Preliminary	and	incor	nplete
Do not cite			

П	ow Parents	Influence	the We	alth Acci	imulation	of their	Children
н	ow Parenis	inimence	ine we	ann acci	ımınanon	or meir	Chilaren

Peter Englund Thomas Jansson Todd Sinai Stockholm School of Economics Sveriges Riksbank Wharton and NBER

Version of March 13, 2013

Karl Hamenberg and Pengpeng Xiao provided outstanding research assistance. Sinai thanks the Zell-Lurie Research Sponsors Program for financial support.

Parents have many ways to influence the economic well-being of their children, whether intentionally or not. They can invest in their children's schooling, bequeath them assets, or teach them about finance. Children can inherit their parents' innate earnings ability, predilection for risk-taking, or taste for saving. These factors matter for more than merely predicting a child's economic future: They also have important implications for intergenerational economic mobility. It is well-established that there is a high correlation between childrens' and parents' wealth. The implications of that correlation for public policy toward intergenerational mobility depends on the mechanisms. If children of wealthy parents are wealthier because they have access to more schooling, that has a much different policy implication than if the correlation is due to inherited raw earnings ability.

In this paper, we decompose the various channels through which parents affect their childrens' wealth accumulation. To do this, we turn to a novel administrative data set from Sweden that follows a panel of a matched set of parents and their grown children over a nine-year period spanning 1999 to 2007. In this data set, we observe more than 200,000 grown children ranging in age from 20 to 65, enabling us to draw robust inferences about the parental role in their childrens' wealth accumulation throughout much of the life cycle.

We examine Sweden for two reasons. First, intergenerational wealth mobility in Sweden is comparable to that in other countries, such as the U.S. In fact, the relation between parents' age-adjusted wealth quintiles and their children's wealth quintiles in our Swedish data is very similar to what Charles and Hurst (2003) found using U.S. data. Second, due to the particulars of the Swedish tax system at the time, the Swedish government collected administrative data on income, assets, and debts for all members of the family. We are aware of no other data set that combines such a large panel of children and parents with detailed balance sheet data.

Our contributions are several-fold. By examining small age categories, we are able to estimate how parental wealth affects the life-cycle of kids' wealth accumulation. Prior research has related only the stock of parents' and children's wealth. Second, we are able to account for most of the effect of parents' wealth on their childrens' wealth. Prior research has been unable to account for about one-third.

We find that children's wealth accumulation is positively correlated with the level of parents' wealth. Nearly all of this correlation, especially for younger child households, is due to just two components of wealth growth: Earnings and changes in house values. Naturally, parental wealth positively influences children's earnings and home ownership. However, about half of that influence reflects similarity of parents and children rather than an independent role for wealth. In addition, the remaining parental wealth effect is economically small.

We also identify a role for bequests and investment returns. Wealthier parents leave significantly larger bequests. In addition, children of wealthier parents tend to own higher-return investments and to receive higher returns on the investments they do own. However, once again, about half of that effect is due to similarities between parents and children.

The remainder of this paper proceeds as follows: We first describe our novel data set.

Next, we document the degree to which the wealth distribution is persistent across generations in Sweden. After that, we turn to decomposing the correlation between parent and child wealth into the components of wealth accumulation, such as earnings, bequests, transfers, and returns to capital. We will find that earnings and housing play important roles, so our next section examines whether parents wealth has and independent effect on those two components of wealth accumulation. The next section turns to the wealth that children have already accumulated, and asks whether children of wealthy parents invest in different assets or obtain higher returns on the assets they own. Finally, we briefly conclude.

Data

Our base data source is the "LINDA" data set, an administrative data set based on data from Swedish tax returns. This data set has been used extensively in economics research and is a standard data set available from Statistics Sweden. Our extract of the data follows a panel of 3 percent of the Swedish tax filers and their current spouses each year for the nine years from 1999 through 2007. Since Swedes file their taxes individually, each household member is a separate, but linked observation. The sample contains a total of 550,000 tax returns, corresponding to 7.5 percent of the Swedish adult population (including children above 18 living with their parents). This data set is popular for research because, during this time period, the Swedish tax authority collected information about taxpayers' balance sheets, including the distribution of assets and total debt. This balance sheet data is quite reliable because, during our sample period, Sweden had a wealth tax, necessitating administrative reporting of all accounts, with the exception of bank accounts where the interest income was below 100 SEK (around 14 dollars). In the wealth data, equities are recorded at market value, debt at nominal value, and houses at the estimated market value. The estimated house value was constructed by Statistics Sweden using neighborhood housing transactions. In addition, we have data on the individual's income and geographic location.

Through a special contract with Statistics Sweden, we then obtained parallel data for the children of all LINDA taxpayers and those children's spouses. Thus, for the taxpayers in the LINDA sample in 1999, we extract the data on their children for the entire 1999 through 2007 time period. In our extract of the data, we observe the children's family linkages at two points in

_

¹ The LINDA sample frame is a reference person. The reference persons are matched to their spouses through official marriage records, and they do not need to be living together. In addition, cohabitating couples with a child in common are treated as being married.

time: 1999 and 2007. We extract the full nine years of data for the spouses of the children as of 1999, and again in 2007. Thus, if a child is married to someone different in 1999 and 2007, we have the full set of data for both spouses. For completeness, we then obtain the same data for the *parents* of all the spouses that we added to the data set.

This data collection process yields the full set of data for the family of every child of a LINDA individual, and every parent or parent-in-law of a child whose data we have extracted. We know if a parent dies during the sample period because their records subsequently cease. There are still gaps in the data, mainly due to divorce or separation. In the "parents" data, since the base LINDA data set reports data only for the current spouse of the reference individual, if a child's parents divorce, one-half of the couple will no longer be in our data. In the "children" data, if a child has different spouses in 1999 and 2007, we do not know if there was an intervening third spouse (or more). These gaps turn out not to be consequential to our analysis, and our results are robust to omitting the potentially noisy observations.

We match data on housing market prices to this sample based on the parish of residence; a parish is the Swedish equivalent of a zip code in the U.S. The house price series controls for quality based on appraisals made for tax purposes. Appraised values are based on a comprehensive list of hedonic characteristics. The indexes are based on the ratio of sales prices and appraised values and adjusted when houses are reappraised (typically every five years).

It is worth noting that we do not directly observe bequests or intervivos transfers.

Administrative data on intergenerational flows is generally unavailable. The presence of an estate tax in Sweden and many other countries provides an incentive to transfer intervivos, outside of the tax system, where by definition it is not recorded in administrative data.

Appendix Figure A plots the number of observations for each age among the LINDA sample, our sample of parents, and our sample of children. LINDA is nationally representative.

Our sample of parents is weighted toward relatively older ages, since young adults are less likely to have children. Our sample of children is skewed toward relatively younger ages since older children are less likely to have living parents.

Intergenerational wealth mobility in Sweden

Despite the widespread perception that Sweden is a relatively egalitarian country, intergenerational wealth mobility there is approximately the same as in the U.S., with the highest-wealth parents tending to have high-wealth children, the lowest-wealth parents tending to have low-wealth children, and with considerable intergenerational wealth mobility in-between.

In our data, there is a strong positive effect of parental wealth on the child's life-cycle wealth accumulation, especially among the highest-wealth parents. This effect is apparent in Figure 1, which plots the age-wealth profile of children according to the their parents' wealth quintile.² By age 49, children with wealthier parents have themselves accumulated more wealth, and the rank-ordering of childrens' wealth matches the quintiles of their parents. However, there are important differences among the quintiles in the life-cycle pattern of wealth accumulation. The quintiles vary in their intial wealth endowments, the amount of wealth decumulation when the children are in their 20s, and the rate of wealth accumulation thereafter.

The top curve in Figure 1 corresponds to children whose parents are in the top 20 percent of the wealth distribution, conditional on age, in any given year. Those children start life with significantly higher net worth than everyone else – 170 percent, or more than 110,000 kronor – decumulate less during their 20s, and reach age 49 with 70 percent more wealth than the next-

_

² The figure is constructed by regressing a child's wealth on a cubic in their age and year dummies, separately for each quintile of parents' wealth, where the parents' wealth quintile is defined as the quintile in each year of the residual of a regression of parents' wealth on their age and age². Partialling out the effect of parents' age is done for consistency with Charles and Hurst (2003). However, it makes no qualitative difference. The curves in the plot are the fit age-wealth profiles from that regression, baselined in the year 2000.

highest quintile. By contrast, the children of the bottom 80 percent of the parental wealth distribution all start with approximately the same average wealth. However, children in the bottom three quintiles decumulate to zero wealth by their mid-20s. Children in the fourth quartile do not decumulate as much.

Although the bottom three quintiles have approximately zero wealth at age 25, by age 49, childrens' wealth is rank-ordered by parental wealth quintile, suggesting that the rate of a child's wealth accumulation varies with parental wealth. However, by middle age, there is some convergence among the top 4 quintiles. Between age 40 and 49, the growth of wealth in the top quintile averaged 6 percent; the fourth quintile, 7 percent; the third quintile, 9 percent, and the second quintile, 11 percent. However, children in the bottom quintile diverge. Children in that quintile averaged 9 percent wealth growth, and only 7 percent between age 45 and 49.

This correlation between parent and child's wealth can be seen in Table 1. In the top left panel, we summarize the child's and parents' mean wealth by age-adjusted parental wealth quintile. The children's wealth increases with the parents' wealth quintile, from 206,000 SEK for children in the bottom quintile of parents' wealth to 667,000 SEK for children in the top quintile. Although these differences reflect a significant wealth disparity – the wealth of the top and bottom groups of children differ by a factor of three – it is not nearly so skewed a wealth distribution as that of the parents, which range from an average of nearly -100,000 SEK (for the lowest quintile), to 3.237 million SEK for the top quintile. It is also not nearly so skewed as the wealth distribution of children as ranked by the child's age-adjusted wealth quintile, in the top right panel. The children's wealth distribution ranges from -151,000 SEK to 1.524 million SEK.³

⁻

³ Our wealth data combines all parents in the household but records each child separately. Thus our measure of parent wealth should be greater than that of the children.

It is clear that children of wealthy parents themselves tend to be wealthy, but that also that parents are only one factor in the determination of a child's wealth.

