.2 presents IGM estimates for sons and daughters, comparing BEG and MOF households. Panel A reports relative and absolute mobility from regressions of child's rank on household' rank. Sons in BEG households exhibit 0.89 deciles higher absolute mobility than their MOF counterparts, while for daughters, the gap is 0.58 deciles. Similar patterns emerge for relative mobility. Panel B reports expected child ranks at the $25^{\text{th}}$, $50^{\text{th}}$, and $75^{\text{th}}$ percentiles of the household education distribution, with BEG advantages most evident among lower-ranked households.

As a further check, I re-estimated the regressions in Appendix Table D.2 while controlling for number of children in the household. As shown in Appendix Table D.3, the results

remain consistent, suggesting that household size does not account for the mobility differences between BEG and MOF recipients.

The appendix then turns to a focused analysis of MOF households, comparing outcomes in cases where only the father received MOF benefits to those where both parents did. Appendix Table D.4 shows that children in two-recipient households have higher absolute mobility. For sons, relative mobility does not differ substantially, whereas for daughters, both relative and absolute mobility are higher when both parents received reparations.

Note that some misclassification may exist in the One parent group, due to unobserved BEG receipt, which could inflates its outcomes and reduce observed differences. The difference between One and Both amount of reparation is smaller than between MOF and BEG, which may also explain the weaker effects.

Panel B of Appendix Table D.4 presents expected child ranks by household education rank, showing convergence across household types at higher education levels for daughters. Among sons, the gap between those who grew up with one versus two reparation recipients is consistent across parental education deciles but remains statistically insignificant. Nevertheless, the direction of the effect aligns with results in Appendix E, where sons exhibit higher mobility when mothers are the primary recipients of reparations, regardless of the mother's education rank.

Overall, these findings support and extend the main results by showing that IGM patterns persist when analyzed at the household level. Reparation increase IGM, with the largest effects observed among families with lower educational attainment.

**Table D.1: Combinations of Parental Reparation Program Participation**

| | Father | | | | |
|---|---|---|---|---|---|
| Mother | BEG | MOF | A2 | MOF late | Total |
| | (1) | (2) | (3) | (4) | (5) |
| BEG | 367 | 419 | 81 | 51 | 918 |
| MOF | 524 | 5,963 | 798 | 288 | 7,573 |
| A2 | 70 | 689 | 295 | 54 | 1,108 |
| MOF late | 48 | 442 | 132 | 159 | 781 |
| Missing | 898 | 7,714 | 1,650 | 844 | 11,106 |
| Total | 1,907 | 15,227 | 2,956 | 1,396 | 21,486 |

*Notes:* Distribution of Second Generation (birth years 1955–1972) by parental reparation program combination. Households are classified as BEG, MOF, A2, Late MOF, or Missing (parental information unavailable).

**Table D.2: Intergenerational Mobility in BEG vs. MOF Households**

| | Sons | | | Daughters | | |
|---|---|---|---|---|---|---|
| | BEG | MOF | Both | BEG | MOF | Both |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| *Panel A: Mobility Measures* | | | | | | |
| Relative Mobility | 0.23*** | 0.30*** | 0.30*** | 0.30*** | 0.34*** | 0.34*** |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| BEG | | | 0.90* | | | 0.62** |
| | | | (0.29) | | | (0.14) |
| BEG × Parent Rank | | | -0.08 | | | -0.04 |
| | | | (0.04) | | | (0.02) |
| Absolute Mobility | 4.92*** | 4.05*** | 4.03*** | 4.38*** | 3.77*** | 3.77*** |
| | (0.24) | (0.07) | (0.07) | (0.16) | (0.09) | (0.09) |
| Observations | 1,189 | 8,127 | 9,147 | 1,132 | 7,735 | 8,867 |
| R-squared | 0.03 | 0.05 | 0.05 | 0.05 | 0.07 | 0.07 |
| *Panel B: Mean Rank Expectations* | | | | | | |
| $\theta_{25}$ | 5.49 | 4.80 | — | 5.13 | 4.62 | — |
| | (0.18) | (0.03) | | (0.15) | (0.08) | |
| $\theta_{50}$ | 6.06 | 5.55 | — | 5.87 | 5.46 | — |
| | (0.12) | (0.05) | | (0.16) | (0.08) | |
| $\theta_{75}$ | 6.62 | 6.30 | — | 6.61 | 6.31 | — |
| | (0.06) | (0.10) | | (0.19) | (0.10) | |

*Notes:* Entries presents mobility estimates from regressions of child education rank on *family* rank (defined as the max of the two parents' ranks, or the observed rank if only one parent is available). Panel A presents relative mobility (rank–rank slope); and absolute mobility (intercept). Panel B reports expected child ranks at the $25^{\text{th}}$, $50^{\text{th}}$, and $75^{\text{th}}$ percentiles of the family-rank distribution. Second generation includes children born between 1955 and 1972 to parents from Poland, Romania, Czechoslovakia, or Hungary. Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

**Table D.3: Intergenerational Mobility Controlling for Household Size**

| | Sons | | | Daughters | | |
|---|---|---|---|---|---|---|
| | BEG | MOF | Both | BEG | MOF | Both |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Relative Mobility | 0.24*** | 0.31*** | 0.31*** | 0.30*** | 0.34*** | 0.34*** |
| | (0.01) | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| BEG | | | 0.73** | | | 0.52** |
| | | | (0.20) | | | (0.10) |
| BEG × Parent Rank | | | -0.06 | | | -0.04 |
| | | | (0.01) | | | (0.02) |
| Number of Siblings | -0.38*** | -0.39*** | -0.39*** | -0.24 | -0.20*** | -0.21*** |
| | (0.03) | (0.02) | (0.01) | (0.11) | (0.02) | (0.02) |
| Absolute Mobility | 5.56*** | 4.84*** | 4.84*** | 4.79*** | 4.20*** | 4.21*** |
| | (0.17) | (0.09) | (0.08) | (0.16) | (0.09) | (0.09) |
| Observations | 1,189 | 8,127 | 9,147 | 1,132 | 7,735 | 8,867 |
| R-squared | 0.06 | 0.09 | 0.09 | 0.07 | 0.08 | 0.08 |

*Notes:* Entries presents IGM estimated from regressions of child education rank on parent rank, adding the number of siblings as a control. See Appendix Table D.2 for the baseline. Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

**Table D.4: Intergenerational Mobility by Number of MOF Recipients in the Household**

| | Sons | | | Daughters | | |
|---|---|---|---|---|---|---|
| | Two | One | Both | Two | One | Both |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| *Panel A: Mobility Measures* | | | | | | |
| Relative Mobility | 0.26*** | 0.25*** | 0.25*** | 0.23** | 0.38*** | 0.38*** |
| | (0.02) | (0.02) | (0.02) | (0.04) | (0.03) | (0.03) |
| Two | | | 0.28 | | | 1.13** |
| | | | (0.17) | | | (0.17) |
| Two × Parent Rank | | | 0.01 | | | -0.15*** |
| | | | (0.03) | | | (0.01) |
| Absolute Mobility | 4.69*** | 4.41*** | 4.41*** | 4.71*** | 3.58*** | 3.58*** |
| | (0.10) | (0.09) | (0.09) | (0.35) | (0.21) | (0.21) |
| Observations | 1,939 | 2,520 | 4,459 | 1,807 | 2,373 | 4,180 |
| R-squared | 0.04 | 0.04 | 0.04 | 0.04 | 0.09 | 0.07 |
| *Panel B: Mean Rank Expectations* | | | | | | |
| $\theta_{25}$ | 5.37 | 5.07 | — | 5.33 | 4.64 | — |
| | (0.10) | (0.08) | | (0.29) | (0.11) | |
| $\theta_{50}$ | 6.00 | 5.69 | — | 5.91 | 5.56 | — |
| | (0.10) | (0.05) | | (0.19) | (0.05) | |
| $\theta_{75}$ | 6.63 | 6.30 | — | 6.49 | 6.48 | — |
| | (0.14) | (0.06) | | (0.09) | (0.09) | |

*Notes:* Same specification as the baseline; comparison is between households with one MOF recipient (One) and households with two MOF recipients (Two). Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

## E Gender Gap In Intergenerational Mobility

This appendix examines whether IGM differs between male and female recipients and whether the main determinants of IGM, parental education and reparation receipt, exert gender-specific effects. The analysis uses rank-rank regressions, of a child's education rank on parental rank, estimated separately by gender. Both relative and absolute mobility are considered.

