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by

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Abstract

During WWII some 70,000 Finnish children were evacuated to Sweden and placed in foster families. The evacuation scheme limited sharply the scope for

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selection into foster care based on background characteristics. A first-come first-served policy was applied where the children were assigned a running number and processed anonymously. Using register and survey data I examine the extent to which the foster environment affected later life outcomes of the Finnish child evacuees. The results show that nurture - the socioeconomic environment at early stages of life - has an important effect on schooling, labor attachment and risky behavior.

JEL: F22, J24, J62, I2

Keywords: child evacuation, nurture effect, intergenerational transmission

The importance of the rearing environment in shaping the future outcomes of a young child is one of the central questions in the social sciences and policy making. The study of the impact of environmental factors on children's outcomes is non-trivial due to the difficulty of sorting out the genetic factors and fetal environment from postbirth factors. Since it is ethically unjustifiable to create the ideal laboratory conditions necessary to analyze the matter, researchers are confined to natural experiments.

During WWII some 70,000 Finnish children aged between one and ten years were evacuated to Sweden and placed in foster families. The evacuations were conducted between 1941 and 1946 by a large evacuation scheme with organized logistics on both sides of the border. A first-come first-served policy was applied where the children were assigned a running number and processed accordingly. Each contingent of evacuees went through several stages along the journey, where inequalities prior to evacuation were leveled out and the evacuees were re-grouped and split into smaller entities, a process that sharply limited the scope for selection into foster care based on background characteristics. The average age at evacuation was five years and the average time spent in foster care was roughly two years.

In this paper I examine how a child's intergenerational transmission and human capital formation are determined by a temporary switch in the socioeconomic family environment. Based on the design of the operation and the anecdotal evidence it is reasonable to assume that the children were sorted into foster families in a random fashion. I exploit preintervention data on background characteristics to test this assumption. The results show that conditional on Swedish proficiency prior to

evacuation and gender, the assignment to foster family was independent of the child's background characteristics.

I use a random sample drawn from a war time registry where detailed preintervention data on the evacuees is stored and complement this data with a survey collecting information about the foster and biological family environment and a wide range of outcomes.[1]

My principal outcome measure is school track choice, i.e., the choice of going to general secondary school (preparing for academic studies) after fourth grade of primary school or continuing the primary school track (preparing for vocational studies).[2] I find that a one standard deviation increase in foster father's occupation-based socioeconomic index (e.g. a move up from being a sheet metal worker to becoming a bookkeeping assistant) increases the probability of going to secondary school by 5.2 percentage points. Also, the results show that the temporary rearing environment during childhood accounts for up to 30 percent of a child's intergenerational transmission of schooling in the form of school track choice. This is a large impact considering the amount of time spent with the foster parents. Since school track choice is made at age eleven there are nine months prebirth and ten years postbirth during which parental input has an impact. The foster parents had an impact during two of the ten years postbirth and no impact via biology. Hence, assuming that the parental inputs add up in a linearly additive way, one would expect the foster family input to account for less than 20 percent of the environmental share of intergen-

[1] The survey was conducted in September 2005. In total, 887 surveys were received back with a response rate of above 60 percent.

[2] School starting age was seven years in Finland and Sweden in 1940s, so the children were tracked at an age of eleven years.

erational transmission of schooling. Previous research suggests that the postbirth environment accounts for less than half of the total intergenerational transmission (genetic factors included), implying a less than 10 percent contribution by the average foster family input to the total intergenerational transmission of school track choice. In light of this, I find a substantial impact of a temporary switch in the childhood rearing environment on school track choice. The results also show that parental input has a larger impact on schooling for girls than it has for boys. I also find that, for men, a one standard deviation increase in foster father's socioeconomic index leads to a 5.3 percentage points lower probability of being unemployed.

The novel result that this paper provides is that a relatively short lasting switch in the early childhood environment may have substantial effects on later life outcomes. This result has important implications for policy. For instance, early childhood interventions may not necessarily need to be long lasting to have important effects: A two-year intervention into a child's environment may make a substantial difference for the cognitive development of the child.

Relation to the Literatures on Nature and Nurture and Early Life Environment - Later Life Outcome

This paper contributes to the intergenerational transmission literature that seeks to disentangle the parents' environmental influences from the prebirth environment (genetics and the fetal environment) of the child. This strand of literature (Das and Sjogren 2002; Plug and Vijverberg 2003; Plug 2004; Björklund, Lindahl, and Plug 2006 (henceforth, BLP); Sacerdote 2007) uses data on adopted children to pin down

the part of postbirth effects that are orthogonal to prebirth effects. The argument goes as follows: If adopted children share only their parents' environment but not their genes and fetal environment, any relationship between the child's later life outcomes and the adoptive parents is driven by the influence the parents have on their children's environment. Potential selectivity in the placement of children is to my knowledge dealt with in only two studies. Sacerdote (2007) shows empirical evidence for the random assignment of Korean American adoptees to adoptive families and BLP use information on both adoptive and biological parents to control for the impact of selective placements.[3] By estimating intergenerational transmission coefficients, these two studies find that both adoptive mother's and father's schooling and income matter for the child's schooling outcomes, although more so for their schooling than for income. Rather strikingly, their results show that biological mother's schooling and father's income have twice the effect of foster mother's schooling and father's income.

The analysis in this study is also related to the literature on neighborhood effects on the creation of human capital. Kling, Liebman, and Katz (2007) find, using data from a randomized re-placement scheme, that important neighborhood effects exist for some groups, e.g. teenagers.[4]

By studying environmental effects on outcomes that span up to 65 years, I am able to address questions on the individual's health, labor market outcomes, fertility, and marriage with little truncation in the data. Hence, this paper is also contributing to

[3] BLP find in their data evidence for selective placement effects in the form of a positive association between background characteristics of biological parents and adoptive parents.

[4] Also Oreopolous (2003), Edin, Fredriksson, and Åslund (2003), and Gould, Lavy, and Paserman (2004) have done work along these lines.

the study of long-run effects of the early childhood environment. To this date I know of only one study examining long-run outcomes that span almost a life time.[5] Gould, Lavy, and Paserman (2009) exploit the operation to airlift Yemenite immigrants to Israel in 1949 which randomly placed them across the country, to study the long-run consequences of early life environment some sixty years later. They find that children who were placed in a good environment outperformed their less fortunate compatriots in a number of dimensions. They were, e.g., more likely to obtain higher education, marry at an older age and have fewer children.

This paper contributes to the existing nature and nurture and early life environment - later life outcome literatures in the following three ways. First, I exploit register data on the age at evacuation, duration of stay with the foster parents, and survey data on whether the foster parents differentiated between foster children and foster siblings to control for these three factors when estimating environmental effects. This allows me to relax two strong identifying assumptions that BLP and Sacerdote (2007) make: (i) They assume that the children are adopted as newborns. Since adoption-at-birth is unrealistic and numerous studies point to a causal relationship between early life environment and later life outcomes, controlling for age at intervention is key; (ii) They assume that parents do not differentiate between adoptive children and their adoptive siblings.[6] Second, even though I am not able to decompose intergenerational transmission coefficients into prebirth and postbirth components due to the temporary nature of the intervention (all children in my sam-

[5] Almond (2006) looks at the effect of prebirth environment at outcomes that span up to 60 years.

[6] BLP provide robustification checks that show, that the bias in pre- and postbirth estimates when not controlling for age at adoption seems to be small.

ple returned to their biological family in Finland after WWII), it may, from a policy perspective, be of even more interest to look at how a temporary switch in the rearing environment affects later life outcomes. Most policy relevant interventions into children's environment are temporary by nature and do not last into adulthood, as adoption does, and in this sense, my estimates may give a more realistic upper bound estimate of an intervention into a child's early life environment. Third, because of the external shock (i.e., the war) that caused the need for the evacuation program and the large scale mobilization of foster families on short notice, both biological families and foster families are expected to be less a selected group of families as compared to the ones in adoption data.[7]

The remainder of this paper is organized as follows. The next section presents the historical background of the operation to evacuate Finnish children to Sweden and describes the evacuation scheme. Section II describes the data and the empirical strategy. Section III tests for whether the data accord with the anecdotal evidence of random placement of the evacuees into foster families. Section IV presents the empirical estimates of the effect of the foster family environment on schooling and a number of alternative later life outcomes. Section V presents robustness checks and Section VI concludes the paper.

[7]The war caused adverse conditions for children who came from the whole range of pre-war socioeconomic backgrounds. Many professionals sent their children away, as is seen from the descriptive statistics in Section (II.D).

I Historical Background

Finland fought three wars during World War II: The Winter War (November 1939 – March 1940) against the Soviet Union, the Continuation War (June 1941 – September 1944) against the Soviet Union, and finally, the reluctance of German troops to leave Finnish territory after the armistice with the Soviet Union led to brief encounters in Lapland. The last foreign troops had withdrawn from Finland by April 27, 1945. Despite Finnish collaboration with the Axis Powers during WWII, Finland's resistance against Stalin's Red Army gave rise to feelings of sympathy in many countries. Food and material aid was received from foreign organizations and credit was granted by several countries.

In Sweden, a civilian movement to help Finland, called "Finland's cause is our cause", emerged within days after the breakout of the Winter War.[8] One of the most diplomatic ways for Swedish civilians to participate in helping the Finnish people was to act as foster parents to those Finnish children who were most exposed to the adversities of war. The idea to evacuate Finnish children to Swedish families emerged from the private initiative of Maja Sandler, the wife of the then Swedish Minister of Foreign Affairs, Rickard Sandler.

As the Continuation War broke out in June 1941, the plan of a large scale operation for evacuating Finnish children to Sweden was put into action. In Sweden, a voluntary organization called the Support Committee of Help for Finnish Children (henceforth "the Placement Committee") was established, and a large network of

[8]The slogan was coined by the author and journalist Olof Lagercrantz, who wrote the pamflet "Finland's cause is our cause" and had 600,000 copies printed and distributed to the Swedish civilian population.

families ready to accommodate child evacuees was created.[9] Shortly after, negotiations regarding the transfer of children to Sweden started and on September 2, 1941, The Committee for Transporting Finnish Children to Sweden (hereafter called "the Evacuation Committee") was established in Finland under the auspices of The Ministry of Social Affairs. The Evacuation Committee was granted funding by the Finnish government for organizing the logistics of the evacuation scheme and for covering the travel expenses of the evacuees.[10] Although the Swedish government covered part of the transportation expenses, the main part of the financial support on the Swedish side came through private fund raising.