The top pair of panels includes data on children with either one or two parents linked to them in the data. A child with just one parent either has already experienced the death of a parent, or their parent simply could not be linked in our data. This sample has 1,675,000 observations. The bottom pair of panels repeat the exercise just with children for whom we observe both parents. The parents need not be part of the same household; our sample includes divorced parents. This sample has 659,000 observations. For the two-parent sample, we can be certain that we measure the totality of parents' wealth. The patterns look similar, though the children's wealth has a slightly lower average in every quintile in this sample. Details of the construction of the samples are presented in Table A2.

The correlation between parents and children wealth is illustrated more directly by the "transition matrices" in Figure 2. Based on the same division into quintiles from regression residuals, it shows the distribution of children across quintiles conditional on the quintile of the parents. Most cells in the table are close to 0.2 suggesting little correlation. The exception is the top, where 40 percent of children of parents in the highest quintile belong to the same quintile themselves. This is slightly higher than the 36 percent found by Charles and Hurst on US data. At the bottom of the wealth distribution, on the other hand, our Swedish data indicate more mobility; 30 percent remain in the bottom quintile versus 36 percent in the US. It should be kept in mind that most children outside the top quintile have very little wealth.

The persistence of wealth across generations

We now turn to decomposing the sources of the correlations in parents' and childrens' wealth. Children of rich parents could be rich because of direct transfers or bequests. It is also

possible that they have higher income levels, which in turn may be due to education, which itself might be determined in part by parents' wealth. Or, parent and child wealth might be correlated because parents and kids are similarly talented or prefer the same type of investments.

We start by examining the components of wealth accumulation that we directly observe in our data to see if they are the channels through which parents affect children's wealth. We then turn to factors whose effects are more difficult to identify. Lastly, we use our estimates to see how much of the persistence in wealth accumulation across generations can be explained by the factors we identify.

As an organizing framework for this paper, we use the accounting identity for a child's wealth:

$$W_{T} = \sum_{t=1}^{T} Y(a_{t}, h_{t}, \omega, s) + \sum_{t=1}^{T} r(a_{t}, h_{t}, \omega, s) W_{t-1} - \sum_{t=1}^{T} c(a_{t}, h_{t}, \omega, s) + \sum_{t=1}^{T} b(a_{t}^{p}, h_{t}^{p}, \omega^{p}, s^{p})$$
(1.1)

In this equation, wealth at any point in time (T) is just the sum of prior labor income (Y), plus the sum of prior returns on capital (r), plus the sum of transfers (gifts and bequests, b), and less the sum of prior consumption (c). Each of those components are potentially a function of the child's age (a), human capital (h), ability type (ω), and preferences (s). Bequests and transfers are also a function of parents own age, human capital, ability type, and preferences, as those factors contribute to parents' wealth and their taste for transfers and bequests.

In this framework, the opportunities for parents' wealth to affect the wealth of their kids are directly, through b, or by influencing Y, r, and c. That influence is captured by the ability type (ω) , and preferences (s), notation. For example, high-ability parents might have high-ability children. That correlation between parents' and kids' ω 's would lead to correlations between parents' and children's wealth. Another example might be that risk-loving parents might have risk-loving children, and thus both might have above-average expected r. That correlation in risk

preferences would be denoted as a correlation in s and would induce a parent/child correlation in wealth.

In practice, most of our empirical analysis will examine changes in wealth since we do not observe the entire time series over the child's life of the variables on the right-hand-side of (1.1). Instead, we will examine:

$$W_{T} - W_{T-1} = Y(a_{T}, h_{T}, \omega, s) + r(a_{T}, h_{T}, \omega, s)W_{T-1} - c(a_{T}, h_{T}, \omega, s) + b(a_{T}^{p}, h_{T}^{p}, \omega^{p}, s^{p})$$
(1.2)

If we observed wealth, labor income, returns on capital, transfers, bequests, and consumption, and all were measured without error, the regression version of (1.2) would yield coefficients of 1 on each element. Or, if the elements were independent, we would obtain a coefficient of one even if we did not observe them all. However, of the elements in (1.2), in our data we directly observe just wealth, earnings, and capital income. In addition, we expect them to be correlated. We also observe the factors that might generate those elements, such as age and education.

Regressing wealth on wealth

Another way of illustrating the correlation of wealth between generations is by regressing the <u>level</u> of a child's wealth on the <u>level</u> of their parents' wealth. In the framework of the prior section, this specification is simply the reduced-form of (1.1). Table 3 reports the results of such regressions, estimated separately by five-year age groups. In this specification, we control for parental age with age dummy variables and for time with year dummy variables. Children's wealth is always positively correlated with parent wealth. In addition, the marginal impact of parent wealth is increasing with the age of the child. For children age 20-24, an additional one million SEK of parental wealth is correlated with a 42,000 SEK increase in their child's wealth. By the time the children reach age 40-49, an additional one million SEK of parental wealth is

associated with a 182,000 SEK higher child's wealth. The bottom panel of the table shows the impact of a one-standard deviation increase in parental wealth. Since the standard deviation of parents' wealth does not change much with the age of the child, the impact is increasing in child age, consistent with the differences in regression coefficients.

Since children's net worth is increasing with age, the effect of parents' wealth does not rise with age when expressed as a fraction of mean child wealth. A one standard deviation increase in parent wealth is associated with a doubling of the children's wealth for the youngest group of children, but only a 50 percent increase in wealth for the oldest group of children.

This pattern helps reconcile an important difference between our approach and that of Charles and Hurst (2003). Parent-child regressions are often estimated in logs, giving the estimated coefficient a straightforward interpretation as an elasticity. This is standard in the corresponding literature on income correlations and was adopted by Charles and Hurst (2003), who found an elasticity of 0.365 in U.S. data. For comparison we have also estimated our regression in logs for the subsample where neither parents nor child has negative wealth. The results are presented in Table 4. The estimated elasticities of child wealth with respect to parents' wealth are in the range of 0.3 – 0.4 for all age groups, comparable to the results reported by Charles and Hurst. The fact that the estimated elasticity is relatively constant across all ages is due to the differences in average wealth noted earlier. Children whose parents are twice as wealthy as the average are themselves between 30 and 40 percent above-average in their accumulated wealth. However, a 20-24-year-old with 30 percent more wealth has just 35,000 additional kronor. A 45-49-year-old with 30 percent more wealth has nearly 200,000 more kronor

As a robustness check, Table 4 also presents the results of a linear regression for the same non-negative-wealth subsample. We see that the results are essentially unchanged from the full

sample in Table 3. Deleting the negative tails of the parents' and children's wealth distributions – a third of all observations – has virtually no impact on the results. The rest of the analysis in this paper will be based on linear models for the entire sample, including observations with negative wealth.

The reduced-form results in Table 3 imply that parents' wealth must be correlated with the children's initial wealth endowment, their wealth accumulation over time, or both. There clearly is a correlation with the initial endowment of wealth, since we see a positive correlation among 20-24-year-olds in the first column of Table 3. But do children of high-wealth parents also accumulate wealth more rapidly?

In the top panel of Table 5, we estimate the reduced-form version of (1.2), regressing the change in children's wealth on the level of the parents' wealth at the end of the prior year.

Children with wealthy parents have more rapid wealth accumulation, and the effect increases as the child ages. When their parents have 1 mm SEK more wealth, children age 20-24 accumulate 4,000 SEK more wealth per year. By contrast, children age 44-49 with similarly wealthy parents would accumulate an additional 26,000 SEK per year. As we will see later, some of the reason the effect increases with age is due to compounding: A child of a wealthy parent accrues more wealth at a young age and earns a return on that wealth, which augments the wealth generation process. However, the additional effect of parents' wealth, after taking compounding into account, still increases with age.

On average, children of parents with an extra 1 mm SEK of wealth would accumulate 13,000 SEK more wealth per year, a 25 percent increase above the mean. These differences cumulate to large differences in the stock of wealth. A child who had a parent whose wealth was consistently 1mm SEK above the average would accrue about 410,000 SEK more by age 49 than a child whose parent had average wealth.

Following the logic of (1.2), not only the level but the change in parents' wealth might be correlated with the change in children's wealth. We investigate this possibility in the second panel of Table 5. Indeed, children whose parents have greater wealth growth themselves have higher contemporaneous wealth growth. A 500,000 SEK higher parents' wealth growth (a bit less than a one standard deviation increase) is correlated with a nearly 10,000 SEK higher growth in the child's wealth on average. Younger children have a somewhat lower correlation and older children tend to have a somewhat higher correlation, but the differences by age across estimated coefficients are much smaller than for the levels of parents' wealth. In addition, controlling for the change in parents' wealth has very little effect on the estimated coefficients on the level of parents' wealth.

Of course, these reduced-form correlations in parents' wealth profiles and that of their children admit a host of possible mechanisms. That the level of parents' wealth is related to the growth of their children's wealth suggests that children of wealthy parents might have greater earnings capacity, be more savvy investors, or simply might receive more gifts of cash or assets from their parents. The correlation in the growth of parents' and children's wealth could be due to contemporaneous transfers of wealth, or children might simply invest in the same assets as their parents. To disentangle these various explanations is where we next turn.

Accounting for the wealth correlation

The wealth identity (1.2) emphasizes that there are four channels through which parents can affect their children's wealth: Earnings, return on capital, transfers/bequests, and consumption. In this subsection, we will start by disentangling the relative importance of those channels. Later, we will ascertain whether parental wealth has an influence on each channel, or if

other parental characteristics just happen to be correlated with both parental wealth and the channel.

Child income

Since, in Figure 1, children of wealthy parents have a higher rate of wealth accumulation but not necessarily a greater initial endowment of wealth, it stands to reason that flow earnings should be higher for children of wealthy parents. We begin by seeing how much of the correlation in parents' and children's wealth is due to children's earnings.

Our approach is to regress the difference in child wealth on child income and parents' wealth in order to learn how much of the wealth correlation remains once we control for child income. Since we will examine the role of bequests later, at this point we limit our attention to children whose parents remained alive throughout the sample period. The results of these regressions are given in Table 6. Income is indeed positively associated with the change in child wealth. The marginal impact ranges from 0.09 at younger ages to 0.32 for children above the age of 45. That is, 100 SEK of income yields between a 9 and 32 SEK increase in wealth. Since the estimated coefficient is smaller than one, higher income must be correlated with higher consumption, lower returns on wealth, or fewer received transfers or bequests. Expressed as a percentage of the mean of the difference of child wealth, a one-standard-deviation increase in income accounts for an increase of between 60 and 90 percent.