Appendix Table E.1 reports descriptive statistics of parental education by parent gender and reparation group. Education levels are broadly comparable across BEG and MOF recipients, reducing concerns that mobility differences reflect unequal educational distributions. As in the main specification, the analysis uses father-child or mother-child observations.

### E.1 Gender Differences in IGM

The results in this section correspond to Table 6 of the main text, which reports intergenerational mobility estimates across BEG and MOF groups. Here, I examine whether these patterns differ systematically by gender.

The results do show systematic gender differences. Sons exhibit higher absolute mobility across all specifications. Sons of BEG fathers reach an average education rank of 5.2 deciles when the father is at the bottom of the distribution, compared to 4.7 deciles for daughters of BEG fathers. Relative mobility is also higher for sons: it ranges from 0.20 for BEG to 0.27 for MOF recipients, while for daughters it ranges from 0.27 to 0.31. Thus, sons experience greater absolute movement, while daughters display stronger persistence across ranks. These findings are aligned with earlier evidence from the United States, where daughters display lower upward mobility than sons (Chadwick and Solon (2002).

The fact that sons experienced higher upward mobility despite daughters attaining slightly higher average education suggests gender differences in expected returns to education. Parental investment decisions are shaped by perceived labor market returns (Becker and Tomes, 1986). At the time, expected returns for women were likely lower than for men, which may have reduced parental incentive to invest equally in daughters'

education. As a result, even highly educated daughters may have faced structural barriers to translating education into occupational or income mobility.

Appendix Table E.2 supports this interpretation. The dependent variable is the natural logarithm of mean income (in thousands NIS). Each additional year of education raises male income by 7 percent and female income by 10 percent. However, the Female coefficient is large and negative, implying that women earned substantially less than men at lower education levels. The interaction term ((Female x Years of education) suggests that additional schooling narrows but does not close this gap. The estimated crossover point at which male and female earnings would equalize is about 41 years of education, well beyond any realistic values. Hence, even as education reduced gender income gaps, structural barriers remained, limiting parental incentives to invest equally in daughters' education.

To further explore gender patterns, the next section analyzes whether the effects of reparations differed by parent and child gender.

### E.2 Reparation Receipt and Parent-Child Gender Patterns in IGM

Table 7 reports expected child education ranks at the $25^{\text{th}}$, $50^{\text{th}}$, and $75^{\text{th}}$ percentiles of the parent distribution, by parent gender and reparation group. This complements Table 6 by showing how reparation effects vary across the parental education levels and gender.

The results primarily reflect differences in *absolute mobility* (the expected education rank of children whose parents are at the lowest end of the education distribution). BEG receipt for fathers improves sons' educational mobility by 0.79 deciles, significant at the 10 percent level. For daughters of BEG recipient fathers, the effect is smaller and not statistically significant. When mothers are the recipients, BEG payments raise the absolute mobility for both sons and daughters: Sons of BEG mothers experience a 0.6 decile increase relative to sons of MOF mothers, and daughters a 0.8 decile increase; both effects are statistically significant.

A key pattern emerges in the interaction between reparations and parental education

rank. In most parent-child combinations, reparation effects are strongest at lower levels of parental education, consistent with liquidity constraints being relaxed. However, for sons of BEG mothers, the positive effect persists across the education distribution (Appendix Figure E.1). At the $75^{\text{th}}$ percentile, sons of BEG mothers reach an expected education rank of 7.4 compared to 6.8 for sons of MOF mothers, a 0.7 decile difference. This suggests that highly educated mothers were particularly effective in translating reparation payments into their sons' educational gains, *regardless* of the mother's education rank.

One possible concern is that the particularly strong effect of reparations among highly educated mothers reflects non-assortative matching rather than genuine maternal influence. If some educated women who received BEG reparations married less-educated men, their households may have been more financially constrained, making the transfer more consequential for child outcomes.

However, the data indicate the opposite pattern. The correlation between mothers' and fathers' education ranks is high,[22] indicating strong positive assortative mating in educational attainment. This makes it unlikely that low paternal education explains the mother–son mobility effect among BEG recipients. The evidence suggests the maternal effect is genuine and distinct.

Maternal reparations are thus associated with stronger and more consistent improvements in mobility for both sons and daughters. These findings alien with research showing that household resources controlled by women translate into greater investments in children's human capital (Duflo, 2003). A similar pattern is observed in fertility outcomes: Hazan and Tsur (2023) show that early female recipients had significantly lower post-reparation fertility than comparable male recipients, suggesting stronger household bargaining power among women. In contrast, paternal reparations primarily benefit sons and have smaller or no effects for daughters.

Taken together, the results suggest that while liquidity relief explains much of the father–son gains, maternal effects likely operate through additional channels, particularly intra-household decision-making.

[22] Among BEG recipients, the correlation between mothers' and fathers' education ranks is 0.590 (SE=0.064); among MOF recipients, it is 0.594 (SE=0.022).

While these results highlight the role of maternal reparations in enhancing educational mobility, they also raise the question of why maternal effects differ from paternal effects. One possible explanation relates to differences in first-generation labor market participation, which may reflect both additional household resources and underlying parental characteristics. I explore this possibility in the next subsection.

### E.3 Maternal Employment: Liquidity Channel or Characteristics Effect?

Differences in maternal labor supply may help explain the stronger maternal effects observed in educational mobility. Appendix Table E.3 compares BEG and MOF recipients, where the BEG variable captures the difference between the two groups. For men, BEG receipt is associated with small and statistically insignificant changes in annual weeks worked in both 1972 and 1983. For women, BEG receipt has no significant effect in 1972 but is linked to a statistically significant increase of 2.7 weeks worked in 1983 relative to MOF female recipients.

This pattern can be interpreted in two ways. First, higher maternal employment intensity may have provided additional household resources that indirectly supported children's education, even if the observed employment difference occurs when most children were already around age 20. Second, and perhaps more plausibly given the timing, the continued labor force participation of BEG mothers may reflect broader characteristics such as ambition, resilience, or stronger attachment to work that also shaped their investment in their children's human capital.

These two interpretations are not mutually exclusive. Some of the observed educational mobility gains may stem from liquidity effects, while others may capture unobserved maternal traits correlated with long-term labor force participation. In this sense, the 1983 employment patterns may serve as both an indicator of resource availability and as a proxy for parental characteristics that contributed children's long-term outcomes.

**Table E.1: Parental Education by Parent Gender and Reparation Program**

| Gender | Reparation | Obs. | Mean educ. | SD educ. | Mean rank | SD rank |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Male | BEG | 1,951 | 11.3 | 3.6 | 5.4 | 2.5 |
| | MOF | 15,848 | 11.1 | 3.7 | 5.2 | 2.5 |
| Female | BEG | 2,813 | 9.8 | 3.4 | 5.1 | 2.3 |
| | MOF | 15,505 | 10.0 | 3.5 | 5.1 | 2.3 |

*Notes:* Parent education rank is defined within parental birth cohorts; The analysis in the current section estimates father–child and mother–child pairs separately. Reported sample sizes reflect the available observations for each pair type.