The Evacuation Committee designed the evacuation scheme and carried out the major part of the evacuations made between 1941 and 1946.[11] The official motives for a mass evacuation of children were, as stated by the Evacuation Committee, that children who were particularly exposed to the various adversities of war should be given a better rearing environment. At first, each Finnish county was granted a quota of evacuees, but restricting the selection of participants to the stated quotas proved difficult as fear for air raids spread among the urban population and food became scarce. The original eligibility criteria were the following: 1. Children of relocated Karelian families[12] 2. children whose fathers were wounded in battle 3. children who

[9] No financial compensation for accomodating Finnish children was ever promised to the families, and none was ever going to be rewarded either for that matter. In other words, accomodating evacuees was based on purely philantropic grounds.

[10] The word comittee is rather misleading in describing both the Finnish and the Swedish organizations, as they cared for all the executive and organizational tasks.

[11] Most evacuations were made in the winter between 1941 and 1942 and in 1944.

[12] Being the border region between Finland and the Soviet Union, Karelia was the region most adversely affected by the war. Roughly 400,000 people, virtually the whole Karelian population, had to be relocated to other regions of Finland already in 1940 as a consequence of the Moscow Peace Treaty between the Soviet Union and Finland, that handed Karelia to the Soviet Union.

had lost their home in bombings 4. children whose father's had died in war or who had lost their parents in bombings. In January 1942, the criteria were expanded to comprise children from large families, and children whose mothers were working; also children who resided in towns that were potential targets for air raids. This latter criterion applied, in practice, to most eastern and southern towns of Finland, where hence most children were considered eligible. At first the objective was to send preschoolers. The age criterion proved difficult to apply in practice due, for instance, to the difficulty to age-discriminate between siblings. Statistics show that roughly half of the children were past school starting age by the time of evacuation.

In Sweden, the Support Committee established a placement scheme and took over all administrative and financial matters on the Swedish side of the border. Fortunately (for me), documents such as all minutes of both aforementioned committees' meetings and descriptive statistics of the evacuation are stored in the National Archives of both Finland and Sweden. It is thus a fairly simple task to construct a picture of the evacuation scheme and the way the evacuations were conducted. Sections A.1 and A.2 in Appendix A describe the stages of the evacuation from children's "biological" home to their final placement in foster care in Sweden.

The child transfers during the Continuation War can be divided into two waves. During the first wave, from September 1941 to June 1943, 22,398 children were evacuated through the Evacuation Committee. The second wave of evacuations took place in spring 1944, first during the bombings of Helsinki, and later that same spring after a massive Soviet offensive on the Karelian isthmus had begun. During the second evacuation wave, in 1944, 29,268 children, some of which were re-evacuees

who had been claimed back in 1943 during a longer period of trench warfare, were evacuated to Sweden. In total 48,628 children were evacuated to Sweden by the Evacuation Committee. Apart from the evacuations supervised by the Evacuation Committee, roughly 10,000-15,000 children were sent to Sweden independently from the official evacuation program through private bilateral organizations and to family and acquaintances. In total, it is estimated that roughly 65,000-70,000 children spent between one and five years (on average 2 years) in foster care in Swedish families during WWII. The total amount of evacuees equals the size of one Finnish cohort during the 1930s.

In this study, I restrict the analysis to the children who were evacuated within the official evacuation scheme, i.e., the population for the study consists of those 48,628 children who were evacuated by the Evacuation Committee. Sections A.1 and A.2 in Appendix A show that the anecdotal evidence on the course of events that took place between separation from the biological parents to the final placement in foster families supports the assumption of random assignment of foster parents with respect to all background characteristics except for gender and age at evacuation.

The description of the events during the transportation to the final destination suggests that the children were processed anonymously according to the information provided on an identification plate hanging around their neck, i.e., an assigned running number, name and gender, and re-shuffled randomly into smaller groups at several stages of the evacuation. By the time the children reached the last leg of their transportation, the inequalities in clothing, cleanness, and nutrition are supposed to have been levelled out, and thus to have made any inference of social background

based on appearance difficult.

The evacuation scheme was carried out with exemplary orderliness taking into account that it was largely run by voluntary forces. The random assignment was achieved by the deliberate objective to process the evacuees according to their assigned running number and not according to socioeconomic status or kin.

I will in Section (III) test the balancing of the foster families' socioeconomic status on the background characteristics of the evacuee. Important for the design of the study is that the empirical evidence supports the anecdotal evidence presented above, i.e., that the assignment into foster families is independent of any other background characteristics than the ones discussed above. This evidence shows that, conditioned on demographic characteristics (such as gender and age at evacuation), there existed a temporary rearing environment for the children unrelated to the child's prenatal characteristics.

II Data and Empirical Framework

A The Econometric Model

The relation between socioeconomic family background and schooling is nontrivial due to the difficulty to sort out the underlying contributions of nature (prebirth environment) from the nurture effects (postbirth environmental factors). My research design does not allow me to decompose intergenerational transmission into pre- and postbirth factors in the same fashion as the studies using adoption data (BLP and Sacerdote (2007)), which make the identifying assumption that the children move to

their adoptive parents immediately after birth. However, since most interventions into children's environment are temporary, it may, in terms of external validity, be even more interesting to look at the size of the effect of a temporary switch in the rearing environment on a child's future outcomes.

I follow the same empirical strategy as BLP and Sacerdote (2007) in that I relate child outcomes to parental inputs and estimate intergenerational transmission coefficients. I include both foster and biological family characteristics in the estimating equation and show empirically in section (III) that the children were randomly assigned to foster families. My model explains schooling y of person i, who was assigned a foster family in Sweden with socioeconomic status F_i, and whose own biological family had socioeconomic status B_i, with the following equation:

$$y_i = \lambda_0 + \lambda_1 F_i + \lambda_2 B_i + \rho \mathbf{C}_i + \delta \left(F_i \times \mathbf{C}_i \right) + u_i \tag{1}$$

Here $\mathbf{C}_i$ is a vector of controls for age at, and duration of, exposure to foster family input. A dummy whether the foster family differentiated between the inputs to foster children and foster siblings is also included in $\mathbf{C}_i$ (non-differentiation=1). The error term u_i represents an unobserved child-specific characteristic assumed to be uncorrelated with both F_i and B_i. Under the assumption that no sorting existed, or that all background characteristics that the potential sorting was based on, are controlled for, the key explanatory variable, F_i, is uncorrelated with both B_i and u_i. Thus, I obtain an unbiased estimate of λ_1 even without controlling for B_i. However, B_i is included since inference on the relative importance of the foster family and biological family inputs is key to the analysis that this paper contributes to. Section

III tests empirically the non-sorting assumption.

In the simplest form of the estimating equation, where controls are excluded, I estimate λ_1 and λ_2 and interpret them as transmission coefficients of foster family and biological family input, respectively. I follow the intergenerational transmission literature, and the recent adoption literature, and discuss the coefficients as associations instead of causal effects.[13] I relate their magnitude to the coefficient of B_i in regression $y_i = \alpha + \beta B_i + u_i$ for a random sample of children who did not experience a switch in their rearing environment during the war, i.e., nonevacuees. This is the standard version of the transmission model, used widely in the literature on intergenerational mobility.[14] The estimated intergenerational transmission coefficient β represents a combined effect of different mechanisms, including genetic inheritance, fetal environment, and the family environment in which the child grew up. In line with the adoption data literature, my estimate for β is comparable with the sum of the estimates for λ_1 and λ_2 if equation (1) is taken literally. The analysis remains the same when adding the control variables and interactions, although instead of λ_1 the marginal effect of F_i becomes $\lambda_1 + \delta \mathbf{C}_i$ and is evaluated at the means of the control variables.

The sample of nonevacuees was constructed by matching three individuals to every evacuee based on demographic characteristics (age within one month's accuracy, gender, mother tongue and municipality of birth).

The model in its simplest form can be estimated with ordinary least squares.

[13] A causal interpretation of the results is complicated by the fact that parental socioeconomic characteristics are correlated with neighborhood and school quality and a list of other socioeconomic factors, which are intertwined with each other.

[14] See Solon (1999) for a review.

As my schooling measure is binary, more exactly, the school track choice, i.e. the choice of going to general secondary school (preparing for academic studies) after fourth grade of primary school or continuing the primary school track (preparing for vocational studies), I am referred to a model of discrete choice.[15]

B Data and the Survey

In order to estimate equation (1) I need four types of information about each evacuee: (i) the socioeconomic background of the evacuee's biological family; (ii) the socioeconomic background of the evacuee's foster family; (iii) information about the duration of the evacuation and the exact age at evacuation; (iv) the evacuee's later life outcomes. To that end we[16] combined register data on the evacuees with a survey conducted for a random sample of the child evacuees.

Register data dating back to WWII on the biological family background, on age at evacuation, and duration of evacuation (points (i) and (iii)) are available in the Child Evacuee Registry at the National Archives of Finland. In this register, an evacuee card is stored for each of the 48,628 Finnish children who were sent through the official evacuation scheme and were returned to Finland. We drew a random sample of 1,931 evacuee cards.[17] In order to obtain data on the evacuee's foster family background and her later life outcomes (points (ii) and (iv)), we conducted a survey for our sample.

At the Population Register Centre in Finland (PRCF) and Swedish Tax Agency

[15] The Finnish two-track school system is described in subsection (C).

[16] A multidisciplinary team of researchers from University of Helsinki and I.

[17] The sample does not contain any siblings due to the sampling method, i.e. we drew every twentieth card from the alphabetically ordered card register.

(Skatteverket) we identified 1,157 individuals (60 percent of the original sample) from our original evacuee card sample as still alive and residing in Finland or Sweden as of June 2005. Two important reasons caused the decline in the sample size for the survey. First, the population registers and social security numbers were introduced in Finland during the last years of the 1960s. This means that persons who had died or changed citizenship pre-1970 were not identified by the PRCF.[18][19] Second, we were only able to identify those expatriates living in Sweden as of 2005.[20] We are particularly concerned about identifying those who emigrated to Sweden because in the 1960s, some 300,000 individuals in their twenties, i.e., a substantial part of the Finnish war time cohorts entering the work force, emigrated to Sweden in search for work. Thus, in order to avoid attrition, it is of utmost importance to include the expatriates in the data.

Another potential source of selection is the adoption of evacuees by their foster families. In total 5,380 evacuees belonging to our base population were adopted after the war by their foster parents. However, because of difficulties to identify these individuals we draw our sample from the evacuee card register that contains only those children who were returned to their biological families after the war. A

[18] A followed up 10 percent sample of the Finnish Census of 1950 by Statistics Finland reveals, that for that sample, the maximum identification rate (1950 base population-deaths-expatriates) from the 1970 years population register is 74.5 percent. For our sample the equivalent identification rate is 77 percent.

[19] Table C-2 in Appendix C presents results from a regression where identification is regressed on background characteristics of the evacuee. Age at evacuation, being female (perhaps a proxy for longevity), and being an out-of-wedlock child were the statistically significant determinants of identification.