Despite this strong influence from income, parental wealth remains statistically and economically significant; the regression coefficient is only 10-20 percent smaller than in the regression not including income. The impact of a one-standard-deviation change in parent wealth corresponds to 30-50 percent of the mean of child wealth change. The estimated correlation of a parent's change in wealth with their child's change in wealth is even less affected by the

inclusion of child's income. While income significantly affects a child's wealth accumulation, and we will see later that parental wealth has an effect on children's incomes, there is still a meaningful independent effect of parents' wealth. ⁴

Housing

The second component in the wealth accumulation equation (1.2) is the return on capital. For most households the home is the major asset. To see how much of the parents' wealth effect is operating through the housing channel, Table 7 presents estimates of the wealth accumulation equation adding the change in housing wealth as an extra control variable. The top panel gives the results for the entire sample, including non-homeowners and those who change tenure mode. It shows that controlling for housing makes a major change to the estimated coefficient on parents' wealth, especially for younger children. For children under the age of 35, the impact of parents' wealth disappears completely when we control for changes in housing wealth. (In all specifications, the change in housing wealth is highly correlated with the change in total net worth.) Above age 35, where the home does not dominate the portfolio as much, parents' wealth retains a significant role in their children's wealth accumulation. The magnitude is smaller than when not controlling for housing, however the differences diminish as the child ages. By contrast, the estimated coefficients on the parents' changes in wealth do not change much when we control for changes in housing wealth.

Bequests

⁴

⁴ These results are based on one-year wealth differences with income and parental wealth lagged one year. We have also estimated the same equation for three-year differences and for five-year differences with essentially the same results.

Our data set does not include direct observations on the amount of bequests. However, since we follow parents and children over nine years, we can observe changes in wealth around the time of death of a parent. Table 8 focuses on children whose parents died during the sample period. If wealthier parents leave larger bequests, then the child's wealth should increase by more when a wealthier parent dies. The estimated coefficient on the parents' change in wealth should average the effect of a bequest with the typical slightly positive correlation between the changes in the parents' and children's wealth. The top panel of Table 8 looks at those households where the child started the sample period with either one or two parents, but had no more living parents by the end of the sample period. The bottom panel only includes those children who started the sample period with two parents, but both passed away during the sample period — a subset of the first table. We report both tables because, in our data, if we observe a child with one parent at the start of the sample period, we cannot be certain if one parent has already died or if we simply could not link to the parent in the data. When the child starts with two parents, we can be certain we have found all living parents.

For both groups we sizeable and statistically significant negative estimated coefficients on the parents' change in wealth. This result is likely due to the decline in wealth when a parent dies (from the positive pre-death level to zero) and the corresponding increase in the child's wealth after a bequest. Thus, it appears that another active mechanism for the correlation of parents and children's wealth is through bequests. On average, the role of bequests is not large. The average drop in parents' wealth is about 50,000 SEK, which would yield a 7,000 SEK increase in the child's net worth. The child of a parent whose wealth was one standard deviation above the mean would receive about 80,000 SEK based on these estimates.

The estimated correlation between the level of parents' and children's wealth is little changed by looking at the period around the death of the parents. However, the estimates are

much noisier since our sample size falls drastically when we restrict our attention to observations on children whose parents die.

The estimated coefficient on the change in parents' wealth in Table 8 likely underestimates the effect of a parent dying. One reason is that it averages together years when a parent died with years when no parent died. Second, it conflates years when the first parent died with years when the remaining parent died. Bequests are likely to be larger in the latter case.

Table 9 addresses that issue. It is based on a regression for the entire sample and includes dummy variables indicating the death of first and second parent and interaction terms with the size of parental wealth in the previous year. All terms are also included with a one-year lag to account for the fact that the actual transfer of the bequest may be lagged. The key variables are the interaction terms. We report only the "All Ages" column as there is little interesting difference across the various age groups of children.

In the first column of Table 9, the death of the second parent is associated with a significant increase in child wealth. In the year the second parent dies, children's wealth increases by nearly 40,000 SEK – doubling the average growth in wealth – though three-quarters of that sum disappears by the next year. Summing the coefficients for the year of death and the year after indicates that around 24 percent of the incremental wealth of the deceased parent shows up on the child's balance sheet.⁵ In interpreting this number, it should be kept in mind that we are looking at the impact of a single child and taking account of siblings would suggest that the overall transfer is about twice as large. In terms of overall magnitudes, the average amount of additional bequest is 240,000 SEK. A child with a parent whose wealth (prior to death) was one standard deviation above the mean would receive an additional 360,000 SEK of bequest.

⁵ The estate seems to be cleared up by the end of the second year, as including a third lag had no effect.

The impact of the death of the first parent is small. For the children of the poorest parents, the first death of a parent they experience reduces their wealth. As parental wealth increases, however, so does the amount received as a transfer. For every additional 100,000 SEK of wealth, the child receives an extra 6,000 SEK.

Accounting for bequests in this way makes no difference for the coefficient on lagged parent wealth. Compared to the coefficients in Table 6, there is very little change on average. And, that small discrepancy is due to the difference in sample between Tables 6 and 9, not to controlling for bequests.

The results in the first column of Table 9 are robust to some alternate specifications. The second column of Table 9 adds child fixed effects. The coefficients related to the death of the second parent change only slightly. In the third column, we restrict the sample to only the year of and the year following the death of the penultimate parent. The estimated effects are slightly larger. The wealth interactions total about 0.27 and the base transfer from the second parent dying increases to 68,000 SEK.

Bequests from parents can take many forms, such as cash, bonds, stocks, or housing. Housing is particularly straightforward to observe – and is a major component of household wealth – and so we investigate it separately. Table 10 uses the change in homeownership — the difference in a dummy variable indicating homeownership – as the dependent variable. In the first column, parental wealth at the time of death has almost no statistically significant effect on a child's home owning. However, in the second column, whether the parent was a home owner does affect whether the child becomes an owner when their parents die. When the first parent dies, if the parent was a home owner the child is about 1.75 percent more likely to switch to home owning. When the second parent dies, if that parent owned their home until death, the child is nearly 3 percentage points more likely to become a home owner.

One reason the impact of the parents' home on the child's housing choices seems so attenuated is that many children already own homes by the time their parents die. To address that issue, the third column of Table 10 limits the sample to children who did not already own a home at the time of their parents' death. There, the effects are much larger. If they were not already home owners, children of parents who are home owners are about 7.5 percentage points more likely to become a homeowner when their first parent dies and about 14.5 percentage points more likely to own a house when their remaining parent dies.

Transfers

The last channel for parent/child wealth transmission that we will investigate is intervivos transfers. We do not observe transfers from parents to children in our data. Instead, we make use of the fact that once both parents have died, transfers must be zero. Under the assumption that children's conditional wealth accumulation would otherwise be the same before and after the death of their parents, the difference in their conditional wealth accumulation from before the death of their parents to afterwards must be due to the cessation of transfers.

The regression we estimate is:

$$W_{t}^{i} - W_{t-1}^{i} = \alpha + \beta_{1} Notall dead_{t} + \beta_{2} All dead_{t} + \beta_{3} Notall dead_{t} \times W_{t^{D}}^{P} + \beta_{4} All dead_{t} \times W_{t^{D}}^{P} + \beta_{5} Y_{t}^{i} + \gamma_{t} + \delta_{i} + \varepsilon_{t}^{i}$$

$$(1.3)$$

That is, the change in the child's wealth is a function of the period before both parents die ("Notalldead"), the period after the death of both parents ("Alldead"), and the parents' wealth, estimated separately for each of the two periods. We also control for income (Y), year dummies, and in columns 4-6, person fixed effects. We remove the year of and subsequent to the death of the second parent from the sample.

If some of the correlation between the parents' and children's wealth is due to parents transferring funds to their children, the estimated coefficient parents' wealth should be smaller in the period after the parents' die than in the period before. However, we find the opposite result. After their parents' death, children of wealthier parents have higher rates of wealth accumulation, not lower. In column 1, which restricts the sample to children with one parent initially, the estimated coefficient rises from 0.020 to 0.042. In column 2, which allows children to have two parents to start (and which controls for the death of the first parent), the estimated coefficient on parents' pre-death wealth rises from 0.015 to 0.061. (The third column pools the two samples and finds an intermediate result.) Columns 4-6, which add child fixed effects, find even greater differences between the pre-death and post-death periods. The coefficient on parents' wealth increases by 0.19 to 0.27 in those specifications.

A possible explanation for these results is that dying parents bequeath wealth, which in turns generates capital income, and thus greater wealth accumulation for children after the parents die. Another possible explanation is that children spend money to take care of their parents in the few years prior to their parents' death, and the increase in wealth accumulation after the parents pass away is due to a reduction in the children's spending, not an increase in income. The latter explanation would require that children spend more on their parents if their parents were wealthier. In any case, these results merit further exploration.

Does parental wealth affect the characteristics of the children

Although we have seen that earnings and home ownership account for the majority of the effect of parents' wealth on children's wealth accumulation, high wealth parents could be correlated with high-earning or high-homeownership children, presenting another channel for parents to affect their children's wealth. One possibility is that high-wealth parents facilitate their

childrens' earnings (for example, by connecting them with a good job) or home buying (for example, by providing liquidity). Another possibility is that parents and children are similar, and those factors that make a high-wealth parent a high-earner would also make their children have above-average earnings as well.

To investigate the correlation of parents wealth with the children's characteristics, we regress (in turn) income, home ownership status, and education on parents' wealth. By using five-year age bins, we can see not only whether parental wealth affects their children, but when in the child's life-cycle the effects are important. Then, we add controls for the characteristics of the parents. To the degree that controlling for parents' characteristics reduces the effect of parents' wealth, it suggests that the mechanism is similarity between parents and children, not a direct effect of parent wealth.

Income

The effect of parents' wealth on their children's income is statistically significant but economically moderate. The estimated coefficients are reported in the first panel of Table 12, which presents a cross-section regression of the child's average income over a five-year window on the parent's average wealth during the same window. Children of wealthier parents have higher incomes, with the magnitude of the correlation increasing with the age of the children up until age 44. If their parents are 1 million SEK wealthier (about two-thirds of a standard deviation), children aged 20-24 will have 1800 SEK higher incomes on average, a small amount relative to the 150,000 SEK average incomes. The effect is an order of magnitude larger for children in the 40-44 age range. For them, a parent who is 1 million SEK more wealthy is correlated with an 18,000 SEK higher average income – about a 6 percent increase.