**Table E.2: Estimated Returns to Education in the Second Generation**

| | All Population | | Survivors' Children | |
|---|---|---|---|---|
| | Age 30–35 | Age 36–40 | Age 30–35 | Age 36–40 |
| | (1) | (2) | (3) | (4) |
| Years of Education (male) | 0.07*** | 0.10*** | 0.10*** | 0.13*** |
| | (0.00) | (0.00) | (0.00) | (0.00) |
| Female | -1.25*** | -1.02*** | -1.20*** | -0.90*** |
| | (0.08) | (0.07) | (0.01) | (0.01) |
| Female × Years of Education | 0.03*** | 0.01*** | 0.03*** | 0.01*** |
| | (0.00) | (0.00) | (0.00) | (0.00) |
| Observations | 27,861 | 29,582 | 794,189 | 768,431 |
| R-squared | 0.17 | 0.19 | 0.19 | 0.20 |
| *Controls:* Birth year, Birth year squared. | | | | |

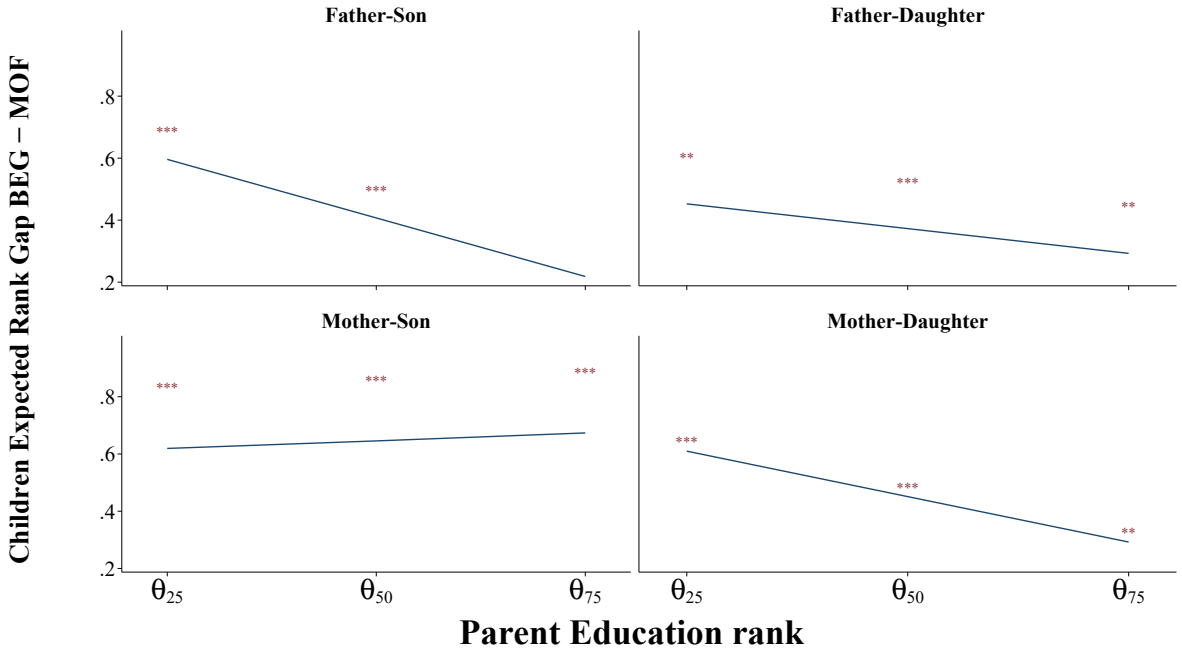
*Notes:* Entries are OLS coefficients from regressions of log mean annual income (thousands of NIS, indexed to the 2023 CPI) at the indicated age on years of education. For men, the return is the coefficient on years of education; for women, the return equals the sum of that coefficient and the Female×Years of education interaction. Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

**Table E.3: Labor Supply Response to BEG Receipt**

| | Men | | Women | |
|---|---|---|---|---|
| | Weeks 1972 | Weeks 1983 | Weeks 1972 | Weeks 1983 |
| | (1) | (2) | (3) | (4) |
| Mean (MOF) | 48 | 50 | 21 | 50 |
| BEG | -2.39 | -1.45 | 0.35 | 2.70* |
| | (4.0) | (1.5) | (4.2) | (1.6) |
| Years of Education | -0.24 | 0.09 | 2.18*** | 0.11 |
| | (0.2) | (0.5) | (0.2) | (0.1) |
| BEG × Years of Education | 0.05 | 0.09 | -0.66 | -0.20 |
| | (0.4) | (0.1) | (0.4) | (0.2) |
| Observations | 1,055 | 1,595 | 1,572 | 1,175 |
| R squared | 0.01 | 0.01 | 0.10 | 0.01 |
| *Controls:* Birth year, Birth year squared, Birth country FE. | | | | |

*Notes:* Entries are OLS coefficients from regressions of weeks worked in 1972 and 1983 on an indicator for BEG receipt. Results are reported separately for men and women; each year is estimated in a separate specification. The sample is my First Generation (birth years between 1926 and 1935). BEG equals 1 for BEG recipients and 0 for MOF. All models include controls for birth year and birth year squared, and fixed effects for birth country. Weeks worked are taken from the 1972 and 1983 censuses. Robust standard errors are shown in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

**Figure E.1: Expected Child Education Decile Gaps, Across Parent–Child Dyads**




Stars: * p<0.10, ** p<0.05, *** p<0.01

*Notes:* Each panel reports difference in expected child education decile (BEG minus MOF) within parent–child dyad. Positive values mean higher IGM for BEG. Estimates are evaluated at $\theta_{25}$, $\theta_{50}$, and $\theta_{75}$ (low, middle, high parental education). Asterisks mark significance of the BEG minus MOF difference from zero using robust standard errors: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Axes are common across panels.

## F Heterogeneity in Initial Conditions

This appendix presents summary statistics used to examine heterogeneity in initial conditions across treatment groups. The focus is on differences between older and younger immigrants within the BEG and MOF groups, supporting the discussion in Section 7.2 of the main text.

The analytical sample was extended to includes males born between 1920 and 1945. Individuals are defined as "Old" if they were age 16 or older at the time of immigration. Appendix Table F.1 reports descriptive statistics for four subgroups: BEG-Old, BEG-Young, MOF-Old, and MOF-Young. It presents means and standard deviations for demographic characteristics (birth year, arrival year, age at arrival), education measures (years of schooling and education rank), and economic indicators (household income in 1972 and 1983, neighborhood SES in 1983 and 1995).

The table highlights differences between Old and Young arrivals, emphasizing age at arrival as a proxy for exposure to the Holocaust and early integration. Young arrivals were, on average, more educated, achieved higher education ranks, and later attained better household income and neighborhood SES. These patterns appear in both BEG and MOF groups. However, after controlling for birth year and country of origin, the differences in income and neighborhood SES largely disappear, as shown in Table 8.