[20] Skatteverket (The Swedish tax authority) to identified for us the ones who, by the PRCF, are reported to have moved to Sweden or to an unknown destination country. Riksskatteverket was able to identify in total 213 individuals in our sample living in Sweden as of August 2005.

random sample ($n = 120$) of the adopted evacuees' evacuee cards (stored in a separate register at the National Archives of Finland) shows that they were on average from lower socioeconomic background, and more often from shattered families than their peers who returned home.[21] Without information on these children's foster family characteristics, or on their outcomes, it is however hard to draw conclusions about the direction of the bias that this selection in our data may cause. May it suffice to say that for the estimates of foster family input to be upward biased, the adopted children who were placed in families of high (low) social class would have had to underperformed (outperformed) their peers who returned to their biological families. While conditioning on biological family background, this scenario is highly unlikely.

The survey was conducted in September 2005. After a second reminder, 752 questionnaires were returned with a response rate of roughly 65 percent.[22] Table C-3 in Appendix C presents the results from a probit regression of a dummy for responding to the survey against background characteristics. The propensity to respond does not balance on all background characteristics. For example, females and those, who had been subject to air raids are overrepresented in the sample. It is reassuring though that characteristics such as having been evacuated as a child from the war zone, living in a city during the war, and the father having died in war - all arguably socioeconomic characteristics - do not affect the response probability. Although the response rate bias of my coefficients is likely to be modest due to the high response rate, I address the potential problem by weighting observations by the

[21] See Table D-1 in Appendix D for a comparison of the background characteristics between the sample of returned evacuees and the adopted children.

[22] No money or financial compensation was offered in return for responding.

inverse of the response probability, as proposed by Angrist and Pischke (2009).[23]

A sample of nonevacuees ($n = 3{,}711$) was constructed by exact matching (based on municipality of birth, age (within one month), gender and native language) of individuals to each by the PRCF identified child evacuee. An identical questionnaire was sent to these persons. By definition we lack register data dating back to WWII for the nonevacuees as all pre-intervention register data come from the aforementioned evacuee cards. The identical data for the nonevacuees is collected through the survey. We received back 1,991 completed surveys for a response rate of 53.7 percent. The possibility that a respondent of the comparison group belonged to the child evacuee population was accounted for by including a question asking whether the person had participated in the evacuation program. The 171 identified child evacuees in the control group were sent the original evacuee questionnaire.[24] We received back 135 surveys and added these individuals to the original sample of child evacuees, as they belong to the same population from where the original treated sample was drawn, and were also randomly drawn.

The final data set contains a random sample of 887 evacuees and a matched sample of 1,749 nonevacuees, who were asked identical pre-intervention questions as those contained in the evacuee card. Table C-1 in Appendix C summarizes the sample sizes and response rates for the two samples.

The rich information contained in the evacuee cards allows us to obtain a good

[23]The response probability is estimated using the predicted values from the test for selective reponse reported in Table C-3 in Appendix C.

[24]Of the controls 242 responded positively on the evacuee question and were removed from the control group. The somewhat low rate of identification in the evacuee card registry (171/242) is not an indication of an incomplete registry. The unidentified are likely to belong to the roughly 25,000 children who were evacuated outside the official program through family or personal connections.

picture of the child's pre-intervention environment. By complementing this data with information on the family background, and characteristics of the foster family collected with the survey, we are able to form an almost complete view of the socioeconomic environment of both the biological and the foster families. The outcome variables come mainly from the survey, except marital status that comes from the PRCF (See Appendix B for variable definitions). Also demographic data, e.g., place of birth, age, gender, and mother tongue are drawn from PRCF to double check the accuracy of the evacuee card data and to fill in missing values on demographic variables.

C Measures

As all data on the foster family's socioeconomic background is derived from the survey, I am limited to measures that can be constructed based on retrospective questions regarding foster parents' socioeconomic status during the respondent's childhood. My primary measure for socioeconomic status of the family will be based on the family father's occupation.[25] In the survey, the respondents are asked to report both their foster and biological parent's occupations. These are coded into the 1,506 occupational categories of the four-digit International Standard Classification of Occupations (ISCO) released by International Labor Organization (ILO) in 1968.The motivation for an occupation-based measure is that parent's occupation is arguably

[25]The proportion of married mother's participating in the labor force was still low before WWII in both Finland and Sweden. Of the 709 respondents who reported non-missing values for foster mother's occupation, 496 had had foster mother's who were either "wives of a farmer" or "housewife" by occupation. The biological mothers where more actively participating in the labor force, probably because of the war, with 349 out of 874 biological mothers being housewives.

easier to recall as compared to parent's income or education. This holds, in particular, for questions on socioeconomic characteristics of the foster parents, with whom respondents only spent part of their childhood (and have not necessarily been in touch with since the war ended).[26] I use survey data on occupation for both foster fathers and biological fathers and substitute missing values on biological father's occupation with occupation as reported on the evacuee card.

The occupation-based measure used for father's socioeconomic status is the International Socio-Economic Index of occupational status (SEI). The SEI scale is derived by Ganzeboom et al. (1992) in the spirit of the Duncan index, (Duncan 1961), so that a weighted sum of the average schooling and the average income levels of occupations determine their status. The scores are rescaled to a range from sixteen (the lower end) to ninety (the higher end).[27]

My primary dependent variable is schooling which is measured as the discrete choice of school track. At the time around WWII Finland had a two-track school system. In this system, cohorts attended uniform education only the first four grades of primary school, after which they were divided into two tracks that differed both in terms of content of education, as well as eligibility to further education.[28] School starting age was seven years so the tracking was made at eleven. After fourth grade

[26] A check for how accurately the survey respondents recall their parents' occupation is done by comparing biological father's occupation as reported in the evacue cards before intervention to the survey answers on biological father's occupation. Of the 804 individuals for which both measures were nonmissing 693 (86.2%) individuals reported the same occupation as the one that was filed in the evacuation card.

[27] See Ganzeboom, De Graaf and Treiman (1992) for the algoritm for estimating their scaled SEI variable.

[28] The comprehensive school reform was implemented between 1972 and 1977, imposing a uniform academic curriculum for the entire cohort until age 16.

of primary school all pupils had to choose whether to apply to general secondary school, or to continue in primary school. Those who continued another four years in primary school, were restricted to vocational professions, whereas those who were admitted to junior secondary school often continued to upper secondary school and were eligible to apply to tertiary education. If family background has a greater impact on early education choices than those taking place during late adolescence, then the school track choice in the Finnish two-track system should be a good outcome variable when estimating nurture effects in intergenerational transmission of schooling and socioeconomic status. There is recent evidence by Pekkarinen, Uusitalo, and Kerr (2009) from Finland that early tracking to academic and vocational secondary education created stronger earnings correlations between fathers and sons than when the tracking was postponed until after grade nine as a result of the Finnish comprehensive school reform in the early 1970s. In Sweden pupils attended primary school until the sixth grade and school starting age was seven years, implying that few evacuees had been tracked in Sweden before returning to Finland.

D Descriptive Statistics

As described above, I pull out pre-intervention data on the evacuees from the evacuee card register. However, the evacuee cards contain only sparse information on the foster parents.[29] I thus use survey data for variables measuring foster parents' characteristics.

[29] In fact, only their name and address was filed after information about the placement was received. Only in rare cases is there information on foster father's occupation, usually in the form of a title in front of his name, the occurrance being highly biased towards professional titles such as Dr., Professor, or Member of Parliament.

The Support Committee did not state any guidelines with respect to socioeconomic status or family arrangements of the foster family. Eighty-seven percent of the foster families were nuclear families and 65 percent had biological children. Farmers and professionals were clearly overrepresented among the foster parents. This tendency is probably explained by the fact that farmers, even though at the lower end of the socioeconomic status scale, usually had more spacious dwellings, and were likely to have been less affected by the scarcity of groceries that also affected Sweden. The professionals had the best financial resources to care for an additional family member. Interestingly though, 17 percent of the children were placed in working class families. Quite naturally, since low income was a common reason to send one's child away, the distribution of the biological family's socioeconomic background is heavily skewed towards the lower social classes, with 60 percent of the children coming from families where the father was a manual worker. (Table E-1 in Appendix E reports the frequencies of children by both biological and foster family background).

Table 1 reports the means and standard deviations of the main variables used in the analysis. I report these statistics for both the evacuees and the nonevacuees, and for a subsample of interest: the child evacuees who reportedly did not speak Swedish prior to the evacuation.[30] The first panel of Table 1 reveals that the evacuees fare only slightly worse than the nonevacuees with respect to later life outcomes. The only exception is occurrence of cardiovascular disease, which is less prevalent in the

[30]Finland was officially bilingual with a Swedish minority. During WWII roughly 10 percent of the population were native Swedish speakers and the Swedish procifiency was fair among part of the native Finnish speaking population in towns and the coastal regions. I use both pre-intervention data on the evacuees Swedish proficiency (Commant of Swedish (yes/no)) from the evacuation cards and information of native language from PRCF. These are highly correlated, (0.68).

treated sample.

The second panel in Table 1 shows that women outnumber men in all samples, an asymmetry that is explained by differences in response rates, since an equal proportion of boys and girls participated in the program. The evacuees where on average five and a half years of age at the time of evacuation and spent slightly more than two years with their Swedish foster families. Figure 1 breaks down the time spent in foster care by age at evacuation.

The third panel in Table 1 reports the characteristics of the biological family. It reveals that evacuees came from families of slightly lower social class but the substantial difference lies in how the war had affected the families pre-intervention. The evacuees came more often from shattered families and families that had fled from their homes.

The fourth panel in Table 1 presents the foster family characteristics. As already discussed earlier, the foster family had a higher socioeconomic status than the biological family of the evacuee, but did not differ much from the nonevacuee's biological families with respect to socioeconomic status.

III Empirically Testing for Random Assignment

In this section I test whether the data support the anecdotal evidence on the random assignment of evacuees to Swedish foster families, in particular with respect to family background. More exactly, I test whether there is a significant relationship between the socioeconomic status of the biological family and the socioeconomic status of the

foster family. This is done by regressing F_i against against all background characteristics (including each of the initially imposed eligibility criteria). If the assignment was indeed random, I would not find any significant association between F_i and the background characteristics.