A more economically significant determinant of children's incomes is educational attainment, and the second panel of Table 12 adds education controls. The last column pools children between age 20 and 49 and, on average, higher educational attainment is correlated with higher incomes. This is not the case for the youngest children, age 20-24, since the higher ducational attainment children are still in school at that point and thus the sample sizes among the college-educated group are quite small. By age 25, incomes grow with education and the slope of the income-education relationship becomes more steep as the children age.

Including education accounts for some of the parents' wealth effect on children's earnings, indicating that part of the mechanism is that wealthy parents have more educated children who then earn more. We will test that mechanism directly later. The remaining direct effect of parents' wealth is about 60 to 75 percent of the magnitude in the top panel, depending on the age of the child.

The bottom panel of Table 12 adds controls for parents' characteristics to see how much of the parents' wealth effect is due to the similarity between parents and children. Indeed, the coefficient on parents' wealth declines by about 50 to 70 percent relative to the top panel and, for the oldest children, the effect of parents wealth on their childrens' incomes disappears completely. The estimated coefficients on parent income show that parents with higher incomes tend to have children with higher incomes. The regression also controls for the educational attainment of the most-educated parent. However, there is little apparent relationship between the parent's education and the child's average income.

Home ownership

A similar division between the direct role of parents' wealth and parents' other similarities with their children is seen when the outcome is home ownership. By about age 30,

children's probability of home ownership is significantly correlated with parent wealth. In the top panel of Table 13, a one standard deviation increase in parent wealth corresponds to a 2 to 3 percentage point bump in the probability of homeownership – a 5 percent rise. A portion of the effect of parents' wealth is due to wealthy parents having more highly-educated children, and education is positively correlated with home ownership. In the second panel, approximately 25 percent of the apparent parents' wealth effect is due to the role of education.

However, much of the apparent effect of parents' wealth is because parents who own houses tend to be both wealthy and to have children who own houses. In the bottom panel of Table 13, children of homeowning parents are about 10 percentage points more likely to own their own house, even after controlling for their educational attainment. In addition, parents' income is also highly correlated with their children's homeownership. Parents with 250,000 SEK higher age-adjusted incomes, which is about one standard deviation, have children with about a 2.5 percentage point higher homeownership rate. The correlation of parents' wealth with their children's home owning falls by 50 percent relative to the top panel once controls for parents' characteristics are included. Nonetheless, there is still a statistically significant positive effect of parent wealth on children's homeownership rates.

Education

Since children's education is an important determinant of their incomes and homeownership rates, we examine the effect of parents' wealth on the child's educational attainment. Sweden provides an especially interesting context, as Swedish higher education is publicly funded. Thus, there should be little opportunity for parental wealth to affect the financial feasibility of a child attending college. Rather, education al attainment would have to

be influenced by factors such as the attitude of wealthy parents toward education, even conditioning on the parents' own educational attainment.

We examine this issue by estimating an ordered logit with the child's educational attainment categories as the outcome variable. In the top panel of Table 14, it is clear that parents' wealth is positively correlated with childrens' educational attainment, with a 1 million SEK increase in parent wealth being correlated with 0.28 increase in the log-odds, on average. However, in the bottom panel of Table 14, nearly half of the parent wealth effect is due to parents with high incomes and high educational attainments having children with higher educational attainments. Even so, the remaining parent wealth effect on childrens' education is statistically significant.

Portfolio similarity and risk-taking

Some remaining potential channels that could lead to a correlation between parents' and children's wealth are related to the balance sheets and financial investments of the parents and children. Swedish households are more prone to have financial investments than their U.S. counterparts. If parents and children tend to invest in similar assets, they will have correlated wealth realizations. And if children inherit a talent (or lack thereof) for investing from their parents, parents' returns on their investments should be correlated with those of their children.

Our first step is to try to see how much of the correlation in children's and parents' wealth is due to returns on preexisting wealth. That is, if children of wealthy parents ever enjoy a one-time windfall, then they might continue to enjoy excess wealth accumulation as they earn capital income. The first column of Table 15 addresses this question by regressing the change in the child's wealth on the child's income, the parent's lagged wealth, and the child's lagged wealth. This specification mimics the top panel of Table 6, with the addition of the child's lagged wealth.

Because any measurement error in lagged wealth is negatively correlated with the subsequent change in wealth, which is the dependent variable, we instrument using the twice-lagged child's wealth.

Averaged across all age groups, 3.6 percent of preexisting wealth is added to the stock of wealth each year. Of course, this does not mean that children earn a 3.6 percent annual return on their wealth. If there is some marginal propensity to consume out of capital income or capital gains, the underlying return could be higher. Controlling for lagged wealth has little effect on the estimated coefficient on parents' wealth, however, as it declines just from 0.0095 to 0.0087.

In the next set of columns, we examine how parents' wealth affects childrens' portfolio choice. If children of wealthy parents tend to hold higher-return assets, it could be a possible link between parent and child wealth. All these specifications include all ages of children and control for child and parent characteristics, such as education and age. We find that children of wealthier parents tend to hold a higher fraction of their assets in risky stocks, less in housing, and are more likely to own stocks and bonds. In addition, we continue to see similarity between parents and children. Children whose parents have a higher share of their assets in stocks also have a disproportionately high risky share. Parents with more housing have children with more housing, and similarly with stocks and bonds.

However, there is little evidence that, conditional on owning and asset, children's and parents returns are correlated. We estimate returns by adding the estimated yield – the capital income from the asset class, as best as we can match categories, divided by the lagged asset value – to the estimated capital gain – the annual change in the reported value of the asset. The capital gain is a noisy measure because we do not observe the purchase or sale of assets in a category.

The first column of Table 16 regresses the child's percent change in wealth on the parent's percent change in wealth and the level of the parent's wealth. Children of wealthier

parents exhibit greater wealth growth, but the effect of parents' wealth growth is not statistically significant. That result persists, in column 2, even as we add more controls. In the remainder of the table, we find that the children of wealthier parents receive higher measured returns on their stocks, bonds, and bank accounts. For stocks, their returns are not correlated with their parents' returns, but for bonds and bank accounts they are. However, we cannot distinguish between investment performance and savings propensity. It could simply be the case that both highwealth parents and children save a greater proportion of their incomes and merely buy stocks and bonds, and save in bank accounts. The high correlation in bank accounts, which should not have capital gains, suggest that is likely to be the case.

Conclusion

In this paper, we have decomposed the correlation between parents' wealth and childrens' wealth into its components. Using a novel panel data set from Sweden of parents matched with their grown children, we are able to identify a number of the potential channels of parental influence. Relative to prior studies, we are able to examine a more complete set of possible mechanisms. In addition, we are able to discern differences over a child's lifecycle and to examine wealth accumulation over a short horizon, rather than correlations in the total stock of accumulated wealth.

We find a high correlation between parents' and childrens' wealth in Swedish data. In addition, children's wealth accumulation is positively correlated with the level of parents' wealth. Unlike the prior literature, we can explain nearly all of this correlation, especially for younger child households. It is due to just two components of wealth growth: Earnings and changes in house values. Naturally, parental wealth positively influences children's earnings and home ownership. However, about half of that influence reflects similarity of parents and children

rather than an independent role for wealth. In addition, the remaining parental wealth effect is economically small. We also identify a role for bequests and investment returns.

Taken as a whole, the results are consistent with most of the correlation in wealth accumulation coming from parent/child similarity rather than parents providing an initial `leg up' for their children. However, much more work remains to establish the magnitudes of the relative effects and, especially, how much of the aggregate persistence across generations in the wealth distribution that they explain.

References:

Altonji, Joseph G., Hayashi, Fumio and Kotlikoff, Laurence J. 1997. "Parental Altruism and Inter Vivos Transfers: Theory and Evidence." *Journal of Political Economy*, 105, issue 6, p. 1121-66.

Betermier, Sebastien, Jansson, Thomas, Parlour, Christine A. and Walden, Johan. 2011. "Hedging Labor Income Risk." Riksbank Research Paper Series No. 86.

Anders Bjorklund & Lena Lindahl & Matthew J. Lindquist. 2010. "What More Than Parental Income, Education and Occupation? An Exploration of What Swedish Siblings Get from Their Parents," *The B.E. Journal of Economic Analysis & Policy*, Berkeley Electronic Press, vol. 10(1), pages 102.

Laurent E. Calvet & John Y. Campbell & Paolo Sodini. 2006. "Down or Out: Assessing the Welfare Costs of Household Investment Mistakes." NBER Working Papers 12030, National Bureau of Economic Research, Inc.

Charles, Kerwin Kofi and Hurst, Erik. 2003. "The Correlation of Wealth across Generations." *Journal of Political Economy*, vol. 111(6), p. 1155-1182.

Cronqvist, Henrik, Münkel, Florian and Siegel, Stephan. 2012. "Genetics, Homeownership, and Home Location Choice." *Journal of Real Estate Finance and Economics* 45, p. 1-33.

Dynan, Karen E., Jonathan Skinner and Stephen P. Zeldes. 2004. "Do The Rich Save More?," *Journal of Political Economy*, vol. 112, p. 397-444.

Edin, Per-Anders and Peter Fredriksson. (2000) "LINDA – Longitudinal INdividual DAta for Sweden," *Working paper*, November 20.

Elinder, Mikael & Erixson, Oscar & Ohlsson, Henry. 2011. "Carnegie visits Nobel: Do inheritances affect labor and capital income?" Working Paper Series 2011:5, Uppsala University, Department of Economics.

Elin Halvorsen and Thor O. Thoresen. 2011. "Parents' Desire to Make Equal *Inter Vivos* Transfers." CESifo Economic Studies (2011) 57(1): 121-155.

Mark Huggett & Gustavo Ventura & Amir Yaron. 2011. "Sources of Lifetime Inequality," *American Economic Review*, vol. 101(7), pages 2923-54.

Hurd, Michael D. 1987. "Savings of the Elderly and Desired Bequests." *American Economic Review*, vol. 77(3), p. 298-312.

Michael Hurd & James P. Smith. 2003."Expected Bequests and Their Distribution." Working Papers 03-10, RAND Corporation Publications Department.

Kessler, Denis & Masson, Andre. 1989. "Bequest and Wealth Accumulation: Are Some Pieces of the Puzzle Missing?," *Journal of Economic Perspectives*, vol. 3(3), pages 141-52.

Kolodziejczyk, Christophe. 2012. "Intergenerational Correlation of Wealth and Portfolio Allocation". Memeo

Kolodziejczyk, Christophe and Leth-Petersen, Søren. 2012. "Do First Time House Buyers Receive Financial Transfers from Their Parents?" Mimeo.