**Table F.1: Summary Statistics for Holocaust Survivors by Age at Arrival**

| | Men | | | | Women | | | |
|---|---|---|---|---|---|---|---|---|
| | BEG | | MOF | | BEG | | MOF | |
| | Old | Young | Old | Young | Old | Young | Old | Young |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Birth Year | 1925 | 1936 | 1928 | 1938 | 1927 | 1936 | 1928 | 1938 |
| | (3.6) | (2.7) | (4.0) | (3.5) | (3.5) | (2.7) | (3.7) | (3.5) |
| Arrival Year | 1948 | 1948 | 1949 | 1949 | 1948 | 1948 | 1949 | 1949 |
| | (1.2) | (1.2) | (1.4) | (1.3) | (1.3) | (1.2) | (1.4) | (1.4) |
| Age at Arrival | 22.7 | 12.2 | 20.9 | 11.2 | 21.8 | 12.2 | 20.8 | 11.3 |
| | (3.8) | (2.5) | (3.8) | (3.2) | (3.6) | (2.5) | (3.7) | (3.2) |
| Education (years) | 10.4 | 13.3 | 10.7 | 12.4 | 9.6 | 11.8 | 9.6 | 11.8 |
| | (3.5) | (3.5) | (3.8) | (3.4) | (3.2) | (3.2) | (3.4) | (3.3) |
| Education Rank | 5.0 | 6.5 | 5.1 | 5.6 | 5.2 | 5.9 | 5.2 | 5.6 |
| | (2.6) | (2.8) | (2.7) | (2.8) | (2.3) | (2.6) | (2.4) | (2.6) |
| Household Income, 1972 | 109 | 109 | 93 | 94 | 107 | 118 | 88 | 95 |
| | (78) | (66) | (69) | (64) | (86) | (86) | (72) | (72) |
| Household Income, 1983 | 102 | 147 | 93 | 109 | 85 | 121 | 81 | 100 |
| | (126) | (141) | (116) | (118) | (109) | (134) | (109) | (116) |
| SES, 1983 | 14.3 | 14.8 | 13.7 | 14.1 | 14.5 | 15.2 | 13.4 | 14.0 |
| | (3.6) | (3.9) | (3.8) | (3.8) | (3.7) | (3.5) | (3.9) | (3.9) |
| Observations | 1,721 | 332 | 7,998 | 5,976 | 2,497 | 573 | 9,374 | 6,673 |

*Notes:* Entries are means of demographic and economic variables. Sslit by gender, reparation program (BEG, MOF), and age at arrival (Old $>$ 15; Young $\leq$ 15). The sample is restricted to Holocaust survivors born between 1920 and 1945 who emigrated from Poland, Romania, Czechoslovakia, and Hungary between 1946 and 1952. Education ranks are defined within birth cohorts. Household income is in thousands of NIS indexed to the 2023 CPI; neighborhood SES is the 1983 index scaled 1-20. Standard deviations are in parentheses.

## G Neighborhoods Socioeconomic Status and Social Mobility

This appendix provides empirical details for the analysis of childhood neighborhood SES and its relationship with IGM, as discussed in Section 7.3.

SES data are available for 1983 but not for 1972. The second generation analyzed here was born between 1955 and 1972, meaning that for many individuals the 1983 SES measure may not fully capture their childhood neighborhood conditions. To approximate earlier exposure, I imputed 1972 SES based on locality information for children who remained in the same place between 1972 and 1983. Because 1972 residency is reported at the locality level, while the 1983 SES index is based on statistical areas, a uniform assignment of SES across the entire sample was not possible. Therefore, SES in 1972 is imputed using the 1983 rank, but only for children who identified as stayers. This approach assumes residential stability among these individuals.

Appendix Figure G.1 displays estimated fixed effects for the imputed 1972 neighborhood SES from a regression of child education rank on father's rank, illustrating how local socioeconomic context relates to children's educational outcomes. Estimates are shown separately for children of MOF recipients and for the rest of the population. The BEG group is excluded due to limited observations. The figure includes only children born between 1955 and 1972 to fathers who immigrated between 1946 and 1952. Error bars represent 95% confidence intervals. These details emphasize that the fixed effects estimates reflect patterns within a stable and well-defined sample, minimizing the risk of bias due to migration or cohort differences.

The results reveal a strong positive relationship between neighborhood SES and children's educational rank, especially in higher SES clusters. Among MOF children, those raised in neighborhoods ranked 10–12 achieve education ranks 1.5–2 deciles higher than peers in the lowest SES areas. A similar, though slightly weaker, gradient appears for the rest of the population.

To assess whether the improvement in IGM among BEG recipients operates through neighborhood quality, Appendix Table G.1 presents a two-stage least squares (2SLS) estimation. The purpose of the 2SLS analysis is to evaluate whether neighborhood

SES mediates the effect of reparations on children's educational outcomes, rather than to identify a separate causal parameter. In this framework, BEG receipt serves as an instrument for childhood neighborhood quality. A larger 2SLS coefficient relative to its OLS counterpart would suggest that neighborhood SES captures an important mechanism through which reparations influence IGM. The validity of this approach rests on the assumption that BEG receipt affects child outcomes primarily by improving residential environments, an assumption that is plausible in this institutional setting but cannot be fully verified.

Several features lend credibility to using BEG receipt as an instrument for neighborhood SES. Israel's education system is publicly funded and largely tuition-free, limiting the potential for direct income effects on educational attainment. As shown in Figure 5, BEG recipients lived in higher SES neighborhoods at every parental education level, suggesting that reparations improved residential conditions rather than directly funding schooling. Because schooling assignment in Israel are typically attend neighborhood-based, these residential differences likely translated into better school and peer environments for children. Furthermore, BEG recipients exhibited higher home-ownership rates than MOF recipients (87 versus 82 percent), consistent with greater financial stability and enhanced ability to relocate to higher-quality neighborhoods. [23]

These institutional and behavioral patterns support the assumption that BEG receipt primarily influenced child outcomes through its effect on residential environments, which underpins the 2SLS identification strategy. Nevertheless, while the above factors strengthen the case that neighborhood upgrading mediates the effect of reparations on IGM, they cannot fully rule out other correlated mechanisms.

The 2SLS results for the full sample provide strong evidence in support of the mediating role of neighborhood SES. The reduced-form regression shows that BEG receipt is associated with an increase of 0.21 deciles in children's educational rank ($p<0.05$). The first-stage regression confirms that BEG recipients were significantly more likely to reside in higher SES neighborhoods, with an estimated coefficient of 0.68 ($p<0.01$) and $F=16.3$,

[23] Housing market data from subsequent decades reinforce this interpretation, consistently showing that high-SES areas were systematically associated with higher housing prices, suggesting that reparations likely facilitated residential upgrading.

indicating a sufficiently strong instrument. The second-stage regression indicates a strong positive effect of neighborhood SES on children's education (0.44, $p < 0.05$), exceeding the OLS estimate of 0.17. This pattern aligns with the hypothesis that reparations indirectly improved child outcomes by enabling access to better residential environments. Taken together, these results reinforce the conclusion that residential upgrading was a central mechanism through which reparations enhanced intergenerational mobility.

To asses robustness, the 2SLS analysis was replicated for the sub-sample of children who remained in the same locality between 1972 and 1983 (Appendix Table G.2). Both the first- and second-stage coefficients are smaller, and the first-stage F-statistic was reduced from 16.3 to 13.0. This attenuation likely reflects selection effects: stayers may differ systematically from movers, likely reflecting selection on unobserved characteristics such as mobility constraints or local attachment. Consequently, the restricted sample is not a perfect proxy for the full population, and its results should be interpreted with caution. Nevertheless, the persistence of statistically significant effects in the restricted sample strengthens the overall conclusion that neighborhood quality constitutes an important channel through which reparations enhanced intergenerational mobility.