Table 2 performs the balancing test by including all background variables available from the evacuee card and the survey. Region and cohort dummies are included in order to control for time-invariant region specific, and cohort specific, characteristics. Columns (1) and (2) show evidence for some positive association between Foster father's SEI and Biological father's SEI. The magnitude of the coefficient of Biological father's SEI in column (1) should be interpreted as a one unit increase in the biological father's score on the socioeconomic index leading to a 0.14 unit increase in the same score of the foster father. The only other background characteristics that are significant at conventional levels (or close) are gender, Swedish proficiency, and age at evacuation.[31] In columns (3)-(4), potential interactions between Biological father's SEI and gender and Swedish proficiency respectively are controlled for. From column (3) it is clear that although girls were more coveted than boys, gender did not alter significantly the association between Foster father's SEI and Biological father's SEI. When the interaction between Biological father's SEI and Swedish proficiency is included in column (4), the sorting based on Biological father's SEI is substantially mitigated and not statistically different from zero. Since anecdotal evidence does not suggest any sorting among the children who already spoke Swedish prior to evacuation, it is likely that sorting conditional on language

[31] Swedish proficiency was reported in the evacuee card under the question "Has a command of Swedish?".

skills took place at the penultimate stage of the journey, i.e. the placement centers from where the prospective foster parents came to pick up the children. Communication, even though limited, with the Swedish speaking evacuees may have enabled the foster parents to form a view of the children's background.

The balancing tests show that the selection into families in Sweden was independent of background characteristics only for the subsample of children without any command of Swedish prior to evacuation. Thus in the strict sense of a natural experiment, the analysis should be restricted to this subsample. Alternatively, sorting can be controlled for when using the whole sample by including Swedish proficiency, the variable that arguably cause the sorting, and its interaction with Foster father's socioeconomic status, in the estimating equation. Based on the results of the balancing tests also gender will be controlled for in each regression.[32]

IV Estimating Intergenerational Transmission Coefficients

A Benchmark Specification: The Importance of Family Environment on School Track Choice

Table 3 shows the results from the benchmark transmission model for how an occupation-based measure for a family's socioeconomic status affects the individual's school track choice. The coefficients are essentially transmission coefficients from parents to chil-

[32] Age at evacuation, that was somewhat close to being significant at conventional levels, is already included in the estimating equation (1).

dren as in (1). As discussed in Section (II.A), transmission coefficients should not necessarily be interpreted as the causal impact of parental input, measured by socioeconomic status. However, as Sacerdote (2007) notes, transmission coefficients "...are a convenient and standard way to measure how changes in the child's outcome are associated with changes in the parental characteristics."

In columns (1)-(4) of Table 3, I estimate the benchmark model using the subsample of children without Swedish proficiency prior to evacuation. The entries in column (2) are the marginal effects of the probit model reported in column (1), evaluated at the means of the independent variables. The marginal effects imply that, for foster father's SEI, a ten score increase on the SEI-scale leads to a 2.9 percentage points higher probability of going to secondary school.[33] A one standard deviation (17.8) increase in foster father's SEI (e.g. a move up from being a sheet metal worker to becoming a bookkeeping assistant), implies a 5.2 percentage point increase in probability of going to secondary school. The coefficients in the first three columns tell a fairly consistent story, the size of the coefficients are almost the same across the two models (probit and LPM) and the significance levels for the variables are also very similar. For this reason the remainder of the analysis employs the LPM (for continuous outcomes, ordinary least squares). Column (4) reports estimates for a specification where controls for length of stay with the foster family, age at evacuation[34], and a dummy for whether the foster parents differentiated between foster

[33]I will in the following use SEI when referring to the variable used as measure for the family's socioeconomic status (SES).

[34]There is in fact little previous evidence that would point towards any interaction between parental input and age at evacuation. Age is however a classical factor in adoption research and several adoption studies find that adoptees with long lasting pre-adoption adversity are likely to face delays in their cognitive and psychological development (Rutter and ERA Study Team 1998;

children and foster siblings are included in levels and interacted with foster father's SEI. The results are fairly robust to controlling for these factors. The interaction terms between foster father's SEI and the duration of the stay, and between foster father's SEI and age at evacuation are not significantly different from zero.

The regressions for the whole sample, reported in columns (5) and (6), include a dummy indicating whether the children had a command of Swedish pre-intervention, and its interaction with foster father's SEI. The results are not essentially altered from the ones reported in columns (3) and (4).

Table 4 estimates the intergenerational transmission coefficient for the sample of nonevacuees. A one standard deviation increase in biological father's SEI (16.87) increases the probability of going to secondary school by 13.7 percentage points. Perhaps not surprisingly, I do not find support for the hypothesis that the parental inputs add up in a linearly additive way. The sum of the size of foster and biological family inputs obtained in Table 3 are not in the same ball park as the size of the coefficient for family input obtained in the regressions reported in Table 4.[35] Given the sample size and the, on average, two year period away from the biological family, it may be overly optimistic to find support for linear additivity of parental inputs of the biological and foster families in the data. In column (2) of Table 4, I control for the possibility that the nonevacuee was evacuated domestically from her parents for some period during WWII, e.g. to relatives or friends, and thus experienced a switch in the rearing environment. The results are robust to including this control

O'Connor et al. 2000). Also a Swedish study using register data reports that an adoption age above four years is associated with lower schooling (Lindblad et al. 2003).

[35]Nonlinear intergenerational transmission is tested in Table E-2 in Appendix E. The results do not provide support for any nonlinearities in the intergenerational transmission.

variable.

B Additional Outcomes

As already mentioned, it is difficult to separate out the causes that affect outcomes by using broad measures such as a socioeconomic index as an explanatory variable. Nonetheless, Table 6 presents the results of the transmission coefficient model for a list of outcomes to try to shed light on which outcomes are affected by the childhood family environment. The outcomes are recorded at the time of completing the survey, i.e., 2005. The long time span and consequently small truncation is unusual; to my knowledge only one study has looked at early environment outcomes for individuals up to sixty years later (Gould, Lavy, and Paserman 2009).

B.1 Transmission Coefficients for Labor Market Outcome, Health, and Risky Behavior

Most estimates for foster father's SEI are insignificant in Table 5 and taken on the whole, a mixed picture emerges. In column (1), although imprecise, the positive and relatively large coefficient for foster father's SEI suggests that parental input has a positive effect on employment throughout the whole working career.

The physical health related estimates have somewhat strange signs, i.e. negative for foster father's SEI, suggesting that the children's long-run health was negatively affected by placement into families belonging to higher social classes. The estimates are not significantly different from zero, but one observation that could explain the sign of the coefficient is that many children were noticeably obese when returning to

Finland.[36] The long-run effects of a sudden switch of environment from one where food was scarce and malnutrition common to another where food was relatively abundant, and more so in the higher social classes, may have resulted in more pronounced obesity among the ones who were evacuated to families of higher social class. The literature on the association between rapid infancy weight gain and later life obesity finds in most cases a rather strong and positive association between the two.[37]

Although Foster father's SEI does not seem to significantly affect mental health, the slope coefficients for both Foster and Biological father's SEI have a positive sign, intuitively suggesting that higher family input is associated with less depression and a higher emotional well-being score. I find evidence that foster family input had an adverse effect on risky behavior in the form of excessive smoking. The external validity of this finding is questionable though, as it is most likely explained by differences in smoking culture across social classes in Sweden in the early 1940s.

I also consider marriage outcomes (having married at least once during ones lifetime and currently divorced), fertility, and emigration. The emigration measure suffers from selection since I only look at emigration to Sweden, the destination country for 72 percent of the expatriates in the sample. I find mostly insignificant estimates for the family input variables (the results are available from the author). It is surprising that neither biological nor foster family input have any effect on marriage outcomes. One explanation may be that the measures used are not sensitive

[36] A journalist witnessing the debarkation of a contingent of returning evacuees after a temporary armistice was reached wrote "Without exception, the children had gained weight, some even to the extent that their [biological] parents had difficulties in recognizing their child" [*Uusi Suomi*, October 10, 1942].

[37] See the evidence on the relationship between rapid infancy weight gain and later risk for obesity summarized in Ong and Loos (2006).

to differences in family input. Instead of "ever married", a perhaps better measure might be "age at first marriage". Also the low rate of divorce in general within the studied cohorts may lead to imprecise results. In Section (IV.D) I look at the marriage outcomes separately for the female and male subsamples.

C Transmission Coefficients by Age at Evacuation

Table 6 presents the estimated transmission coefficients separately for two age groups: children aged five years or below at evacuation and children above five years at evacuation. One of the distinguishing features of this study is that I know the precise age at the date of evacuation. This enables me to split the data into subsamples by age at evacuation.

A comparison of the school track choice estimates in columns (1) and (5) shows that the transmission coefficient of foster father's SEI is slightly steeper and statistically significant for the younger age-at-evacuation group when controlling for the duration of evacuation.[38] The imprecisely estimated transmission coefficient of foster father's SEI for the older age-at-evacuation group makes comparisons between the two groups difficult. Suffice it to note that notwithstanding the precision, the transmission coefficient of foster father's SEI is of the same order of magnitude for both age-at-evacuation groups.

Higher foster family input seems to be associated with poorer later life health for the younger age-at-evacuation group. The coefficients are substantial in magnitude and relatively close to being statistically significant at conventional levels. This

[38] The younger and older ager groups spent on average 27 months and 24 months in Sweden respectively.

finding gives further support for the consideration that a sudden positive nutrition shock and the consequent fast weight gain may have had an adverse effect on the younger evacuees' later life health.

In columns (4) and (8), the estimates point towards a negative relationship between foster family input at early ages of childhood and long term emotional well-being, whereas at later ages of childhood, no such relationship is found. Instead, the ones who are sent at later ages seem to have been positively affected by biological family input (potentially the input during early ages pre-intervention). A picture emerges, showing important associations between family input at early stages of childhood and emotional-well being later in life.

D Transmission Coefficients by Gender

Table 7 studies gender differences in response to family input. The school track choice estimates in columns (1) and (5) show that girls seem to have been more responsive to foster family input than boys with respect to cognitive ability. The use of labor force attachment as outcome in columns (2) and (6) shows that men were less likely to be unemployed as a consequence of higher foster family input than were women. The labor attachment estimate for Foster father's SEI is significant both in magnitude and statistically in column (6), suggesting that a one standard deviation increase in foster father's SEI leads to a 7.2 percentage points lower probability of being unemployed for men. The fertility and marriage outcomes show a similar pattern in the subsamples as in the regressions using the whole sample; estimates for parental input are not statistically different from zero.

V Testing Robustness

I have provided empirical evidence for the assignment of children into foster families being independent of background characteristics conditional on Swedish proficiency prior to evacuation. Because it is challenging, if not impossible, to empirically identify all background characteristics causing nonrandom sorting, I need to assess the robustness of my results against omitted variables. Also potential recall bias in the survey answers on father's occupation is a concern that deserves attention in this section.

A Omitted Variable Bias

Omitted-variable bias occurs if F_i is correlated with unobserved biological family background characteristics or if B_i is correlated with unobserved foster family background characteristics. A conventional robustness check is to observe whether the coefficient of F_i remains stable to the inclusion of additional biological family background variables. Removing all biological family characteristics from the specification should also not affect the estimates on foster family input. In column (1) (column (2)) of Table E-3 in Appendix E, I show that the coefficient that corresponds to foster family input does not change noteworthily when excluding (including) biological family characteristics.