Wojciech Kopczuk & Josephp Lupton. 2007. "To Leave or Not to Leave: The Distribution of Bequest Motives." *Review of Economic Studies*, vol. 74(1), pages 207-235.

Laurence J. Kotlikoff. 1988. "Intergenerational Transfers and Savings." *The Journal of Economic Perspectives*, Vol. 2, No.2, pp. 41-58.

Laitner, John & Ohlsson, Henry. 2001. "Bequest motives: a comparison of Sweden and the United States." *Journal of Public Economics*, vol. 79(1), pages 205-236.

Audrey Light & Kathleen McGarry. 2003. "Why Parents Play Favorites: Explanations for Unequal Bequests." NBER Working Papers 9745, National Bureau of Economic Research, Inc.

Lockwood, Lee. 2012. "Incidental Bequests: Bequest Motives and the Choice to Self-Insure Late-Life Risks". Mimeo.

McGarry, Kathleen M. 2012. "Dynamic Aspects of Family Transfers." NBER Working Paper No. w18446.

Kathleen McGarry. 1999. "Inter vivos transfers and intended bequests." *Journal of Public Economics*, Volume 73, Issue 3, Pages 321-351.

Franco Modigliani. 1988. "The Role of Intergenerational Transfers and Life Cycle Saving in the Accumulation of Wealth" *The Journal of Economic Perspectives*, Vol. 2, No. 2, pp. 15-40.

Ohlsson, Henry. 2007."The equal division puzzle – empirical evidence on intergenerational transfers in Sweden." Working Paper Series 2007:10, Uppsala University, Department of Economics.

Shore, Stephen H. 2011. "The Intergenerational Transmission of Income Volatility: Is Riskiness Inherited?" *Journal of Business & Economic Statistics*, vol. 29(3), pages 372-381.

Appendix:

Swedish Context

Since the reader might not be familiar with the Swedish economy and tax system, we briefly summarize it here. Sweden has a population of XXXX adults. Figure 1 plots the age, income, and wealth distributions for Sweden in 2004 based on the nationally-representative LINDA data against the same distributions for the U.S. based on the 2004 Survey of Consumer Finances (SCF), weighted to be nationally representative.

Table 1 compares the asset distribution by age of Swedes in 2004 to Americans in 2004, using the LINDA data and the SCF, respectively.

No discussion of intergenerational transfers is complete without considering the tax implications. In Sweden, prior to 1 January 2005 bequests were taxed on all amounts above 280.000 Kronor. The tax rate was progressive and also differed depending on family relations. For spouses and children the tax rate was 10 percent between 0 and 300.000 (net of the 280.000 deduction), 20 percent between 300.000 and 600.000 and 30 percent above 600.000. For more distant relations the higher tax rates started to kick in at lower thresholds. Gifts inter vivos were taxed similarly allowing for a tax-free amount of 10.000 per year. The estate and gift taxes were completely eliminated from 1 January 2005. In calculating the value of a gift or bequest, most assets and liabilities were valued at actual market value. Houses, however, were valued at tax assessed values, normally corresponding to between 50 and 75 percent of the market value of the house.

Furthermore, Sweden had a wealth tax that was abolished from 1 January 2007. Prior to that, the tax was 1.5 percent of net wealth above 1.5 million SEK for singles and 3 million SEK for couples. Net wealth was calculated according to the same principles as for gifts and bequests, i.e. real estate assets were valued below market value.

Both taxes invited tax planning. Thus a common tax minimization scheme was for parents to transfer an existing home, or one purchased for the purpose, to a child or children along with offsetting loans from the parent to the children. The net amount of the transfer would fall below the gift limits. The debt service on the loans would be forgiven each year, with that "gift" also being under the annual limit. Between the amplification due to the difference between the market and tax value of the house, and the gifting of the debt service, reasonably large amounts could be transferred intervivos. Also, the wealth tax could be reduced by transferring assets from parents, if their wealth exceeded 3 million SEK, to children, if their wealth was below the threshold.

Appendix Table A1:

	Has					Median condit	ional on having		
Age group	Equities	Bonds	Housing	Debt	Equities/assets	Bonds/assets	Housing/assets	Debt/assets	
LINDA data (2004)									
<35	0.61	0.15	0.45	0.88	0.10	0.03	0.94	0.87	
35-44	0.70	0.18	0.61	0.91	0.06	0.02	0.91	0.64	
45-54	0.69	0.24	0.64	0.89	0.07	0.03	0.85	0.44	
55-64	0.71	0.33	0.67	0.80	0.09	0.04	0.74	0.26	
65-74	0.68	0.38	0.63	0.56	0.12	0.06	0.68	0.15	
75+	0.54	0.30	0.45	0.22	0.21	0.10	0.65	0.10	
			Survey of	Consumer Fina	nces (2004)				
<35	0.18	0.03	0.44	0.80	0.06	0.05	0.78	0.62	
35-44	0.26	0.05	0.70	0.89	0.03	0.02	0.71	0.45	
45-54	0.32	0.09	0.79	0.88	0.05	0.02	0.64	0.29	
55-64	0.36	0.12	0.81	0.76	0.08	0.03	0.55	0.16	
65-74	0.32	0.13	0.83	0.59	0.10	0.06	0.60	0.14	
75+	0.26	0.10	0.86	0.40	0.13	0.10	0.70	0.08	

Notes: The first four columns report the share of the sample, weighted to reflect the aggregate population, that has positive amounts in each of the categories. The last four columns report the median amount as a share of total assets. Equities is defined as stocks, stock mutual funds, and 50 percent of combined and "other" mutual funds. Bonds is defined as mortgage, government, corporate and other bonds, bond mutual funds, and 50 percent of combined and "other" mutual funds. Housing is defined as all residential real estate, whether income-producing or not. Debt is all debt.

Appendix Table A2: Sample construction

	Base sample	"all parents" sample
	Number	Number
	Removed remaining	Removed remaining
Starting observations:	3,736,683	3,736,683
Age>59	442,431 3,294,252	442,431 3,294,252
Missing education	36,791 3,257,461	36,791 3,257,461
Education changes over the sample period	1,539,886 1,717,575	1,539,886 1,717,575
Both parents die by the end of 1999	16,344 1,701,231	16,344 1,701,231
Three parents linked in the data	558 1,700,673	558 1,700,673
Missing child's wealth	1,119 1,699,554	1,119 1,699,554
Missing risky share of assets	561 1,698,993	1,698,993
Missing parents' age	1,373 1,697,620	
Missing parents' education	267,998 1,429,622	
Missing parents' risky share	50,736 1,378,886	
Missing parents share of income from capital	8,405 1,370,481	
Number of parents ever <2	597,910 772,571	
Remove children with incomplete data	106,643 665,928	12,555 1,686,438
Remove parents with wealth>10000000	6,840 659,088	11,394 1,675,044

Figure 1:

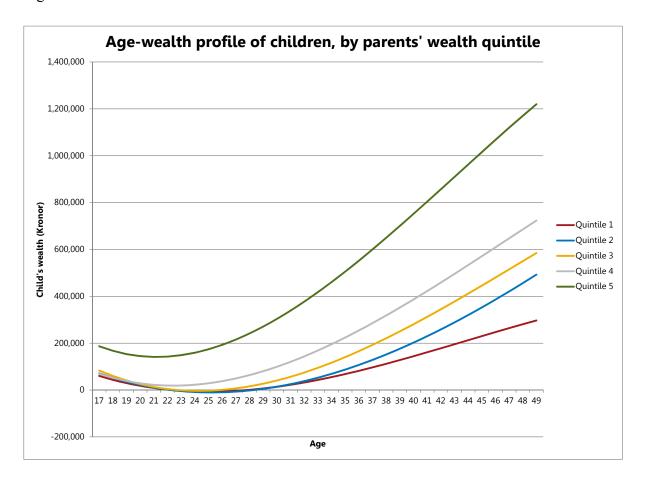


Table 1. Mean wealth of parents and children by wealth quintile

"All Parents" sample

Child's wealth quintile	Child's mean wealth	Parents' mean wealth	Parents' wealth quintile	Child's mean wealth	Parents' mean wealth
1	-151,392	680,324	1	206,104	-99,424
2	23,697	735,065	2	251,335	157,299
3	79,697	733,378	3	260,961	464,479
4	265,459	986,371	4	354,854	1,099,250
5	1,524,487	1,720,637	5	666,853	3,237,117

Notes: Quintile is assigned each year, based on wealth after controlling for age and age squared.

[&]quot;Two parents" sample

Child's wealth	Child's mean	Parents' mean	Parents' wealth	Child's mean	Parents' mean
quintile	wealth	wealth	quintile	wealth	wealth
1	-200,188	1,135,874	1	105,065	-42,884
2	2,502	1,085,659	2	138,934	485,224
3	75,349	1,140,646	3	196,464	968,624
4	243,834	1,457,250	4	291,691	1,745,133
5	1,165,301	2,403,172	5	554,632	4,066,773

Notes: Quintile is assigned each year, based on wealth after controlling for age and age squared.