**Table G.1: Effect of BEG Receipt and Neighborhood SES on Child's Education**

| | Reduced Form | OLS | First Stage | Second Stage |
|---|---|---|---|---|
| | Child Educ. Rank | Child Educ. Rank | SES 1983 | Child Educ. Rank |
| | (1) | (2) | (3) | (4) |
| SES 1983 | | 0.17*** | | 0.44** |
| | | (0.00) | | (0.21) |
| Father Educ. Rank | 0.29*** | | | 0.15** |
| | (0.01) | | | (0.07) |
| BEG | 0.21** | | 0.68*** | |
| | (0.09) | | (0.11) | |
| Daughter | -0.11** | -0.22*** | 0.03 | -0.23*** |
| | (0.06) | (0.04) | (0.07) | (0.07) |
| Observations | 11,535 | 28,277 | 13,558 | 8,943 |
| R-squared | 0.06 | 0.05 | 0.01 | — |
| *Controls:* Father's birth year, Father's arrival year, Father's birth country FE | | | | |
| First stage F statistic | — | — | 16.32 | — |

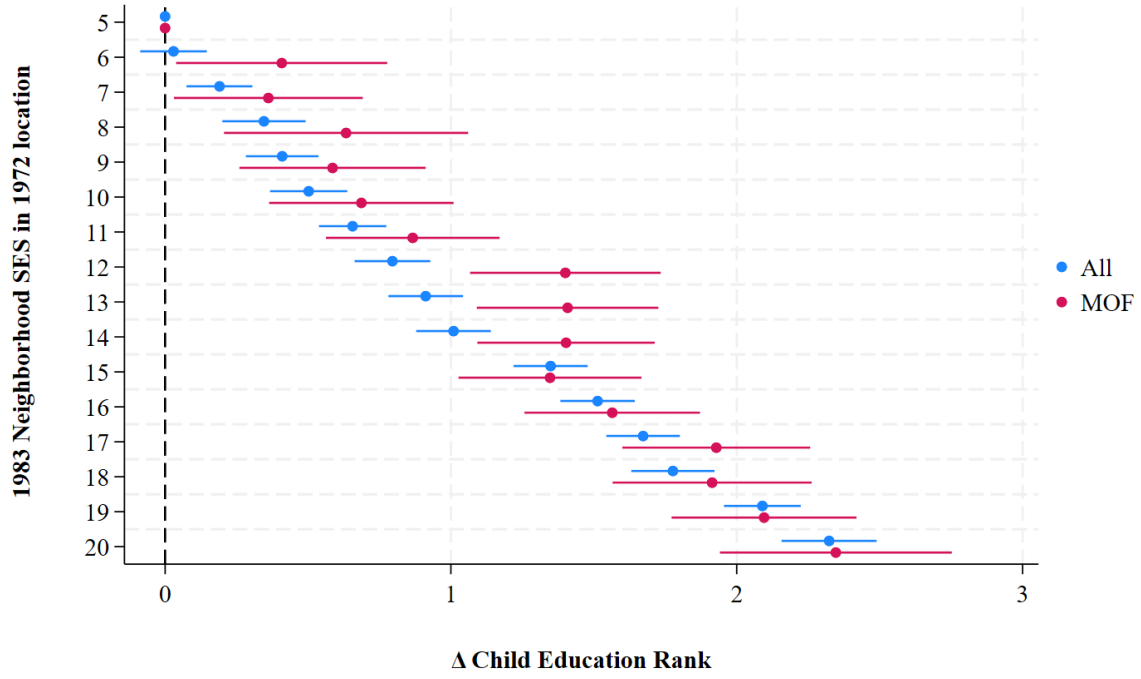
*Notes:* Entries are coefficients from regression estimates of children's educational attainment by parental BEG receipt status and neighborhood SES. Columns 1–4 report, respectively, 1 the reduced form of child education rank on BEG; 2 OLS of child education rank on neighborhood SES (1983); 3 the first stage regressing neighborhood SES on BEG; 4 2SLS of child education rank on SES instrumented with BEG. All models include controls for birth year and birth year squared, and fixed effects for father's birth country. Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

**Table G.2: Effect of BEG and Neighborhood SES on Child Educational Outcomes (Restricted Sample: Non-movers 1972–1983)**

| | Reduced Form | OLS | First Stage | Second Stage |
|---|---|---|---|---|
| | Child Educ. Rank | Child Educ. Rank | SES 1972 | Child Educ. Rank |
| | (1) | (2) | (3) | (4) |
| SES 1972 | | 0.17*** | | 0.53** |
| | | (0.00) | | (0.25) |
| Father Educ. Rank | 0.31*** | | | 0.11 |
| | (0.01) | | | (0.10) |
| BEG | 0.20** | | 0.74*** | |
| | (0.12) | | (0.13) | |
| Daughter | -0.25*** | -0.21*** | -0.15 | -0.20*** |
| | (0.07) | (0.04) | (0.08) | (0.10) |
| Observations | 7,011 | 1,9307 | 9,252 | 6,124 |
| R-squared | 0.06 | 0.05 | 0.01 | — |
| *Controls:* Father's birth year, Father's arrival year, Father's birth country FE | | | | |
| First stage F statistic | — | — | 13.01 | — |

*Notes:* Entries are coefficients from the same specifications estimated on households that did not move between 1972 and 1983, so neighborhood SES reflects childhood exposure. Estimates are otherwise comparable to the full sample. All models include controls for birth year and birth year squared, and fixed effects for father's birth country. Robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

**Figure G.1: Childhood SES and IGM**




*Notes:* This figure shows the relationship between childhood neighborhood SES (1972) and children's education rank. Points plot coefficients on SES fixed effects from regressions of child education decile on SES indicators; vertical bars show 95% confidence intervals. Results are reported for two groups: MOF (children of MOF recipients) and All (children from non-reparation households). BEG is excluded due to few observations at low SES. The sample includes children born between 1955 and 1972. All models include controls for birth year and birth year squared, and fixed effects for father's birth country.

## H A Calibration Exercise

This appendix confirms that the main results are robust to alternative parameterizations of the structural model. The findings confirm that the main results are stable across a wide range of assumptions, consistent with evidence from the literature on heritability and validated by descriptive statistics across exposure groups.

### H.1 Parameters and Definitions

Appendix Table H.1 summarizes the parameters of the structural model. It lists the five core parameters governing investment and endowment dynamics ($\alpha, \beta, h, \lambda, \rho$), along with the policy variable $R$ and the historical shock indicator *holo*. For each parameter, the table outlines its theoretical role, expected influence on the slope and intercept of the intergenerational relationship, and the calibration values used in the simulations. This overview also sets the stage for the following subsection, which assesses the robustness of model outcomes to variations in these parameters.

### H.2 Sensitivity Analysis

#### H.2.1 Investment and Endowment Weights ($\alpha$ and $\beta$)

Figure H.1 assesses the robustness of the model to alternative assumptions regarding the sources of human capital formation by varying the relative weights of parental investment ($\alpha$) and inherited endowments ($\beta$). The figure includes two sets of heatmaps: panels a–c compare High-exposure families with and without reparations, while panels d–f compare High and Low-exposure reparation recipients.

In both cases, the outcome is the gap in expected child education rank, calculated at the $25^{\text{th}}$, $50^{\text{th}}$, and $75^{\text{th}}$ percentiles of the parental education distribution.

Across all combinations of $\alpha$ and $\beta$, the estimated gaps remains strictly positive. This indicates that, *ceteris paribus*, children of highly exposed recipients families consistently attain higher education ranks, both relative to non-recipients and to less-exposed recipients, under all parameterizations.

The magnitude of the gap increases with higher values of $\alpha$, suggesting that model outcomes are more sensitive to the weight placed on parental investment. Variation in $\beta$ has a smaller quantitative effect, though the direction of the relationship is stable across the parameter space. Overall, the results confirm that the main findings are not driven by the specific parameterization of investment and endowment weights. The baseline calibration of $\alpha = 0.5$ and $\beta = 0.5$ represents a reasonable central case, as it yields patterns consistent with alternative specifications while maintaining internal and external consistency of the model outcomes.

### H.2.2 Heritability ($h$)

A central parameter in the structural model is the heritability rate ($h$), which governs the extent to which parental endowments are transmitted to children. In empirical work, the concept of heritability is often proxies by sibling correlation in outcomes, which captures similarities arising from shared endowments, whether genetic or environmental (Mogstad and Torsvik, 2022).