B Recall Bias

Even though preintervention data on biological father's occupation is available in the evacuation cards I have chosen to use survey data for both foster and biological father's occupation to make sure the two variables are comparable. However, a concern that arises when using survey data on father's occupation is that recall bias may contaminate the coefficients of family input. If it were the case that the measurement error caused by incorrect recalling of father's occupation is positively correlated with schooling or any of the other outcome variables, then the coefficients of family inputs will be upward biased. To address this problem I use the information on biological father's occupation as reported in the evacuee cards that were filed before the intervention.[39] The potential upward bias is controlled for in the regressions presented in Table E-4 in Appendix E by replacing the survey variable on Biological father's SEI with the preintervention information. Running the equivalent regressions as the ones reported in columns (3)-(6) of Table 3 yields coefficients (and t-statistics) that are of the same order of magnitude as the ones reported in Table 3. This suggests that, if there is any recall bias, it is at least not severe. Another possibility is however that the measurement error in father's occupation derived from the survey is uncorrelated with the error term in equation (1). In this case attenuation bias is likely to be the concern. Under the assumption that the measurement errors in the two occupation variables are uncorrelated with each other, one can obtain the reliability ratio for

[39] As mentioned in fn. 26, 86.2 percent of the respondents reported the equivalent occupation as the one filed in the evacuation card. The occupation was however more precicely defined in the surveys, a father who according to the evacuee card was a construction worker could in the survey be, e.g., a roofer. To avoid attenuation caused by measurement error I replace all cases where the occupations are equivalent in both sources with the more precise definition.

the occupation-based Biological father's SEI by calculating their correlation. The correlation between Biological father's SEI based on the survey answers and Biological father's SEI as reported in the evacuation card is 0.89. Inflating the coefficient obtained using the survey based measure by dividing it with the reliability ratio will give the unbiased measure.

VI Conclusions

This paper exploits a unique event in which almost 70,000 Finnish children were evacuated during WWII and were, conditioned on gender and Swedish proficiency prior to evacuation, randomly placed in Swedish foster families. The operation creates a rare opportunity to study how exogenously generated variation in the rearing environment affects both short- and long-run outcomes. Some outcomes are observed more than sixty years after the evacuations took place, providing an unusually long time span for examining effects of early environment on long-run outcomes.

The results suggest that children who were placed in foster families of higher social class were more likely to continue to secondary school. This result is not sensitive to controlling for background characteristics. When splitting the data into subsamples, I find that the association between foster family input and school track choice is of the same order of magnitude for children aged five or below as compared to children older than five. I find that higher foster family input was more strongly associated with school track choice for girls than it was for boys. Biological family input (including prebirth and postbirth input) had a strong positive association with the probability

of going to secondary school for both the whole sample and for the aforementioned subsamples by age and gender. A comparison of the size of coefficients for foster family input (part of postbirth effects) and biological family input (prebirth effects + (total of postbirth effects - foster family input)) suggests that up to 30 percent of parental input is accounted for by foster family input. Thus, the temporary random rearing family environment in foster care in Sweden accounts for a substantial part of the environmental effect on schooling, and more so at early childhood.

There is some evidence that lower foster family input elevated the risk of having been unemployed at some point during the career, in particular for men. Emotional well-being is negatively associated with early childhood (five years or below) family input at statistically significant levels and with an economically significant slope coefficient. This negative association suggests that the effect of parental input on cognitive and non-cognitive skills may not always work in the same direction. Long-run outcomes such as lifetime fertility, marriage outcomes and emigration are not affected by the random temporary rearing environment.

The findings in this paper complement the previous literature in three ways. First, by providing evidence that a randomly assigned temporary rearing environment has substantial impact on the individual's schooling, the results confirm the findings of BLP and Sacerdote (2007), i.e. that both prebirth and postbirth components are important. Comparing my results to these two adoption studies, which find that postbirth environment may account for up to 50 percent of the intergenerational transmission, it is striking how little less an, on average, two year lasting exposure to foster family input accounts for. Second, the finding that parental input in early

childhood only has a marginally stronger association with school track choice than does parental investment at later stages of childhood and adolescence, is somewhat at odds with developmental skill formation literature by Cunha and Heckman (2008). They find that early interventions into a child's environmental conditions are more important for a child's cognitive development than interventions at later ages. Third, this paper shows the importance of early life environment on long-term outcomes, such as labor market outcomes and emotional well-being.

The novel result that this paper provides is that a relatively short lasting switch in the early childhood environment may have a substantial effect on later life outcomes. This result has important implications for policy. For instance, early childhood interventions may not necessarily need to be long lasting to have important effects: A two-year intervention into a child's environment may make a substantial difference for the cognitive development of the child.

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Tables

TABLE 1
Summary Statistics

	Evacuees		Nonevacuees
	Whole sample	Non-Swedish subsample	
Number of observations	715	598	1721
Outcomes: Schooling			
School track choice	0.34	0.30	0.36
	(0.47)	(0.46)	(0.48)
Outcome: Labor Market			
Unemployed during	0.44	0.46	0.36
working career (yes/no)	(0.50)	(0.50)	(0.48)
Outcomes: Health & Risky Behavior			
Physical health	6.43	6.41	6.24
	(2.25)	(2.22)	(2.23)
Cardiovascular disease	0.29	0.30	0.36
	(0.45)	(0.46)	(0.48)
Beck Depression Inventory	8.78	8.78	8.69
	6.13	(6.15)	(6.52)
Emotional well-being	74.19	74.31	74.86
	(14.62)	(14.56)	(14.15)
Excessive drinking	0.20	0.21	0.17
	(0.40)	(0.41)	(0.37)
Smoking	0.43	0.42	0.33
	(0.50)	(0.49)	(0.47)
Outcomes: Marriage, Fertility, and Emigration			
Married at least once	0.88	0.86	0.92
	(0.33)	(0.34)	(0.27)
Divorced	0.17	0.16	0.15
	(0.37)	(0.37)	(0.36)
Number of children	2.26	2.26	2.19
	(1.33)	(1.39)	(1.21)
Emigrated to Sweden	0.17	0.16	
	(0.37)	(0.37)	
Demographic and Program Characteristics			
Female	0.55	0.55	0.54
	(0.50)	(0.50)	(0.50)
Swedish procifiency*	0.16		0.113
	(0.37)		(0.32)

TABLE 1
Continued

	Treated group		Nonevacuees
	Whole sample	Non-Swedish subsample	
Age at evacuation (months)	65.60	65.11	
	(30.74)	(30.50)	
Duration of evacuation (months)	26.40	26.86	
	(15.25)	(15.57)	
Evacuated in home country to family or friends for a period during WWII			0.37 (0.44)
Biological family characteristics			
SEI-score of biological father	37.31	36.07	40.00
	(15.02)	(13.93)	(16.87)
SEI-score of biological father as filed in evacuee card (preintervention)			
Evacuated from war zone*	0.26	0.31	0.25
(Karelian families)	(0.44)	(0.46)	(0.43)
Father died in war*	0.22	0.23	0.07
	(0.41)	(0.42)	(0.25)
Subject to air raids*	0.13	0.14	
	(0.34)	(0.35)	
Family lived in town (town=1)*	0.601	0.575	
	(0.49)	(0.49)	
Mother's labor force participation	0.701 (0.46)	0.684 (0.47)	0.628 (0.48)
Foster family characteristics			
SEI-score of foster father	40.45	39.52	
	(18.12)	(17.78)	
Non-differentiation btw foster child and foster siblings	0.92 (0.28)	0.91 (0.28)	

Entries in Table 1 represent the means of the relevant variables. Standard deviations are in parentheses. For the variables marked with an asterisk, the entries of the treated group are pulled out from the evacuee card, i.e. are pre-intervention registry data. The other variables are collected by the survey. Swedish proficiency is proxied by native language for the control group. In cases where the value of a demographic variable (native Swedish or gender) was missing in the survey we use data from the Populations Register Center in Finland. In rows 'alcohol abuse', 'Age at evacuation', 'Duration of evacuation', 'Household financial stability', 'Evacuated from war zone', 'Father died in war', 'Subject to air raids', and 'Non-differentiation btw foster child and foster siblings' the number of observations is less than the number reported for each column, namely 577-712 observations for the treated group and 1471-1678 observations for the control group .

TABLE 2
Test for Balancing - Regressing Foster Father's socioeconomic status on all background characteristics

	Dependent variable: Foster father's SEI (17-90)			
	(1)	(2)	(3)	(4)
Biological father's SEI (17-90)	0.140	0.136	0.093	0.005
	(2.38)	(2.25)	(1.17)	(0.06)
Swedish proficiency		3.798		-9.360
		(1.51)		(1.60)
Swedish proficiency×Biological father's SEI				0.311
				(2.53)
Female	5.489	5.581	1.945	1.802
	(3.53)	(3.57)	(0.44)	(0.42)
Female×Biological father's SEI			0.095	0.097
			(0.82)	(0.88)
Age at evacuation	-0.064	-0.047	-0.065	-0.070
	(1.17)	(0.86)	(1.18)	(1.26)
Out-of-wedlock (yes/no)	3.613	2.823	3.920	3.993
	(0.59)	(0.45)	(0.64)	(0.63)
Both parents alive (yes/no)	-1.540	-1.809	-1.574	-1.751
	(0.61)	(0.71)	(0.62)	(0.70)
Father died in war	1.496	1.724	1.409	1.402
	(0.67)	(0.78)	(0.63)	(0.63)
Father wounded in war	3.452	3.193	3.674	3.660
	(0.95)	(0.88)	(1.01)	(0.99)
Family evacuated from war zone	-0.248	-0.061	-0.200	-0.003
	(0.08)	(0.02)	(0.07)	(0.0009)
Family lived in town (town=1)	-0.692	-0.598	-0.615	-0.344
	(0.41)	(0.35)	(0.37)	(0.20)
Subject to air raids	-1.595	-1.404	-1.590	-1.657
	(0.68)	(0.59)	(0.68)	(0.72)
Mother's labor force participation	0.927	0.566	0.984	0.760
	(0.54)	(0.33)	(0.56)	(0.44)
Observations	618	618	618	618
R^2	0.12	0.13	0.12	0.14

The entries in Table 2 represent the coefficients from OLS regressions. Robust t-statistics are reported in the parentheses. An intercept, 21 regional dummies, and 18 cohort dummies are included in all regressions.