Table 2. Transition matrices. The position of children and parents in the wealth distribution

"All Parents" sample									
	Child's wealth quintile								
Parents' wealth quintile	1	2	3	4	5				
1	32	26	17	13	12				
2	23	24	23	17	14				
3	18	20	24	23	15				
4	15	17	21	26	21				
5	12	13	15	22	38				

"Two parents" sample

		Ch	oild's wealth quir	ıtile	
Parents' wealth quintile	1	2	3	4	5
1	30	27	20	13	10
2	23	24	23	18	11
3	18	20	23	23	16
4	16	17	19	25	24
5	13	12	14	20	40

Notes: Quintile is assigned each year, based on wealth after controlling for age and age squared

35

Table 3: Regression of five-year average of child's wealth on five-year average of parents' wealth

	<u> 20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40-44</u>	<u>45-49</u>
Five-year average parents'	0.0416***	0.0721***	0.102***	0.138***	0.171***	0.182***
wealth	(0.00134)	(0.00475)	(0.00237)	(0.00332)	(0.00570)	(0.00998)
R-squared	0.125	0.014	0.091	0.094	0.088	0.089
N	34005	82585	93815	86020	49635	18120
Mean child's wealth	47,110	106,660	212,318	323,745	426,854	449,992
St.dev child's wealth	170,219	956,217	582,238	740,308	918,114	862,573
Mean Parents' wealth	1,014,967	1,228,781	1,573,111	1,593,269	1,538,827	1,337,870
St.dev Parents' wealth	1,452,209	1,560,338	1,714,234	1,620,527	1,542,576	1,373,485

Table 4: Regressing five-year average of child's wealth on five-year average of parents' wealth. net wealth ≥ 0

	<u> 20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40-44</u>	<u>45-49</u>			
Dependent Variable: Five-year average child's wealth									
Five-year average parents'	0.0437***	0.0754***	0.106***	0.140***	0.161***	0.176***			
wealth	(0.00195)	(0.00843)	(0.00327)	(0.00430)	(0.00693)	(0.0118)			
R-squared	0.120	0.009	0.086	0.085	0.078	0.085			
Dependent Variable: Log fi	ve-year avera	ge child's wea	lth						
Log five-year average	0.370***	0.379***	0.410***	0.358***	0.351***	0.296***			
parents' wealth	(0.0179)	(0.0130)	(0.0114)	(0.0112)	(0.0145)	(0.0230)			
R-squared	0.112	0.089	0.105	0.085	0.083	0.064			
N	18350	43370	57860	58875	35745	13335			
Mean child's wealth	115,521	271,902	409,795	523,059	638,521	651,838			
St.dev child's wealth	194,345	1,288,005	644,446	802,670	972,594	896,954			
Mean Parents' wealth	1,484,106	1,700,458	1,965,224	1,884,967	1,780,035	1,514,644			
St.dev Parents' wealth	1.545.842	1.636.575	1.752.660	1.643.932	1.594.935	1.416.562			

Table 5. Regressing one-year difference in child wealth on parents' wealth and parents' change in wealth

	<u> 20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40-44</u>	<u>45-49</u>	All Ages
Parents Wealth(t-1)	0.00406***	0.00845**	0.00874***	0.0139***	0.0216***	0.0256***	0.0129***
	(0.000629)	(0.00306)	(0.00224)	(0.000655)	(0.000965)	(0.00164)	(0.000899)
Adj. R-squared	0.001	0.000	0.000	0.007	0.010	0.010	0.001
Parents Wealth(t-1)	0.00395***	0.00799*	0.00844***	0.0125***	0.0203***	0.0244***	0.0120***
	(0.000642)	(0.00323)	(0.00242)	(0.000667)	(0.00102)	(0.00186)	(0.000981)
Parents Change in Wealth	0.0125***	0.0139	0.0157*	0.0315***	0.0133***	0.0279***	0.0192***
	(0.00151)	(0.00829)	(0.00675)	(0.00203)	(0.00336)	(0.00614)	(0.00280)
Adj. R-squared	0.002	0.000	0.000	0.009	0.010	0.009	0.001
N	49389	123290	146785	134064	87208	35751	576487
Mean child's dwealth	1,923	23,156	31,584	55,616	69,971	75,633	41,368
St.dev child's dwealth	186,392	1,707,346	1,490,955	415,359	478,088	491,287	1,132,490
Mean parents' wealth(t-1)	822,709	1,137,992	1,449,345	1,579,587	1,591,323	1,494,946	1,383,666
St.dev parents' wealth(t-1)	1,332,888	1,592,450	1,743,539	1,747,045	1,687,579	1,602,924	1,680,976

Table 6. Regressing one-year difference in child wealth on the child's income, parents' wealth, and parents' change in wealth

	<u> 20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40-44</u>	<u>45-49</u>	All Ages
Income	0.0934***	0.187***	0.131***	0.201***	0.233***	0.321***	0.204***
	(0.00939)	(0.0495)	(0.0306)	(0.00644)	(0.00782)	(0.0149)	(0.0104)
Parents Wealth(t-1)	0.00366***	0.00691*	0.00712**	0.00957***	0.0166***	0.0195***	0.00950***
	(0.000642)	(0.00325)	(0.00244)	(0.000671)	(0.00102)	(0.00186)	(0.000989)
Parents Change in Wealth	0.0122***	0.0133	0.0150*	0.0296***	0.0107**	0.0232***	0.0177***
	(0.00151)	(0.00829)	(0.00675)	(0.00203)	(0.00334)	(0.00610)	(0.00280)
Adj. R-squared	0.004	0.000	0.000	0.017	0.022	0.025	0.002
N	49389	123290	146785	134064	87208	35751	576487
Mean child's dwealth	1,923	23,156	31,584	55,616	69,971	75,633	41,368
St.dev child's dwealth	186,392	1,707,346	1,490,955	415,359	478,088	491,287	1,132,490
Mean child's income	167,125	217,935	255,332	283,370	299,970	303,843	255,306
St.dev child's income	90,443	104,421	139,445	183,324	220,684	199,585	165,251
Mean parents' wealth(t-1)	822,709	1,137,992	1,449,345	1,579,587	1,591,323	1,494,946	1,383,666
St.dev parents' wealth(t-1)	1,332,888	1,592,450	1,743,539	1,747,045	1,687,579	1,602,924	1,680,976
Mean parents' dwealth	65,829	106,354	119,613	115,473	99,631	82,731	105,777
St.dev parents' dwealth	563,683	624,167	633,461	580,220	522,734	496,132	589,583

Table 7. Controlling for changes in housing wealth when regressing one-year difference in child wealth on the child's income, parents' wealth, and parents' change in wealth

	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40-44</u>	<u>45-49</u>	All Ages
> Full sample							
Income	-0.00629	-0.0690***	-0.00683	0.0992***	0.165***	0.229***	0.0588***
	(0.00645)	(0.0203)	(0.00843)	(0.00556)	(0.00717)	(0.0140)	(0.00425)
Change in Housing Wealth	0.758***	0.991***	0.986***	0.654***	0.633***	0.617***	0.977***
	(0.00328)	(0.00131)	(0.000771)	(0.00320)	(0.00525)	(0.00985)	(0.000610)
Parents Wealth(t-1)	-0.000156	0.000296	-0.000896	0.00357***	0.0105***	0.0144***	0.00149***
	(0.000440)	(0.00133)	(0.000673)	(0.000577)	(0.000936)	(0.00174)	(0.000405)
Parents Change in Wealth	0.0102***	0.00995**	0.00518**	0.0261***	0.0111***	0.0269***	0.0128***
	(0.00104)	(0.00340)	(0.00186)	(0.00174)	(0.00306)	(0.00572)	(0.00115)
N	47269	116172	134588	118086	73649	28798	518562
Adj. R-squared	0.532	0.832	0.924	0.274	0.183	0.142	0.832

Table 8: The correlation of parents' and children's wealth when parents die

Dependent Variable: Annual change in child's wealth

	20-24	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40-44</u>	<u>45-49</u>	All Ages			
> Children whose parents die during the sample period										
Income	0.0917	0.172***	0.128***	0.266***	0.455***	0.239***	0.296***			
	(0.0568)	(0.0405)	(0.0319)	(0.0223)	(0.0219)	(0.0166)	(0.0106)			
Parents Wealth(t-1)	0.0187**	0.0246***	0.0192***	0.0244***	0.0241***	0.0103**	0.0197***			
	(0.00647)	(0.00491)	(0.00425)	(0.00375)	(0.00412)	(0.00372)	(0.00202)			
Parents Change in Wealth	-0.0664***	-0.0509***	-0.0473***	-0.0838***	-0.106***	-0.216***	-0.138***			
	(0.0152)	(0.00966)	(0.00753)	(0.00760)	(0.00878)	(0.00721)	(0.00403)			
N	1147	4003	7417	13055	20860	31202	77684			
Adj. R-squared	0.058	0.027	0.018	0.034	0.037	0.049	0.038			
> Two parents both die	during the sa	mple period								
Income	0.190	0.280	0.0978	0.291***	0.109	0.0475*	0.0766***			
	(0.220)	(0.160)	(0.0793)	(0.0773)	(0.0617)	(0.0240)	(0.0218)			
Parents Wealth(t-1)	0.00876	0.0218*	0.0130	0.0242*	-0.000738	0.0221***	0.0166***			
	(0.0104)	(0.00988)	(0.00774)	(0.00941)	(0.00965)	(0.00531)	(0.00382)			
Parents Change in Wealth	-0.0582	-0.0460	-0.0951***	-0.198***	-0.198***	-0.162***	-0.159***			
	(0.0338)	(0.0283)	(0.0136)	(0.0201)	(0.0228)	(0.0112)	(0.00828)			
N	95	367	889	1953	4190	7380	14874			
Adj. R-squared	0.087	0.026	0.098	0.087	0.025	0.054	0.044			

Table 9: The change in child's wealth at the time of a parent's death

LHS Variable: Annual change in child's wealth

		<u>All Ages</u>	
			Year second
	Fulls	sample	parent dies
Income	0.210***	0.384***	0.0484*
	(0.00529)	(0.0122)	(0.0222)
Parents Wealth(t-1)	0.0115***	0.00631**	
	(0.000610)	(0.00197)	
First parent died this year	-20126.1	-22966.7	
	(10658.5)	(12618.0)	
First parent died(t-1)	-5544.6	-3088.3	
	(10729.9)	(12717.8)	
Second parent died this year	38389.0***	40976.1**	67623.0***
	(11202.1)	(13324.9)	(9718.3)
Second parent died(t-1)	-29846.1*	-26248.3	
	(11753.0)	(13967.5)	
First parent died x Parents wealth(t-1)	0.0373***	0.0292***	
	(0.00527)	(0.00621)	
lag(First parent died x Parents wealth(t-1))	0.0258***	0.0127	
	(0.00557)	(0.00661)	
Second parent died x Parents wealth(t-1)	0.0713***	0.0652***	0.0914***
	(0.00844)	(0.0100)	(0.00508)
lag(Second parent died x Parents wealth(t-1))	0.169***	0.162***	0.181***
	(0.00953)	(0.0113)	(0.00575)
Year dummies?	Yes	Yes	Yes
Child fixed effecs?	No	Yes	No
N	1126518	1126518	15699
Adj. R-squared	0.004	0.003	0.083

Table 10: Bequests of houses

LHS Variable: Homeownership change (kdhomeowner)