The baseline specification adopts $h = 0.7$, consistent with empirical estimates of cognitive and non-cognitive trait transmission reported in the literature (e.g., Björklund and Jäntti, 2020; Sacerdote, 2007). Appendix Table H.2 summarizes representative sibling and twin correlations in years of schooling. Reported estimates typically range between 0.3 and 0.7, with the upper bound observed in twin studies. This range supports the plausibility of the baseline assumption, $h = 0.7$, and motivate sensitivity checks for lower values of $h$.

To assess robustness, I vary $h \in \{0.3, 0.5, 0.7\}$ and examine predicted outcomes across three points of the parental education distribution ($25^{\text{th}}$, $50^{\text{th}}$, and $75^{\text{th}}$ percentiles). Appendix Figure H.2 presents the results for expected child education ranks across Holocaust exposure and reparation groups.

In all parameterizations, the ordering of groups remains stable: children of highly exposed reparation recipients attain the highest ranks, followed by low-exposure recipients, and then by non-recipients. Absolute attainment levels vary with the assumed heritability rate. Higher $h$ values reduce the dispersion in outcomes, reflecting the increasing dominance of inherited endowments relative to parental investment.

Appendix Table H.3 summarizes the corresponding gaps in expected child ranks between groups. The effect of reparations among highly exposed families declines modestly as $h$ increases (from approximately 2.6 to 2.0 deciles for children to low educated parent), whereas differences linked to Holocaust exposure conditional on receiving reparations grow with $h$ (from roughly 0.8 to 1.4 deciles).

Overall, the results demonstrate that while the magnitude of effects depends on the degree of heritability, the qualitative ranking of groups is preserved across all tested values. The choice of $h = 0.7$ thus represents a conservative and empirically grounded calibration that yields stable model outcomes.

### H.2.3 Responsiveness of parental investment to child endowments ($\lambda$)

In the baseline formulation, parental investment is specified as $I = I_0 + \lambda E$, where $\lambda > 0$ indicates reinforcing behavior—parents reinforce ability by investing more in higher-endowment children, while $\lambda = 0$ implies equal treatment across children. Allowing $\lambda < 0$ corresponds to compensatory behavior, where parents allocate grater resources to lower-endowment children. This mechanism relates to recent empirical work examining how parents adjust investments in response to differences in children's educational potential.[24]

Appendix Figure H.3 presents expected child ranks at the mean parental education level for values of $\lambda \in [-1, 1]$. Several patterns emerge. First, outcomes for High-exposure families with reparations are relatively stable across the range of $\lambda$. Second, outcomes for High-exposure families without reparation improves as $\lambda$ increases, since endowment-driven investment favors them when transfers are absent. Third, among Low-exposure families with reparation expected child ranks decline as $\lambda$ rises, implying that reparations are most effective when parental investments are less strongly tied to child endowments. Fourth, Low-exposure families without reparations remain persistently disadvantaged across all values of $\lambda$.

[24] See Mogstad and Torsvik (2022) for a discussion of reinforcement versus compensation in the transmission of inequality, and Sanz-de Galdeano and Terskaya (2025) for direct evidence on parental responses to sibling differences in genetic propensity for education.

Allowing $\lambda < 0$ yields an instructive counterfactual: disadvantaged families can outperform advantaged ones if parents systematically compensate weaker children. In this range, Low-exposure recipients even overtake High-exposure recipients, reversing the ranking observed in the empirical data. While conceptually useful, such compensatory behavior is unlikely to characterize survivor households, where limited resources and strong perceived returns to education likely led to reinforcing investment. The negative range is therefore included solely as a robustness check to illustrate sensitivity to intra-household allocation assumptions.

The calibration of $\lambda$ is supported by empirical group rankings at the mean father education level: High-exposure with reparation (6.20) $>$ High-exposure without reparation (5.85) $>$ Low-exposure with reparation (5.71) $>$ Low-exposure without reparation (5.48). This pattern is reproduced in the model for low positive values of $\lambda$. Setting $\lambda = 0.1$ offers a calibration that reproduces the empirical group ordering and ensures smooth model behavior around the baseline.

### H.2.4 Efficiency of parents' investment ($\rho$)

The parameter $\rho$ governs the interaction between parental education and investment when producing child human capital. Higher values of $\rho$ strengthen the complementarity between parental education and investments.

Appendix Figure H.4 plots expected child ranks at the mean parental education level for $\rho \in [0, 1]$. The results indicate that outcomes are broadly stable across the parameter space. High-exposure recipients consistently achieve the highest expected ranks, while Low-exposure non-recipients remain the lowest throughout. Increasing $\rho$ slightly raises outcomes for low-exposure recipients and modestly reduces them for high-exposure non-recipients, but the group ordering remains unchanged.

These results indicate that $\rho$ plays a secondary role in shaping relative outcomes. Whether the complementarity between education and investment is strong or weak, reparations continue to enhance mobility prospects for the exposed, and qualitative ranking of groups persists.

Calibration of $\rho = 0.1$ therefore provides a moderate level of complementarity consistent with empirical evidence, without overstating interaction effects.

### H.3 Conclusion

The robustness exercises presented in this appendix support the parameter choices adopted in the structural model. Across a wide range of plausible specifications, the qualitative relationships among exposure, reparations, and child outcomes remain stable. This consistency indicates that the baseline calibration reflects structural features of intergenerational mobility rather than results driven by arbitrary assumptions.

Parameters related to the transmission of endowments and the allocation of parental investment ($h$, $\lambda$, $\rho$) influence the magnitude of simulated outcomes but do not alter their direction or relative ranking. The chosen values therefore provide an empirically grounded and theoretically coherent benchmark. They ensure that the model reproduces realistic behavioral mechanisms, such as constrained parental investment and the moderating effect of income transfers, while maintaining internal consistency and interpretability.

**Table H.1: Structural Model Parameters**

| Parameter | Role | Effect on Rank-Rank Slope | Effect on Rank-Rank Intercept | Baseline Value |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| $\alpha$ | Productivity of parental investment | Slope increases as investment raises child outcomes | $Educ_1$ and $Educ_2$ increase | 0.50 |
| $\beta$ | Effect of endowment on education | Slope increases when endowments transmit via $h$ | Higher mean education; constant rises | 0.50 |
| $h$ | Heritability of endowments | Stronger link from parent to child endowment raises slope | Small direct effect unless $\beta$ is large | 0.70 |
| $\lambda$ | Sensitivity of investment to endowment | Complementarity with endowment raises slope | Constant can move with endowment mix | 0.10 |
| $\rho$ | Interaction of parental education and investment | Amplifies effect of $Educ_1$ on $Educ_2$; slope rises | Higher $Educ_2$, especially at high $Educ_1$ | 0.10 |
| $R$ | Reparation transfer | Slope can fall if transfers target low $Educ_1$ | Constant rises as $Educ_2$ shifts up | Yes/No |
| *holo* | Exposure to Holocaust | Weaker $Educ_1$–$Educ_2$ link lowers slope | Lower $Educ_1$ reduces constant | High/Low |

*Notes:* Entries summarize the structural model parameters: parameter's role, its qualitative effect on the IGM slope (relative mobility) and intercept (absolute mobility), and the baseline value. $Educ_1$ is parental education; $Educ_2$ is child education. $R$ is the reparation transfer indicator (Yes/No); "High/Low" denote Holocaust exposure scenarios. Related sensitivity analyses for $\alpha$ and $\beta$, $h$, $\lambda$, and $\rho$ appear in Figures H.1, H.2, H.3 and H.4.