TABLE 3
Estimated Transmission Coefficients

Dependent variable: School track choice: Track = 0 (primary, civic or vocational school) vs. Track = 1 (secondary school or university)						
	(1)	(2)	(3)	(4)	(5)	(6)
Foster father's SEI	0.0086	0.0029	0.0026	0.0023	0.0026	0.0018
	(2.67)	(2.67)	(2.39)	(2.39)	(2.39)	(2.63)
Biological father's SEI	0.0256	0.0088	0.0085	0.0084	0.0089	0.0086
	(5.69)	(5.65)	(5.87)	(3.78)	(7.63)	(5.68)
Interactions:						
With Foster father's SEI						
Swedish proficiency					-	-
Age at evacuation				+		+
Time spent in Sweden				+		+
Non-differentiation btw foster child and foster siblings				+***		+***
With Biological father's SEI						
Time spent in Sweden				-		-
Observations	580		580	544	698	656
Percent correctly predicted	71.2		71.5	73.3	70.3	71.5
Log-likelihood	-317.77		-510.37	-455.45	-631.55	-572.18
Pseudo R-squared	0.115		0.137	0.160	0.167	0.183

The Non-Swedish (pre-intervention information on Swedish proficiency) speaking subsample is used in the regressions reported in columns (1)-(4) of Table 3 and the whole sample is used in regressions (5)-(6). The entries in column (1) are estimates from a Probit model. The entries in column (2) are the marginal effects of the Probit model of column (1) evaluated at the means of the variables. The entries in columns (3)-(6) represent the coefficients in a linear probability model. In columns (1) and (2) robust $z-$statistics in brackets and in column (3) -(6) robust $t-$statistics. The entries in column (4), (5) and (6) for Foster father's SEI and Biological father's SEI are $\partial P\left(y=1|F,B,C\right)/\partial F$ and $\partial P\left(y=1|F,B,C\right)/\partial B$ respectively, evaluated at means of the interacted variables. All the main effects of the interacted terms are included in the regressions. In columns (4)-(6) the $t-$statistics reported for the marginal effects of Foster father's SEI and Biological father's SEI refer to the coefficients of the level variable. An intercept, a gender dummy, 21 regional dummies, and 18 cohort dummies included in each regression. Sampling weights are used. The sign of the interaction terms is reported and significance is reported with the conventional symbols(* for significant at 10 percent significance level, ** for significant at 5 percent significance level, and *** for 1 percent significance level).

TABLE 4
Estimated Transmission Coefficients for
Nonevacuees

	Dependent variable: School track choice	
	(1)	(2)
Biological father's SEI	0.0081	0.0093
	(11.84)	(10.52)
Evacuated to family or friends		0.1524
during WWII (EVFAM)		(2.42)
(Biological father's SEI)×EVFAM		-0.0034
		(2.37)
Observations	1706	1597
Percent correctly		
predicted	69.6	69.1
R^2	0.138	0.139

All entries in Table 4 represent coefficients in a linear probability model. Robust $t-$statistics are reported in the parentheses. An intercept, a gender dummy, age, native Swedish dummy, 18 cohort dummies, and 21 regional dummies are included in each regression. Sampling weights are used. The inverse probability weights are calculated based on a probit model where response is regressed against gender, age, and native language (Swedish dummy).

TABLE 5
Estimated Transmission Coefficients for Evacuee Outcomes

	Labor force attachement (1)	Physical health (2)	Heart disease (yes/no) (3)	Depression (BDI) (4)	Emotional well-being (5)	Smoking (6)	Excessive Drinking (7)
Foster father's SEI	-0.0015	-0.0068	0.0007	-0.0090	0.0247	0.0020	-0.0001
	(1.21)	(1.20)	(0.65)	(0.67)	(0.74)	(1.65)	(0.16)
Biological father's SEI	-0.0059	0.0184	-0.0002	-0.0419	0.0848	-0.0015	0.0004
	(4.67)	(3.08)	(0.21)	(2.60)	(2.17)	(1.16)	(0.35)
Swedish proficiency	-0.1651	-0.5933	0.1287	1.5033	-4.7642	0.1756	0.1021
	(1.22)	(0.88)	(1.05)	(0.79)	(1.10)	(1.26)	(0.92)
Swedish proficiency×	0.0020	0.0138	-0.0054	-0.0264	0.0559	0.0025	-0.0033
Foster fathers SEI	(0.74)	(1.08)	(2.30)	(0.73)	(0.66)	(0.87)	(1.57)
Observations	660	660	660	660	660	660	660
R^2	0.10	0.05	0.09	0.07	0.06	0.13	0.15

All entries in columns (1), (3), (6) and (7) of Table 5 represent the coefficients in a linear probability model and all entries in columns (2), (4) and (5) represent OLS coefficients. Robust $t-$statistics are reported in the parentheses. An intercept, 18 cohort dummies, and 21 regional dummies are included in each regression. Sampling weights are used.

TABLE 6
Estimated Transmission Coefficients by Age Group

	Evacuees ≤ 5 years at evacuation				Evacuees > 5 years at evacuation			
	School track choice (1)	Heart disease (yes/no) (2)	Physical health (3)	Emotional well-being (4)	School track choice (5)	Heart disease (yes/no) (6)	Physical health (7)	Emotional well-being (8)
Foster father's SEI	0.0024	0.0010	-0.0080	-0.0273	0.0023	-0.0003	-.0101	0.0220
	(4.24)	(1.41)	(1.18)	(1.68)	(0.76)	(0.22)	(0.11)	(0.06)
Biological father's SEI	0.0093	-0.0015	0.0091	0.0518	0.0064	0.0016	0.0105	0.0213
	(3.65)	(0.73)	(0.36)	(0.46)	(3.15)	(0.30)	(2.97)	(3.58)
Interactions:								
With Forster father's SEI								
Swedish proficiency	-	+	+	-	+	-***	+	+
Time spent in Sweden	+	+	-	-	-	+	+	+
Non-differentiation btw foster child and foster siblings	+***	+	+	+***	+***	+	-	-
With Biological father's SEI								
Time spent in Sweden	-	+	+	+	-	+	-	-***
Observations	306	306	306	306	352	351	351	351
R^2	0.26	0.16	0.11	0.13	0.18	0.14	0.12	0.18

All entries in columns (1)-(3) and (5)-(7) of Table 6 represent the coefficients in a linear probability model. All entries in columns (4) and (8) represent OLS coefficients. The entries for Foster father's SEI and Biological father's SEI are $\partial P\left(y=1|F,B,C\right)/\partial F$ and $\partial P\left(y=1|F,B,C\right)/\partial B$ respectively, evaluated at means of the interacted variables. All the interacted terms are also included in levels. Robust $t-$statistics are reported in the parentheses. The $t-$statistic for the marginal effect of Foster father's SEI refer to the coefficient of the level variable. An intercept, a gender dummy, 21 regional dummies, and 18 cohort dummies included in each regression. Sampling weights are used. The sign of the interaction terms is reported and significance is reported with the conventional symbols (* for significant at 10 percent significance level, ** for significant at 5 percent significance level, and *** for 1 percent significance level).

TABLE 7
Estimated Transmission Coefficients by Gender

	Girl Evacuees				Boy Evacuees			
	School track choice (1)	Labor force attachment (2)	Divorced (3)	Number of Children (4)	School track choice (5)	Labor force attachment (6)	Divorced (7)	Number of Children (8)
Foster father's SEI	0.0038	0.0008	0.0007	-0.0027	0.0026	-0.0045	-0.0012	0.0024
	(2.49)	(0.51)	(0.55)	(-0.64)	(1.45)	(2.25)	(0.93)	(0.45)
Biological father's SEI	0.0065	-0.0059	-0.0003	-0.0019	0.0127	-0.0069	-0.0006	0.0022
	(3.53)	(3.50)	(0.15)	(-0.38)	(7.57)	(3.39)	(0.48)	(0.42)
Swedish proficiency	0.1297	-0.2569	-0.0647	-0.3465	0.1677	0.0134	0.0078	0.4997
	(0.64)	(1.41)	(0.38)	(-0.96)	(0.82)	(0.06)	(0.05)	(0.91)
Swedish proficiency×	-0.0008	0.0023	0.0015	0.0059	-0.0023	0.0014	-0.0002	-0.0030
Foster father's SEI	(0.22)	(0.66)	(0.44)	(0.77)	(0.55)	(0.31)	(0.07)	(0.27)
Observations	371	371	371	371	288	288	288	288
R^2	0.16	0.13	0.07	0.15	0.25	0.16	0.09	0.07

All entries in columns (1)-(3) and (5)-(7) of Table 7 represent the coefficients in a linear probability model. All entries in columns (4) and (8) represent OLS coefficients. Robust $t-$statistics are reported in the parentheses. An intercept, 21 regional dummies, and 18 cohort dummies are included in each regression. Sampling weights are used.

Figures

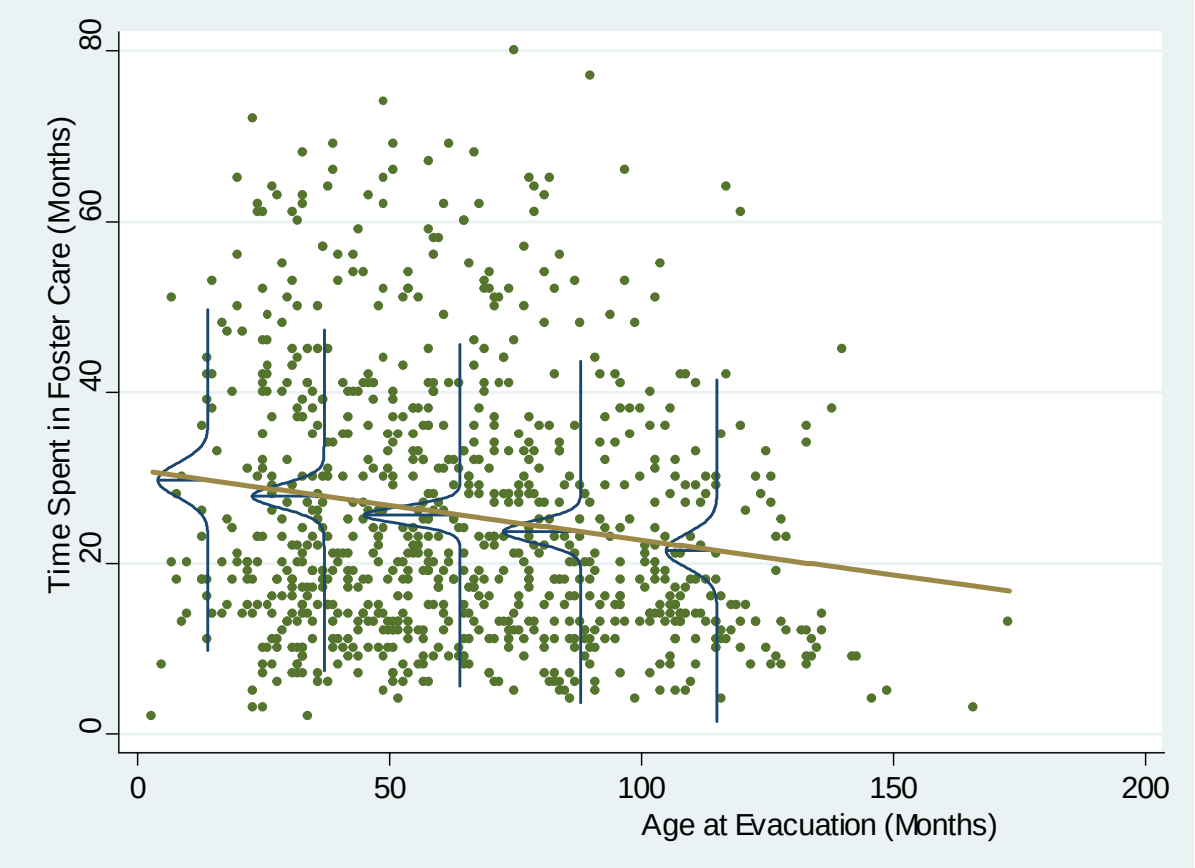

Figure 1: Time Spent In Foster Care by Age at Evacuation.