		All Ages	
			Kids who
			started
			without a
		ample	house
Income (millions)	0.035***	0.0349***	0.266***
	(0.00147)	(0.00147)	(0.00287)
Parents Wealth(t-1) (millions)	0.00125***	0.00125***	0.00590***
	(0.000170)	(0.000168)	(0.000279)
First parent died this year	-0.00426	-0.00233	-0.0149*
- H 1/2 42	(0.00297)	(0.00385)	(0.00613)
First parent died(t-1)	0.00525	-0.00574	-0.0288***
	(0.00299)	(0.00388)	(0.00613)
Second parent died this year	0.0145***	0.00484	0.00248
Consider a word of the dividity 1)	(0.00312)	(0.00356)	(0.00550)
Second parent died(t-1)	0.00295	0.00479	-0.00617
First parent diad v Darents wealth/t 1)	(0.00327)	(0.00374)	(0.00581)
First parent died x Parents wealth(t-1)	0.00198 (0.00147)		
lag(First parent died x Parents wealth(t-1))	0.000147)		
tag(riist parent died x raients weatth(t-1))	(0.00155)		
Second parent died x Parents wealth(t-1)	-0.00263		
Second parent died x rarents weatth(t 1)	(0.00235)		
lag(Second parent died x Parents wealth(t-1))	0.00724**		
tag(Second parent atea x raients weatth(t 1))	(0.00265)		
First parent died x Parents homeowner(t-1)	(0.00203)	0.000708	0.0189*
- 1.01 parent a.ea		(0.00479)	(0.00794)
lag(First parent died x Parents homeowner(t-1))		0.0177***	0.0574***
3/ 3/2 3/2 3/3 3/3 3/3 3/3 3/3 3/3		(0.00485)	(0.00804)
Second parent died x Parents homeowner(t-1)		0.0245***	0.0809***
		(0.00604)	(0.0100)
lag(Second parent died x Parents homeowner(t-1))		0.00450	0.0645***
		(0.00634)	(0.0108)
N	1126518	1126518	552387
Adj. R-squared	0.004	0.004	0.023

Table 11: The effect of parents' wealth on intervivos transfers to their children

Dependent Variable: Annual change in child's wealth

	Pre-post			With personID fixed effect			
	Start with 1 parent S	Start with 2 parents	All parents	Start with 1 parent	Start with 2 parents	All parents	
Income	0.446***	0.306***	0.417***	0.708***	0.352***	0.656***	
	(0.0133)	(0.0301)	(0.0122)	(0.0246)	(0.0770)	(0.0239)	
(a) Prior period	-107984.4***	79201.2*	-107554.5***				
	(8732.1)	(35583.9)	(8206.1)				
(b) Both parents deceased	-119368.3***	-4939.8	-129223.7***	-35786.6***	-210499.8***	-62883.0***	
	(11239.3)	(30324.8)	(10498.2)	(10025.5)	(28837.2)	(9577.3)	
(c) Prior period x parents' wealth	0.0202***	0.0153***	0.0192***				
	(0.00243)	(0.00418)	(0.00204)				
(d) Post x parents' prior wealth	0.0420***	0.0613***	0.0467***	0.191***	0.274***	0.212***	
	(0.00398)	(0.00809)	(0.00353)	(0.00598)	(0.0111)	(0.00513)	
First parent died		-39952.9*	-27800.1				
		(18295.8)	(15384.6)				
First parent died x Parents wealth		0.0398***	0.0338***				
		(0.00953)	(80800.0)				
N	47837	12040	59877	47837	12040	59877	
Adj. R-squared	0.039	0.037	0.038	0.151	0.086	0.133	
Notes: Includes controls for child's	age						
Probabily F-test fails to reject							
(a) = (b)	0.1077	0.0001	0.0012				
(c) = (d)	0.0000	0.0000	0.0000				
Percentage of child x year obs							
where at least one parent is alive:	67.76%	83.26%	70.88%	67.76%	83.26%	70.88%	
Percentage of child x year obs where both parents are dead:	32.24%	16.74%	29.12%	32.24%	16.74%	29.12%	

Notes: Sample period excludes both the year of and the year following the second parent's death Sample includes only those children who lose both parents during the sample period.

Table 12: The effect of parents' wealth on children's income

Dependent Variable: Child's 5-year average income

	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40-44</u>	<u>45-49</u>	All ages		
Parents' average wealth	0.00182** (0.000621)	0.00460*** (0.000449)	0.0118*** (0.000557)	0.0169*** (0.000757)	0.0182*** (0.00137)	0.0126*** (0.00223)	0.0129*** (0.000329)		
R-squared (Between)	0.026	0.007	0.026	0.034	0.023	0.013	0.082		
> Includes child's education dummies									
Parents' average wealth	0.000681 (0.000614)	0.00342*** (0.000447)	0.00745*** (0.000558)	0.0104*** (0.000749)	0.0111*** (0.00135)	0.00494* (0.00213)	0.00750*** (0.000325)		
Child's education:									
Education 9 to 10 years	106281.0	25257.9	48810.2*	70353.2**	35741.9	6316.5	26588.0*		
	(71373.9)	(18492.4)	(23451.3)	(24791.8)	(31261.7)	(35414.5)	(10968.0)		
Through high school	144814.0*	68103.9***	85912.9***	98400.6***	54805.6	22228.3	69177.6***		
	(71350.9)	(18383.6)	(23250.7)	(24489.9)	(30795.2)	(34934.0)	(10885.8)		
College < 2 years	93278.9	68091.4***	143413.0***	200383.4***	169460.7***	174476.3***	149682.5***		
	(72517.6)	(18762.1)	(23478.0)	(24770.4)	(31607.9)	(37109.3)	(11066.2)		
College 2+ years	38788.4	91517.8***	141496.1***	177262.9***	149401.7***	127358.1***	141799.0***		
	(100897.7)	(18507.7)	(23308.8)	(24578.7)	(30990.5)	(35227.5)	(10935.2)		
Postgraduate education		103197.3	232631.4***	280112.4***	341021.5***	371075.3***	288397.9***		
D 1 (D)	0.0624	(88060.6)	(29725.7)	(29189.1)	(38335.9)	(56029.4)	(14139.9)		
R-squared (Between)	0.0634	0.0365	0.0814	0.1119	0.0938	0.1307	0.1526		
> Includes child's and p									
Parents' average wealth	0.00124*	0.00242***	0.00489***	0.00678***	0.00562***	0.00182	0.00512***		
	(0.000630)	(0.000458)	(0.000579)	(0.000779)	(0.00142)	(0.00222)	(0.000337)		
Child's education:									
Education 9 to 10 years	112296.9	21517.8	43642.4	68006.5**	34996.2	2719.2	26548.3*		
	(70707.1)	(18307.2)	(23260.3)	(24590.5)	(31019.2)	(35276.1)	(10912.7)		
Through high school	150201.4*	61519.0***	76715.6***	93010.6***	50801.1	15446.4	65345.7***		
	(70692.7)	(18201.5)	(23073.2)	(24300.7)	(30570.8)	(34806.1)	(10832.5)		
College < 2 years	106423.1	59682.7**	127334.9***	186161.1***	156093.8***	161232.9***	140561.9***		
	(71863.8)	(18580.0)	(23314.9)	(24603.7)	(31410.1)	(37020.0)	(11019.5)		
College 2+ years	68475.8	83915.8***	123156.0***	160580.2***	132529.5***	114796.5**	131653.7***		
	(99952.0)	(18327.0)	(23152.5)	(24421.2)	(30823.0)	(35150.8)	(10891.2)		
Postgraduate education		98950.2	206277.1***	254358.2***	312650.7***	351077.9***	275302.1***		
Downatis avanans in some	0.0100***	(87158.5) 0.0530***	(29540.8) 0.0728***	(29036.1)	(38234.4) 0.148***	(56296.4)	(14096.7)		
Parent's average income	0.0186***			0.0873***		0.134***	0.0608***		
Parents' education:	(0.00350)	(0.00318)	(0.00452)	(0.00690)	(0.0158)	(0.0304)	(0.00262)		
Education 9 to 10 years	8435.1	2479.5	-3021.5	2735.0	7852.8	21541.9	7634.3**		
Education 9 to 10 years	(4816.8)	(3501.4)	(4524.6)	(5349.9)	(9415.0)	(14747.7)	(2348.1)		
Through high school	11736.1**	6056.7*	5483.3	5219.5	8057.0	11936.7	9848.9***		
Through high school	(4140.1)	(2824.6)	(3138.7)	(3309.8)	(5130.5)	(6864.3)	(1594.5)		
College < 2 years	892.0	-3580.9	14281.1*	7486.8	18342.0	67443.4	8202.9*		
conege 12 years	(6080.8)	(4531.0)	(6229.7)	(8846.8)	(19932.7)	(37392.2)	(3504.0)		
College 2+ years	-9420.0*	-5599.7	10333.7**	19821.1***	29182.9***	14619.9	9460.7***		
conege z · yours	(4439.4)	(3102.0)	(3591.7)	(4072.7)	(6899.9)	(10780.2)	(1883.3)		
Postgraduate education	-42209.2***	-53870.6***	4501.4	46172.7***	7203.1	2035.1	4700.2		
- 3-9-2220 0000000	(12237.3)	(9108.6)	(8803.9)	(11892.7)	(23395.1)	(62691.5)	(5591.6)		
R-squared (Between)	0.0843	0.057	0.0994	0.1271	0.1091	0.141	0.1621		

Table 13: The effect of parents' wealth on children's home owning Dependent Variable: Child is a home owner