**Table H.2: Selected Evidence on Intergenerational Correlation from the Literature**

| Country | Study | Brothers | Sisters | Mixed |
|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) |
| *Panel A: Siblings* | | | | |
| Norway | Björklund et al. (2009a) | — | — | 0.41 |
| Denmark | Bredtmann and Smith (2018) | 0.31 | 0.39 | 0.33 |
| Sweden | Björklund and Jäntti (2012) | 0.43 | 0.40 | — |
| Sweden | Lindahl (2010) | 0.41 | 0.43 | — |
| USA | Mazumder (2008) | — | — | 0.60 |
| *Panel B: Monozygotic twins* | | | | |
| Sweden | Björklund and Jäntti (2012) | 0.75 | 0.73 | — |
| Australia | Miller et al. (2001) | 0.65 | 0.70 | — |
| USA | Behrman and Taubman (1989) | 0.75 | — | — |

*Source* Björklund and Jäntti (2020).

*Notes:* This table summarizes selected findings on intergenerational correlation in educational outcomes from the existing literature. Entries are within-family correlations from the cited studies. Panel A reports sibling correlations; Panel B reports monozygotic twin correlations. The magnitudes provide empirical support for calibrating endowment persistence at $h = 0.7$ in the structural model.

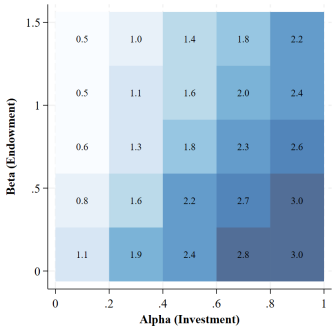
**Table H.3: IGM Gaps by Heritability and Parent Rank**

| | High Exp: Yes - No | | | Yes: High Exp - Low Exp | | |
|---|---|---|---|---|---|---|
| | $h$=0.3 | $h$=0.5 | $h$=0.7 | $h$=0.3 | $h$=0.5 | $h$=0.7 |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| $\theta_{25}$ | 2.70 | 2.43 | 2.06 | 0.83 | 1.30 | 1.47 |
| | (0.07) | (0.07) | (0.06) | (0.12) | (0.11) | (0.09) |
| $\theta_{50}$ | 2.44 | 2.06 | 1.65 | 0.65 | 1.01 | 1.15 |
| | (0.06) | (0.06) | (0.05) | (0.08) | (0.07) | (0.06) |
| $\theta_{75}$ | 2.17 | 1.70 | 1.24 | 0.46 | 0.72 | 0.83 |
| | (0.09) | (0.07) | (0.05) | (0.07) | (0.06) | (0.05) |

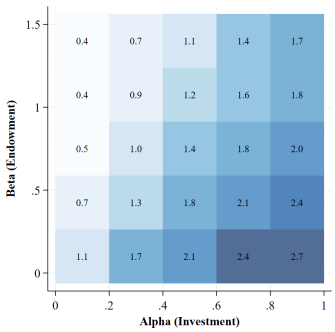
*Notes:* Entries are gaps in expected child education rank between groups, evaluated at parent ranks $\theta_{25}$, $\theta_{50}$, and $\theta_{75}$. Columns 1–3 report, within the High exposure group, the difference between reparation recipients (Yes) and nonrecipients (No). Columns 4–6 report, within recipients (Yes), the difference between High and Low exposure. Heritability $h$ takes values 0.3, 0.5, and 0.7 across columns as indicated. Values are implied by rank-rank regressions under the structural model with other parameters at baseline values. Positive numbers favor the first group named in each header. Standard errors are in parentheses.

**Figure H.1: Sensitivity of IGM to Investment ($\alpha$) and Endowments ($\beta$)**

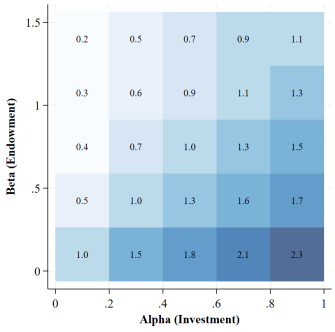
High Exp. Yes-No Reparation




**(a)** $\theta_{25}$

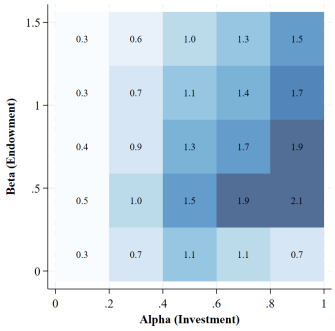



**(b)** $\theta_{50}$

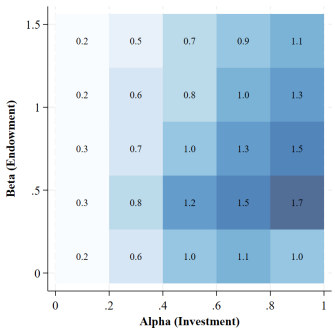



**(c)** $\theta_{75}$

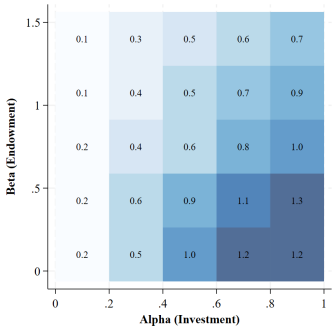
High-Low Exp. with Reparation




**(d)** $\theta_{25}$



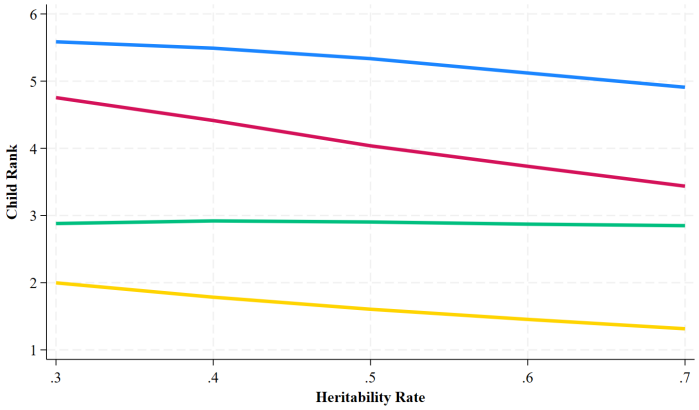

**(e)** $\theta_{50}$



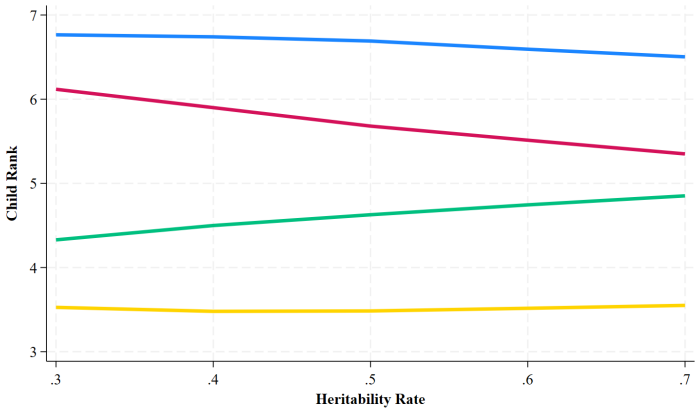

**(f)** $\theta_{75}$

*Notes:* Each heat map reports the difference in expected child education rank for a given $(\alpha, \beta)$ pair. Panels (a)–(c) show the gap between High-Exposure families with and without reparations, defined as $\mathbb{E}[\text{child education rank} \mid R = 1] - \mathbb{E}[\text{child education rank} \mid R = 0]$. Panels (d)–(f) show the gap between High- and Low-Exposure reparation recipients, defined as $\mathbb{E}[\text{child education rank} \mid holo = 1] - \mathbb{E}[\text{child education rank} \mid holo = 0.5]$. Each panel corresponds to a parental education percentile: $\theta_{25}$, $\theta_{50}$, and $\theta_{75}$, respectively. Numbers in cells show the magnitude of the gap in expected child education rank; darker shading indicates larger gaps. All other parameters are fixed at baseline values. The horizontal axis ($\alpha$) is the parental investment coefficient in education accumulation, and the vertical axis ($\beta$) is the endowment coefficient.

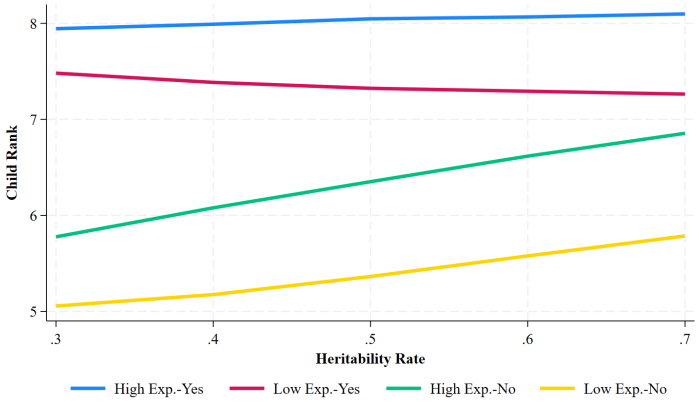
**Figure H.2: Expected Child Rank under Alternative Heritability Values**




**(a)** $\theta_{25}$



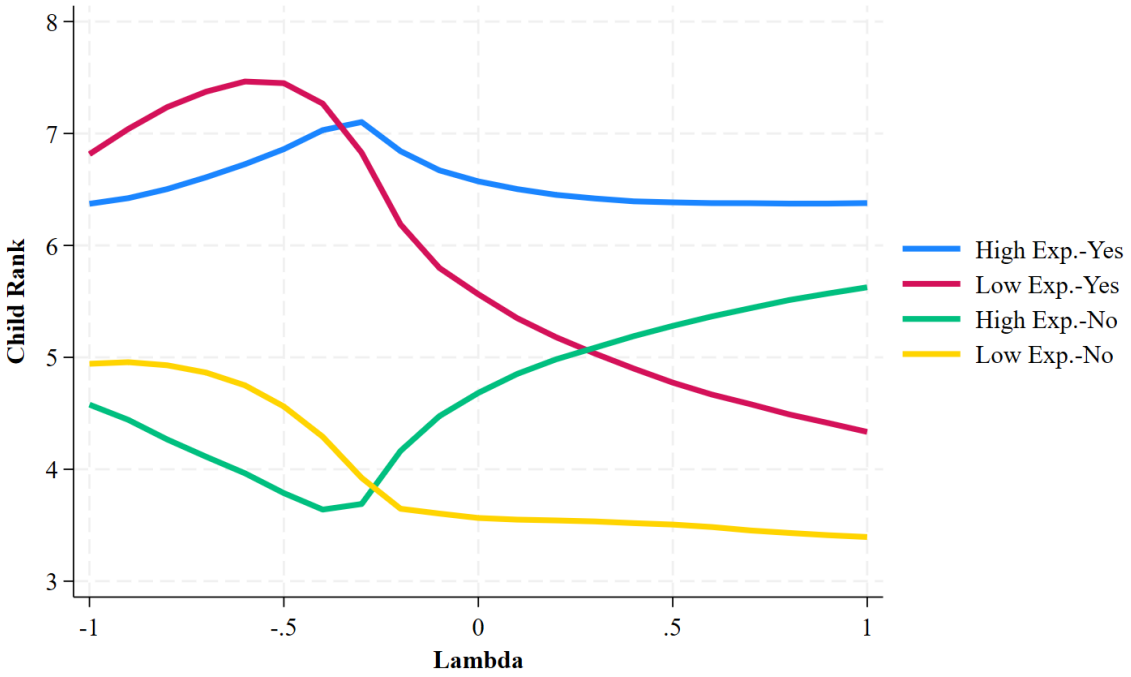

**(b)** $\theta_{50}$




**(c)** $\theta_{75}$

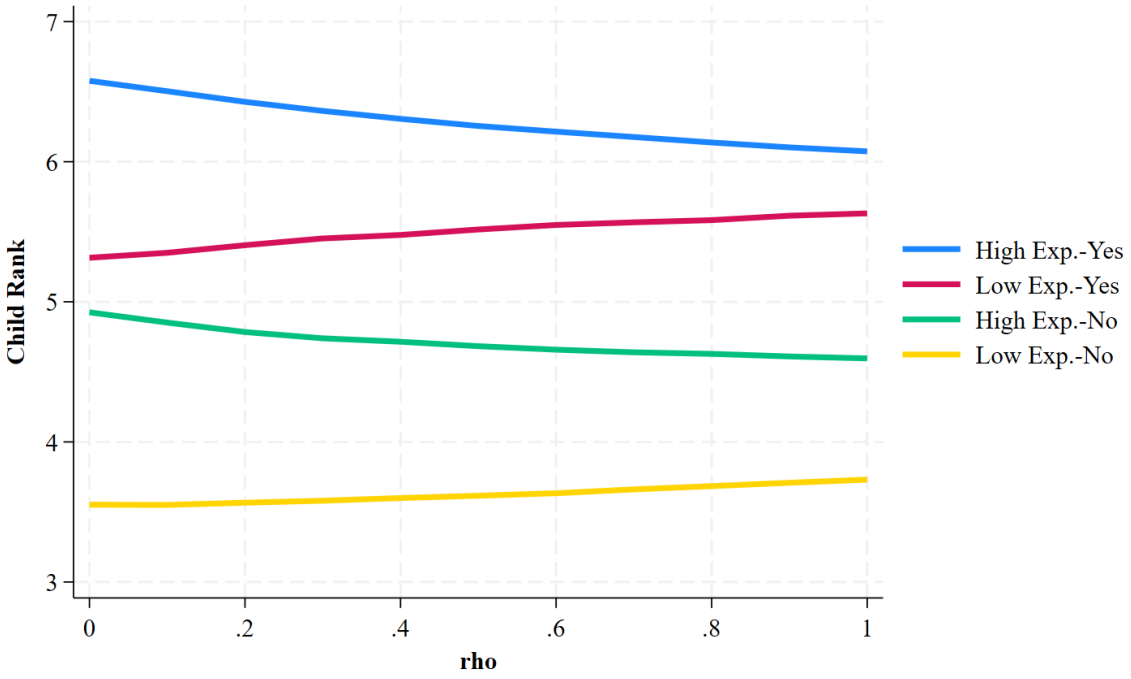
*Notes:* Panels (a)–(c) report model-predicted child education rank at parental ranks $\theta_{25}$, $\theta_{50}$, and $\theta_{75}$, where $\theta_p$ denotes the $p^{\text{th}}$ percentile of the parental education distribution within birth cohort. Four groups defined by Holocaust exposure (High vs. Low) and reparation receipt (Yes vs. No). the heritability parameter $h$ varies across plots; all other parameters remain at baseline values. Predictions come from separate rank-rank regressions of child rank on parent rank

**Figure H.3: Expected Child Rank under Alternative λ**
(Investment responsiveness to child endowment)




*Notes:* This figure shows model predicted child education rank evaluated at the mean parental education ($\theta_{50}$). Four groups defined by Holocaust exposure (High, Low) and reparation receipt (Yes, No).Values come from rank-rank regressions run separately within each group. The parameter $\lambda$ governs how parental investment responds to the child endowment, $I = I_0 + \lambda E$ with $\lambda > 0$ reinforcing, $\lambda = 0$ equal treatment, and $\lambda < 0$ compensatory. Other parameters remain at baseline values.

**Figure H.4: Expected child rank under alternative $\rho$**
(Efficiency of parental investment)




*Notes:* This figure shows model predicted child education rank evaluated at the mean parental education ($\theta_{50}$) for values $\rho \in [0, 1]$. Lines correspond to the four groups used throughout (High Exp.–Yes, Low Exp.–Yes, High Exp.–No, Low Exp.–No). $\rho$ governs the interaction between parental education and investment in the model; other parameters remain at baseline values.