Appendices

A The Evacuation Scheme[40]

A The Evacuation from Finland to Sweden

A large organization was set up on the foundations of the already established war time logistic organizations and volunteer institutions to carry out the evacuations.[41] The organization made itself known through nationwide broadcasting and advertising in local newspapers. Headquarters were established in Helsinki, employing a large administrative staff. The Evacuation Committee set up and funded regional subsidiary offices that were largely run by volunteers such as local nurses and representatives from Christian and feminist organizations and political parties. The Evacuation Committee emphasized the importance of their unconditional possession of control over the evacuations in order to avoid incompleteness in the registries of evacuated children. After the evacuations began, in September 1941, the county offices were converted into evacuation centers handling the selection process, transportation arrangements, documentation, accounting, correspondence between the evacuees and their families, and advertising of the evacuation scheme in the local media. Absorption centers were set up near the ports of Turku and Vaasa, from

[40] The chief part of the documents that this section is based on are available in the Files for The Child Evacuation Scheme during WWII at The National Archives of Finland (NAF). When not specifically mentioned, we refer to Lomu (1974), who constructs a detailed report on the evacuation scheme based on the documents of NAF.

[41] The Civilian Service of Finland contributed with an already existing network of volunteers. This organization was founded in 1939 for the purpose of distributing aid packages received from foreign oragnizations.

where the evacuees were shipped to Sweden and in the border towns of Tornio and Kemi, from where the evacuees crossed the border by railway. All travel expenses were covered by the Evacuation Committee.

Parents who heard of the evacuation program through mass media or local authorities first filed an application to the local evacuation office.[42] When the application was approved, a health check at the local hospital followed and an identification document including a photograph was issued.[43] The documents were sent to the local evacuation office where the child's file was put into a queue awaiting for information on the region's quota for the following evacuation round. As soon as the headquarters of the organization gave information of each region's quota for the next round, the county office gathered the children - according to the ordered date of application approval - to the nearest railway station from where they were sent to the absorption centers. The children were not allowed to carry any money and their ration cards (most grocery products were rationed in Finland during the war) needed to be handed in before departure.[44] The children brought with them a franked envelope, which the foster parents that would be assigned in Sweden, were urged to post to the Finnish county office with notification of the child's arrival and their name and address, to enable correspondence between the biological parents and their child. Upon arrival at the absorption center, a brief health check was conducted and information on the children was entered into an evacuee register. Each child was assigned a running

[42]If the father was on duty, the mother could file the application without his consent. However, in case the father should disapprove, he could have his child returned immediately.

[43]It took on average 21 days from the time of filing the application to embarking the evacuation transit to Sweden (author's calculation).

[44]This made any form of bribing of the officials difficult for the children.

number according to arrival order and given an identification plate to carry around the neck.

Until 1944, most transports were conducted by boat due to the capacity constraints of the highly congested Swedish railways. Also air planes were occasionally used during the winter season when an impenetrable ice layer prevented shipping. From 1944 onwards, train was considered the safest way of transportation due to the hydro-mines spread around the Finnish Gulf.

Based on the above description of the evacuation, it is plausible that the evacuation created randomness in the order in which the children were transported to Sweden. The strongest arguments in favor of random order of evacuation with respect to any background characteristics are that the children were processed according to a running number upon the arrival to the absorption centers (and boarded the vehicle of transportation accordingly). Also the fact that, on the ships, complete registers of the children on board were put together en route suggests that the separation into small groups upon embarkment is likely to have taken place in a haphazard fashion. The fact that no money or ration cards were allowed on the trip is important for the sake of the random assignment argument in that it suggests that the children could not possibly have affected the placement by bribing the officials. Furthermore, the biological parents' unawareness of both the final destination and the identity of the foster parents, for which the request for identity and address of the foster parents in the form of a franked envelope is a concrete indicator, made any possible manipulation of the placement difficult.

B The Placement to Foster Families in Sweden

In Sweden, the structure of the Support Committee was literally a mirror image of the Evacuation Committee on the Finnish side. Its main office was located in Stockholm and each county had its own local committee led by an authorized representative who was in charge of the placement of the children into families. In practice, large local volunteer organizations conducted the major part of the placement, and the provincial offices handled registries of children and other administrative issues. Quarantine centers were established in geographically strategic Swedish towns, usually the capital of the county.

At first, as the contingents arrived in Swedish territory, they were taken to sanitary centers, which were located in the near proximity of the arrival port or station (Stockholm, Umeå and Haparanda), where brief health checks and delousing was conducted.[45] At the sanitary centers, the contingents were split into smaller groups which were placed in quarantine centers for a week[46]. They went through careful health checks to make sure they were not carrying any contagious diseases before being assigned a county of destination and finally a foster family. Although medical issues were of first priority, much weight was put on nutrition and inventory of the children's luggage. Clothes were provided to poorly equipped children, and all children were cleaned thoroughly. When leaving the quarantine centers, the children were separated into smaller groups and transported via the county offices - where the group would be re-shuffled into smaller units - to their final destinations.

[45] A common delousing method widely practiced with child evacuees was to shave the head.

[46] The children who were evacuated towards the end of the war in 1944 were generally in worse health and thus the quarantaine period was prolonged to 14 days in spring 1944.

Little is documented about the final stage of the evacuation, that is, the placement in foster families, and thus one is principally referred to anecdotal evidence as recalled or retold by the evacuees.[47] Regarding the different stages of the journey until the local Swedish provincial offices, anecdotal evidence conforms unusually well with the information in official documents. The final stage of the trip to the eventual placement seems to have been completed in three different ways: 1. when several children arrived at the same time to a community, the distribution of children to foster families would take place at some temporary lodging, e.g. the local parish house or school premises, according to a first-come first-served process,[48] 2. in sparsely populated areas, or in areas where only one family was awaiting a child, the assigned family would receive the child on a bus stop or train station without any possibilities to affect the choice of child, 3. in some cases the local ombudsman for the placement committee, often the local priest or school principal, assigned the children to families at their arrival on the train or bus station.

The description of the events during the journey to the final destination suggests that the children were processed anonymously according to the information provided on an identification plate hanging around their neck, i.e., an assigned running number, name and gender, and sorted randomly at several stages of the journey. By

[47] I make use of a compilation of 135 short stories of recollections by the evacuees edited by Lehtiranta (1996).

[48] Pirkko Bergman, a one time child evacuee, recalls "the children were taken to a room and told to sit on chairs with the identification plates visibly displayed. A group of people rushed in and among the first ones was a tall man who examined her, wrote something indicating "reserved" on the parcel she was carrying and continued to examine others. Others showed interest in me but noticed the reservation sign on the package. The tall man, who turned out to be the priest of the village of Åsunden, Gösta Rosen, returned to pick me up together with another child, who, I found out at arrival to the village, he had chosen for himself, I was assigned to a neighbour family" (Lehtiranta ed. (1996).

the time the children reached the last leg of their transportation, the inequalities in clothing, cleanness, and nutrition are supposed to have been levelled out, and thus to have made any inference of social background based on appearance difficult.

The aforementioned documentation provides credible support for the assumption that no sorting of the children was made based on their background characteristics. Casual evidence based on first hand accounts by the evacuees also supports this random nature of the assignment. There are however two caveats to the random assignment assumption that point towards some selection based on demographic characteristics. First, many of the numerous first hand accounts show that siblings would end up in families living close to each other.[49] One potential reason for this is that siblings, already at the beginning of the journey, were assigned consecutive running numbers. However, it is almost equally plausible, that the officials were trying to arrange it so that siblings would be placed in the same region. Second, anecdotal evidence also reveals that foster parents were, in some cases, able to present preferences regarding children's age and gender.[50] Thus it is essential to control for these characteristics in order to exclude sorting into foster families.

[49]Some of the many first person accounts provide evidence that siblings could be separated from each other at any stage of the journey.

[50]However, numerous first person accounts show that the failure to meet the foster parents-to-be's qualifications seldom led to the rejection of the child. Marja Leskipohja, aged only 9 months at the time of evacuation, recalls: "my foster parents have later told me that they were hoping to host a boy but as they arrived to pick up the child I was the only one left of the contingent that had arrived to Karlstad".

B Variable Definitions:

A Outcomes

School track choice

The surveyees are asked to indicate their highest completed education on a five class categorization: 1. Primary school 2. Lower secondary school or civic school 3. Vocational school 4. Upper secondary school 5. Tertiary degree (university) education. Educational attainment is also obtained from census data of Statistics Finland. I collapse the 5 classes into a dummy variable measuring whether the person continued to secondary school after the fourth grade of civic school. Classes 1 and 3 obtain value zero and classes 2, 3 and 4 obtain value one.

Labor force attachment

The surveyees were asked whether they at some point during their professional career had had a spell of unemployment.

Health

Physical health. Self-rated health compared to own age group was measured using a Visual Analogue Scale (VAS) with 0 indicating "very much worse" health compared to own age group, and 10 indicating "very much better health" compared to own age group.

Cardiovascular disease. The surveyees are asked whether they at some point during their life have suffered from any heart problems or cardiovascular disease.

Depressive symptoms. The respondent's depressive symptoms were measured using Beck Depressive Inventory, a 21 question instrument widely used for measuring the severity of depression.

Emotional Well-Being is measured using the items of the Short-Form-36 Health Survey of the RAND Health Insurance Experiment measuring emotional well-being (Ware and Sherbourne 1992).

Risky behavior

Smoking, drinking. The surveyees are asked, separately for each substance, whether they, in the course of their life, have been smoking or misusing alcohol

(yes/no).

Marriage outcomes

Divorced. Register data from PRCF is used on the marital status of the individual. All individuals who never married are coded as missing values.

Ever married. Register data from PRCF is used on the marital status of the individual. All individuals who are either married, divorced, or live in separation from their legal husband are coded as married at least once.

Fertility

The surveyees are asked to indicate the number of children they have.

Emigration

The emigration measure is a dummy on whether the individual emigrated to Sweden. Register data from PRCF is used on the country where the individual is registered. All individuals who emigrated before the registers of PRCF were completed in the end of 1960s but were still Finnish citizens by 1970 are included in the registers of PRCF. We identified those, who emigrated to Sweden.

B Independent variables

Swedish proficiency prior to evacuation

There is information on command in swedish from three sources: the evacuation card registry, Populations Register Center in Finland (PRCF), and the survey. The evacuation card recorded "Command in Swedish prior to evacuation", whereas the survey and PRCF recorded native language. The correlation between the survey answer and the information native language from the records of PRCF is 0.84 whereas the correlation between the evacuation card variable and information from PRCF is 0.68.

Malnutrition

The surveyees are asked to indicate on a likert scale from one to four how much anxiety malnutrition within the rearing family caused them during WWII. The observations who obtained a value less than three, i.e. much or some anxiety, were coded as one and the rest as zero.

Mother's labor force participation

All surveyees whose mothers were reported to have been at home or housewives were codeded as zero and the ones with a reported occupation were coded as one.

Family lived in town

The information on whether the biological family lived within an urban area (coded as one) was coded based on the reported municipality of birth derived from the evacuation cards for the evacuees and the Populations Register Center for the nonevacuees.

Non-differentiation between foster children and foster siblings

The surveyees are asked whether the foster family differentiated between the inputs to foster children and foster siblings (yes/no).

C Test for Association between Identification for Survey and Positive Response and Backgroud Characteristics

TABLE C-1
RESPONSE RATE FOR THE MAILINGS

	Sent	Responded	Response rate
Mailing to the evacuees			
Original draw	1157	752	64.9
Identified from control group	171	135	78.9
Total	1328	887	67.7
Mailing to the nonevacuees*			
Nonevacuees	3097	1749	56.4

*The 242 evacuees identified through the matched control group are excluded.

TABLE C-2
TEST FOR SELECTIVE IDENTIFICATION OF TREATED SAMPLE UNITS BY THE POPULATION REGISTER CENTER OF FINLAND

	Dependent variable: dummy for sample unit identified by PRCF
Age at evacuation	-.0084 (2.14)
Swedish speaking	-0.053 (1.68)
Female	0.049 (2.23)
Family evacuated from war zone	-0.013 (0.45)
Father wounded in war	-0.003 (0.06)
Father died in war	-0.029 (0.73)
Out-of-wedlock child	-0.229 (2.65)
Subject to bombings	0.041 (1.13)
Family lived in town (countryside=0)	0.020 (0.84)
Observations	1931
F-test, background point estimates = 0	21.59
$p > \chi^2$	0.010

The entries in Table C-2 represent the marginal effects of a probit model evaluated at the means of the independent variables. The $t-$statistics are reported in the parentheses. All right hand side variables are pulled from the evacuee cards in the Child evacuee records at the National Archives. The whole sample drawn from the evacuee card register with nonmissing values on the relevant variables is included. A probit model is estimated with the dependent variable taking value one if the observation was identified by the Population Register Center, Finland. The marginal effects are evaluated at the mean of age at evaucation.

TABLE C-3

Test for Selective Response to Survey with Respect to Pre-intervention Characteristics

Probit model with dependent variable: dummy for response to survey questionnaire	
Age at evacuation	-0.001 (0.31)
Swedish speaking	-0.020 (0.48)
Female	0.048 (1.70)
Family evacuated from war zone	0.003 (0.08)
Father wounded in war	-0.103 (1.66)
Father died in war	0.037 (0.74)
Out-of-wedlock child	0.183 (1.67)
Subject to air raids	0.088 (2.10)
Family lived in town (town=1)	0.039 (1.28)
Observations	1157
F-test, background point estimates = 0	15.06
$p > \chi^2$	0.089

The entries in Table C-3 represent the marginal effects of a probit model evaluated at the means of the independent variables. The $t-$statistics are reported in the parentheses. The dependent variable taking value one for a positive response on the original survey or the reminder. All right hand side variables are pulled from the evacuee cards in the Child evacuee records at the National Archives. I include all observations that are identified and to whom we have sent the survey questionnaire.

D Background Characteristics of Adopted Evacuees

TABLE D-1
COMPARISON OF BACKGROUND CHARACTERISTICS BETWEEN SAMPLE OF RETURNED EVACUEES AND ADOPTED EVACUEES

	Children who returned Mean	Adopted by foster family Mean
Both parents alive=1	0.81	0.55
	(0.40)	(0.50)
SEI-score of biological father	37.67	30.97
	(14.96)	(11.72)
Family evacuated from	0.26	0.24
war zone (Karelian)=1	(.44)	(0.43)
Single-parent	0.01	0.09
household=1	(0.11)	(0.29)
Age at evacuation (months)	65.60	51.19
	(30.74)	(28.70)
Observations	887	120

Standard deviations are reported in the parentheses.

E Descriptive Statistics and Robustness tests

TABLE E-1
SOCIOECONOMIC CLASS-FREQUENCIES

	Foster parents	Biological parents
Professionals, highe-grade	99 (13.60)	66 (7.58)
Proffessionals, lower-grade and technicians, higher-grade	95 (13.05)	53 (6.08)
Routine non-manual, higher-grade	3 (0.41)	13 (1.49)
Routine non-manual, lower grade	6 (0.82)	12 (1.38)
Small employers	14 (1.92)	8 (0.92)
Self-employed workers (nonprof.)	60 (8.24)	57 (6.54)
Farmers	321 (44.09)	87 (9.99)
Technicians, lower-grade, supervisors of manual workers	13 (1.79)	41 (4.71)
Skilled manual workers	56 (7.69)	289 (33.18)
Nonskilled manual workers	35 (4.81)	223 (25.60)
Agricultural workers	26 (3.57)	22 (2.53)
Observations	728 (100.00)	871 (100.00)

Entries represent the number of families belonging to each socioeconomic class of the eleven-category discrete class scheme by Erikson, Goldthorpe, and Portocarero (1979). In this classification, class is determined by the employment relation, and occupation (based on the ISCO68 occupational code) is used as an indicator of that relation. I apply the standard module generated by De Graaf, Ganzeboom, and Kalmijn (1989) to derive the categories from ISCO68. The fractions are presented in parentheses as percentage of total.

TABLE E-2

ESTIMATED TRANSMISSION COEFFICIENTS IN NONLINEAR MODELS

	Dependent variable: School track choice	
	(1)	(2)
Foster father's SEI	0.0043	0.0132
	(1.87)	(1.76)
Biological father's SEI	0.0103	0.0036
	(3.81)	(0.50)
(Foster father's SEI)^2 /100		-0.0091
		(1.29)
(Biological father's SEI)^2 /100		0.0076
		(0.94)
(Foster father's SEI×Biological	-0.0048	-0.0050
father's SEI)/100	(0.83)	(0.83)
Observations	580	580
R^2	0.139	0.143

The Non-Swedish (based on preintervention information on Swedish proficiency) speaking subsample is used in the regressions reported in Table E-2. All entries in the table represent coefficients in a linear probability model. Robust $t-$statistics are reported in the parentheses. An intercept, a gender dummy, 18 cohort dummies, and 21 regional dummies are included in each regression. Sampling weights are used.

TABLE E-3

Sensitivity Analyses

	Dependent variable: School track choice	
	(1)	(2)
Foster father's SEI	0.0022	0.0019
	(1.86)	(1.68)
Biological father's SEI		0.0095
		(7.07)
Swedish proficiency	0.1331	0.1945
	(0.92)	(1.40)
Swedish proficiency×	0.0007	-0.0017
Foster fathers SEI	(0.25)	(0.65)
Out-of-wedlock (yes/no)		-0.0627
		(0.43)
Both parents alive (yes/no)		0.0838
		(1.53)
Father died in war		0.0225
		(0.43)
Family evacuated from war zone		-0.1210
		(1.87)
Family lived in town (town=1)		0.0252
		(0.62)
Subject to air raids		-0.0058
		(0.10)
Mother's labor force		0.0060
participation		(0.15)
Malnutrition		0.0179
		(0.39)
Observations	630	630
R^2	0.092	0.182

All entries in Table E-3 represent coefficients in a linear probability model. Robust $t-$statistics are reported in the parentheses. An intercept, a gender dummy, 18 cohort dummies, and 21 regional dummies are included in each regression. Sampling weights are used in all regressions.

TABLE E-4

Estimated Transmission Coefficients Using Register Data on Biological father's SEI

Dependent variable: School track choice: Track = 0 (primary, civic or vocational school) vs. Track = 1 (secondary school or university)				
	(1)	(2)	(3)	(4)
Foster father's SEI	0.0025	0.0022	0.0023	0.0018
	(2.18)	(1.91)	(2.10)	(2.30)
Biological father's SEI	0.0079	0.0082	0.0087	0.0112
	(5.04)	(3.01)	(6.91)	(4.93)
Interactions:				
With Foster father's SEI				
Swedish proficiency			-	-
Age at evacuation		+		+
Time spent in Sweden		+		-
Non-differentiation btw foster child and foster siblings		+***		+***
With Biological father's SEI				
Time spent in Sweden		-		-
Observations	540	505	655	614
Percent correctly predicted	71.3	71.9	68.3	70.8
Log-likelihood	-485.08	-431.37	-604.39	-546.67
Pseudo R-squared	0.129	0.153	0.156	0.172

The Non-Swedish (pre-intervention information on Swedish proficiency) speaking subsample is used in the regressions reported in columns (1)-(2) of Table E-4 and the whole sample is used in regressions (3)-(4). All entries represent the coefficients in a linear probability model. Robust $t-$statistics are reported in brackets. The entries in column (2)-(4) for Foster father's SEI and Biological father's SEI are $\partial P\left(y=1|F,B,C\right)/\partial F$ and $\partial P\left(y=1|F,B,C\right)/\partial B$ respectively, evaluated at means of the interacted variables. All the main effects of the interacted terms are included in the regressions. In columns (2)-(4) the $t-$statistics reported for the marginal effects of Foster father's SEI and Biological father's SEI refer to the coefficients of the level variable. An intercept, a gender dummy, 21 regional dummies, and 18 cohort dummies included in each regression. Sampling weights are used. The sign of the interaction terms is reported and significance is reported with the conventional symbols(* for significant at 10 percent significance level, ** for significant at 5 percent significance level, and *** for 1 percent significance level).