Average parent wealth (millions of SEK) R-squared (Between)	20-24 0.00254 (0.00228) 0.002	25-29 0.00972*** (0.00210) 0.001	30-34 0.0217*** (0.00194) 0.007	35-39 0.0273*** (0.00216) 0.011	40-44 0.0243*** (0.00307) 0.007	45-49 0.0290*** (0.00591) 0.007	All ages 0.0257*** (0.00103) 0.090
Includes year dummies.	The "all age	s" column in	cludes child	age controls.			
> Includes child's educa	ation dummi	ios.					
Average parent wealth	0.00153	0.00749***	0.0154***	0.0201***	0.0150***	0.0247***	0.0165***
(millions of SEK)	(0.00230)	(0.00211)	(0.00198)	(0.00221)	(0.00311)	(0.00601)	(0.00105)
Children's education:	(5.55=57)	(=====,	(5155_5)	(5155===)	(3,2,2,2,2,	()	(0.00=00)
Education 9 to 10 years	0.127	0.0692	0.159	0.252***	0.206**	0.106	0.118***
,	(0.267)	(0.0874)	(0.0833)	(0.0731)	(0.0721)	(0.0997)	(0.0354)
Through high school	0.161	0.173*	0.319***	0.392***	0.302***	0.146	0.258***
3 3	(0.267)	(0.0868)	(0.0826)	(0.0722)	(0.0710)	(0.0984)	(0.0351)
College < 2 years	0.124	0.139	0.363***	0.471***	0.411***	0.223*	0.347***
• •	(0.271)	(0.0886)	(0.0834)	(0.0731)	(0.0729)	(0.104)	(0.0357)
College 2+ years	-0.00351	0.207*	0.377***	0.452***	0.407***	0.195*	0.362***
	(0.378)	(0.0874)	(0.0828)	(0.0725)	(0.0715)	(0.0992)	(0.0353)
Postgraduate education		0.198	0.240*	0.566***	0.464***	0.111	0.390***
		(0.416)	(0.106)	(0.0861)	(0.0884)	(0.158)	(0.0456)
R-squared (Between)	0.0046	0.0087	0.0234	0.0281	0.0308	0.0148	0.1125
Includes year dummies.	The "all age	s" column in	cludes child	age controls.			
> Includes child's and p				0.01.41***	0.0101**	0.01.47*	0.00988***
Average parent wealth (millions of SEK)	-0.00258	0.00323	0.0109***	0.0141***	0.0101**	0.0147*	
Children's education:	(0.00238)	(0.00217)	(0.00206)	(0.00231)	(0.00331)	(0.00630)	(0.00109)
Education 9 to 10 years	0.0820	0.0569	0.122	0.235**	0.193**	0.0862	0.112**
Education 5 to 10 years	(0.265)	(0.0866)	(0.0826)	(0.0727)	(0.0719)	(0.0992)	(0.0351)
Through high school	0.106	0.144	0.266**	0.368***	0.285***	0.123	0.235***
Through thigh school	(0.265)	(0.0861)	(0.0819)	(0.0718)	(0.0709)	(0.0979)	(0.0349)
College < 2 years	0.0701	0.104	0.299***	0.436***	0.390***	0.193	0.315***
contege \ 2 years	(0.269)	(0.0879)	(0.0828)	(0.0727)	(0.0729)	(0.104)	(0.0355)
College 2+ years	0.0132	0.167	0.314***	0.417***	0.388***	0.168	0.329***
conege 2+ years	(0.375)	(0.0867)	(0.0822)	(0.0722)	(0.0715)	(0.0989)	(0.0351)
Postgraduate education	(0.575)	0.141	0.164	0.523***	0.444***	0.0475	0.359***
. osigiadade eddedien		(0.412)	(0.105)	(0.0858)	(0.0887)	(0.158)	(0.0454)
Parents own their home	0.0748***	0.110***	0.121***	0.109***	0.0746***	0.0982***	0.105***
	(0.00809)	(0.00817)	(0.00853)	(0.00884)	(0.0117)	(0.0195)	(0.00413)
Parent's average income	0.0317*	0.0782***	0.114***	0.0920***	0.110**	0.245**	0.0834***
(millions of SEK)	(0.0133)	(0.0152)	(0.0162)	(0.0205)	(0.0367)	(0.0855)	(0.00849)
Parents' education:							
Education 9 to 10 years	0.0112	0.0385*	0.0126	0.0219	-0.0000139	-0.0525	0.00758
	(0.0181)	(0.0166)	(0.0161)	(0.0158)	(0.0218)	(0.0415)	(0.00756)
Through high school	0.00914	0.0479***	0.00634	0.0158	0.00611	-0.00485	0.00668
	(0.0156)	(0.0134)	(0.0112)	(0.00978)	(0.0119)	(0.0193)	(0.00514)
College < 2 years	0.0195	0.0272	-0.0222	0.0329	0.0223	0.111	-0.0109
	(0.0229)	(0.0215)	(0.0221)	(0.0261)	(0.0462)	(0.105)	(0.0113)
College 2+ years	0.00253	0.0279	-0.0129	0.00391	-0.0197	-0.0537	-0.0206***
	(0.0167)	(0.0147)	(0.0128)	(0.0120)	(0.0160)	(0.0303)	(0.00607)
Postgraduate education	0.0113	0.0175	-0.0444	0.0428	-0.0244	0.137	-0.0223
	(0.0459)	(0.0431)	(0.0313)	(0.0351)	(0.0542)	(0.176)	(0.0180)
R-squared (Between)	0.0228	0.027	0.0428	0.0412	0.0377	0.0299	0.1264
Includes year dummies	and parent a	ge controls.	The "all age:	s" column inc	ludes child a	ge controls.	

Table 14: The effect of parents' wealth on children's education

Dependent Variable: Child's education -- Ordered logit

	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40-44</u>	<u>45-49</u>	All ages
Parents' average wealth	0.285***	0.211***	0.279***	0.287***	0.263***	0.255***	0.282***
(millions of Kronor)	(0.0113)	(0.00527)	(0.00403)	(0.00446)	(0.00613)	(0.0116)	(0.00222)
N	32710	77825	85860	75200	41540	14260	327395
Pseudo R-squared	0.151	0.032	0.027	0.026	0.020	0.015	0.035
Includes year dummies.	The "all age	es" column i	ncludes chil	d age contro	ols.		
Parents' average wealth	0.224***	0.140***	0.166***	0.174***	0.153***	0.187***	0.175***
(millions of Kronor)	(0.0114)	(0.00551)	(0.00428)	(0.00475)	(0.00658)	(0.0122)	(0.00234)
Parents' average income	0.681***	0.896***	1.136***	0.962***	0.906***	1.284***	0.878***
(millions of Kronor)	(0.0570)	(0.0392)	(0.0353)	(0.0435)	(0.0746)	(0.168)	(0.0192)
Parents' education:							
Education 9 to 10 years	-0.0119	0.0698	0.159***	0.281***	0.646***	0.493***	0.361***
	(0.0662)	(0.0429)	(0.0352)	(0.0347)	(0.0439)	(0.0781)	(0.0168)
Through high school	0.468***	0.558***	0.633***	0.672***	0.695***	0.611***	0.715***
	(0.0574)	(0.0350)	(0.0244)	(0.0214)	(0.0244)	(0.0367)	(0.0115)
College < 2 years	0.812***	1.020***	1.317***	1.354***	1.387***	1.491***	1.252***
	(0.0925)	(0.0556)	(0.0455)	(0.0515)	(0.0869)	(0.190)	(0.0241)
College 2+ years	0.444***	1.158***	1.655***	1.704***	1.655***	1.367***	1.504***
	(0.0627)	(0.0386)	(0.0272)	(0.0252)	(0.0318)	(0.0562)	(0.0134)
Postgraduate education	0.284	1.663***	2.271***	2.286***	2.841***	2.182***	2.180***
	(0.210)	(0.102)	(0.0682)	(0.0745)	(0.123)	(0.403)	(0.0389)
Pseudo R-squared	0.1664	0.0592	0.0807	0.0746	0.0642	0.0433	0.0785

Includes year dummies and parent age controls. The "all ages" column includes child age controls.

Table 15: The effect of parent wealth on the portfolio allocation of their children

	IV Regressions						
			Child's				
	Change in	Child's "risky"	housing share	Child is a	Child owns	Child owns	
	child's wealth	share of assets	of assets	home owner	stocks	bonds	
Kids' wealth (t-1)	0.0361***	1.01***	3.26***	9.37***	12.3***	4.67***	
(millions of SEK)	(0.00620)	(0.0957)	(0.207)	(0.228)	(0.190)	(0.142)	
Kids' income	0.187***	6.97***	32.0***	41.3***	34.9***	6.74***	
(millions of SEK)	(0.0135)	(0.206)	(0.453)	(0.500)	(0.418)	(0.308)	
Kid is a home owner		-0.155***					
		(0.000660)					
Parents' wealth (t-1)	0.00867***	1.18***	-0.231***	-0.0669	2.29***	0.753***	
(millions of SEK)	(0.00134)	(0.0206)	(0.0471)	(0.0520)	(0.0430)	(0.0310)	
Parents' risky share of assets		0.198***				0.0402***	
		(0.00214)				(0.00322)	
Parents own a home		0.0307***	0.0690***	0.133***			
		(0.000728)	(0.00270)	(0.00298)			
Parents housing share of assets			0.0373***	-0.0401***			
			(0.00320)	(0.00353)			
Parents own stocks					0.128***		
					(0.00135)		
Parents own bonds						0.0644***	
						(0.00107)	
N	420903	420903	420903	420903	420903	420903	
Adjusted R-squared	•	0.157	0.055	0.064	0.085	0.035	
Child education dummies		Yes	Yes	Yes	Yes	Yes	
Parents education dummies		Yes	Yes	Yes	Yes	Yes	
Child age dummies	Yes	Yes	Yes	Yes	Yes	Yes	
Parents age dummies		Yes	Yes	Yes	Yes	Yes	
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	

Table 16: The effect of parent wealth on the financial returns of their children

	Child's percen	t Child's percen	t		
	change in	change in	Child's return	Child's return or	n Child's return on
	wealth	wealth	on stocks	bonds	bank accounts
Kids' wealth (t-1)	27.5	-21.5**	-33.3***	1.50	16.2***
(millions of SEK)	(15.3)	(8.33)	(8.94)	(5.21)	(4.13)
Kids' income		53.8**	79.2***	72.6***	208***
(millions of SEK)		(19.2)	(18.9)	(20.7)	(9.21)
Kid is a home owner (t-1)		-0.290***	-1.004***	-0.245**	0.344***
		(0.0616)	(0.169)	(0.0771)	(0.0251)
Kids' risky share of assets (t-1)		-0.352*	-0.222*	0	1.511***
		(0.146)	(0.0937)	(.)	(0.0665)
Percent change in parents' wealth	7.00	12.9			
	(111)	(119)			
Parents' wealth (t-1)	3.43*	5.76**	5.24*	5.75**	8.42***
(millions of SEK)	(1.57)	(2.05)	(2.26)	(2.23)	(0.960)
Parents own a home (t-1)		-0.101	0.150	0.135	-0.0994
		(0.115)	(0.150)	(0.107)	(0.0553)
Parents housing share of assets (t-1)		0.109	-0.152		0.0220
		(0.134)	(0.194)		(0.0650)
Parents' return on stocks			0.0116		
			(0.0105)		
Parents' return on bonds				0.0267***	
				(0.00513)	
Parents' return on bank accounts					0.0292***
					(0.00231)
N	285115	256545	71592	16202	407494
Adjusted R-squared	0.000	0.000	•	0.005	0.010
Child education dummies		Yes	Yes	Yes	Yes
Parents education dummies		Yes	Yes	Yes	Yes
Child age dummies	Yes	Yes	Yes	Yes	Yes
Parents age dummies		Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes