# Has the Intergenerational Transmission of Economic Status Changed?

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Susan E. Mayer and Leonard M. Lopoo

University of Chicago[1]

Abstract

We use data from the PSID to assess whether the effect of parental income on son's economic status has changed for cohorts born between 1949 and 1965. We find that the effect of parental income on a son's economic success has declined over the past generation. This is true regardless of whether we measure a son's success using his hourly wage at age thirty, his annual earnings at age thirty, or his family income at age thirty. We provide suggestive evidence that the decline is due to the increase in government investment in children, especially in their educational attainment.

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# Has the Intergenerational Transmission of Economic Status Changed?

Susan E. Mayer and Leonard M. Lopoo

The extent to which economic status is transmitted from one generation to the next has long been of interest to social scientists and policy makers. This interest largely arises because of the belief that the intergenerational transmission of economic status violates norms of equal opportunity. Imagine two societies with exactly the same mean income and the same distribution of income. In Society A, children's economic status is perfectly correlated with their parent's economic status, and in Society B there is no correlation. Most people would agree that opportunity was more equal in Society B.

Many studies have estimated the intergenerational transmission of economic status in the United States. (See Solon, 2000, for a review of these studies.) A few compare economic mobility in the United States with economic mobility in other countries. (See Bjorklund and Jantti, 2000, for a review.). But we know of no published study that has tried to estimate whether economic mobility has changed over time.

Understanding changes in the intergenerational transmission of economic status is important for several reasons. Substantively, understanding changes in intergenerational mobility can help us understand the implications of the rise in inequality over the last twenty-five years. Inequality can grow because rich and poor children's opportunities diverge leaving their incomes farther apart than their parents' incomes. But inequality can also grow when the intergenerational transmission of economic status declines. In the first scenario inequality grows because the economic prospects of poor children are even worse than the economic fortunes of their parents. In the second scenario poor children do better on average than their parents. These two scenarios imply quite different conclusions about the likely effects of the growth in inequality, and especially about the effects of growing inequality on the poor.

At a more technical level knowing whether mobility has changed is important because estimates of intergeneration mobility often group data on cohorts born in successive years. Other studies measure outcomes in a particular year for respondents of different ages. Such estimates are in effect an average for all birth cohorts included in the sample. If mobility has changed over time, both kinds of estimates could be misleading.

## I. Previous Research

The United States is neither completely mobile nor a completely rigid caste society. Estimates of the correlation between a father's income in a randomly selected year and his son's income in a randomly selected year are usually .20 or less (Sewell and Hauser 1975, Behrmen, Taubman and Wales 1980, Behrman and Taubman 1990, Becker and Tomes 1986). Because averaging income over several years reduces the importance of measurement error, the correlation between parental income averaged over several years and a son's income averaged over several years tends to be larger than the single year correlation, suggesting much less intergenerational mobility (Gottschalk 1992, Solon 1992, Zimmerman 1992, Altonji and Dunn 1991). Previous research shows that estimates of the intergenerational transmission of economic status rise with age and are greater for both family food consumption and wealth than for earnings, wages, or schooling.[2]

However, there is considerable variation in the estimates of intergenerational mobility that use the same data, for the same outcome, and average parental income over several years. Among eighteen studies using PSID data and averaging parental income over several years, the elasticity of son's earnings with respect to father's earnings varies from .13 to .53.[3] Of these estimates, three are less than .30, five are between .30 and .40, eight are between .40 and .50 and two are above .50. If we consider only the five studies that estimate the effect of father's earnings averaged over five years on son's annual earnings measured in a specific year, the estimates are from .32 to .53. In the three studies among these five that include sons born between 1951 and 1959, the estimates are .39, .41, and .53. The other two studies include more recent cohorts and have lower estimates, .34 and .31.

Recent research by sociologists finds that the relationship between fathers' and sons' occupational status has not increased and probably has decreased in the last thirty years (Biblarz et al. 1996, Grusky and DiPrete 1990, Hauser 1998, Hout 1988). Occupational status and income are related, but they do not measure the same thing and the correlation is typically less than .50 in the U.S. (Duncan et al. 1972). Thus trends in the association between parents' and children's occupational status need not follow the same trend as the association between parents' and children's economic status. Other sociological research suggests a long term gradual

[2] See the summary of research in Bowles and Gintis (2000).

increase in intergenerational mobility. For example, Featherman and Hauser found that the effects of family background were lower in the 1973 Occupational Changes in a Generation Survey than in the 1962 survey.

**II. Why Economic Mobility Could Change**

We begin by measuring economic mobility in the same way that most previous research has done. Economists usually define the relationship between a parent's economic status ($Y_p$) and child's ($Y_c$) economic status as follows:

$$\ln Y_c = \alpha + \beta_p \ln Y_p + \varepsilon_c. \qquad (1)$$

The estimated value of $\beta_p$ is defined as follows:

$$\hat{b}_p = (r_{\ln Y_c, \ln Y_p})\left(\frac{s_{\ln Y_c}}{s_{\ln Y_p}}\right)$$

where $r_{\ln Yc, \ln Yp}$ represents the sample correlation between parents' and children's economic status and $s_{\ln Yc}$ and $s_{\ln Yp}$ represent the standard deviation of the child's and parents' income, respectively. Following this literature our first measure of intergenerational mobility is an estimate of $\beta_p$.

The economic model underlying equation 1 is the human capital model. It holds that a child's economic status is a function of parental endowments and investments in their children. Endowments include biological and genetic characteristics such as I.Q. and eye color. Investments are all the things that help children succeed such as nutritious meals, schooling, and education at home. Affluent parents can afford to invest more in their children, so children of affluent parents are more likely to themselves be affluent than children of poorer parents. Given this model, the effect of parental income on children's economic status can change if the relative investments made by rich and poor parents change, or if the payoff to the investment changes.

Since Lyndon Johnson declared war on poverty in the United States and before, federal and state expenditures on behalf of children have increased greatly and much of this spending

[3] These numbers are from Table 3 in Solon (2000).

was intended to reduce the "investment gap" between rich and poor children. Means-tested programs such as Medicaid, food stamps, Head Start, and Pell Grants for college expenses were designed to increase investment in the health, nutrition, and knowledge of poor children. If the programs achieved their intended result, the effect of parental income should be lower for children reared after these programs were implemented than for children born before the programs existed. This is one interpretation of the meaning of equal opportunity, namely that investment in children does not depend on their parent's income.

Although it is obvious that means-tested programs should reduce the "investment gap" between rich and poor children, universal programs can also close the gap under some circumstances. Most social scientists assume that a child's economic success increases at a diminishing rate as the level of investment rises. Empirical evidence for this assumption is weak, but empirical work does suggest that the effect of parental income on children's educational attainment and eventual wages is nonlinear and concave downward (Mayer 1997). This implies that the first dollar of investment creates the greatest increase in the economic well-being of the child. It also implies that when institutions outside the family invest equally in all children, poor children are likely to gain more than affluent children, because poor children's parents have not invested as much.

Public schools and non-government aid should, of course, have reduced the effect of parental income even before the war on poverty. However, government means-tested benefits increased steeply after about 1969 and per pupil spending on public education increased and became more equal across school districts after 1975. If these investments helped low-income children, the effect of parental income should be lower for recent cohorts of children.

Changes in the returns to parental investments can also affect intergenerational mobility. Returns to schooling have increased over the last twenty years. Even if parents continue to invest the same amount in their children's schooling and nothing else changes, an increase in the return to schooling would mean that inequality between affluent children (who are more likely to go to college) and poorer children (who are less likely to go to college) would increase. Put another way, all else equal if the effect of parental income on son's schooling has not changed, the increase in returns to schooling would increase the effect of parental income on son's income. Of course the increase in returns to schooling and the increase in government investments in children could off-set one another leading to no change in intergenerational mobility.

## III. Methods

In equation 1$\beta_p$ is the elasticity of children's income with respect to parents' income. If $\beta_p = .10$ for example, children who grew up in families whose income differed by say 100 percent would differ by 10 percent. This model, like those used in all the research on intergenerational mobility, estimates the effect of parental income *and all its correlates* on children's economic success. Clearly, there are numerous avenues through which this relationship can arise including through parents' cognitive skill, education, parenting skills, and so on. We return to this issue below.

Research on intergenerational mobility often reports $\beta_p$ as a measure of the intergenerational correlation of economic status. If the variance of the parents' income distribution is equal to the variance of the children's income distribution, then $\beta_p$ is equivalent to the correlation between the log of the parents' income and the log of the child's economic status. The degree of intergenerational mobility is then $(1 - \beta_p)$. However, when inequality is growing, estimating the intergenerational correlation using $\beta_p$ is likely to be misleading. Unless the growth in inequality has been the same for both generations, the ratio of the variance of the parent's and children's income distribution will have changed over time. If the difference in the variance of the parent's and children's distributions has grown, $\beta_p$ will be an increasingly biased estimate of the intergenerational correlation of economic status. Traditionally, this problem has been "swept

Our second measure of mobility is the standardized coefficient, βeta, from equation 1. βeta is estimated as follows:

$$\hat{b} * (\frac{s_{\ln Y_p}}{s_{\ln Y_c}}) = r_{\ln Y_c, \ln Y_p} = beta$$

In this bi-variate regression βeta is equivalent to the sample correlation. Trends in its value are unaffected by changes in the variance of either income distribution. Thus in equation 1, 1-βeta is in principle a better measure of intergenerational mobility than $1-\beta_p$. βeta can be interpreted as the predicted change in $Y_c$ for each standardized change in $Y_p$.

If we square $r_{yp, yc}$, we get the familiar measure of $R^2$, which tells us the percent of the variance in $Y_c$ explained by the variance in $Y_p$. This measure is redundant in the bi-variate regression. But if we add more X's to equation 1, $R^2$ measures the percent of the variation in $Y_c$ explained by *all* measured aspects of family background.

$\beta_p$ and βeta are useful because they summarize changes in the income distributions of parents and children. But this is also a limitation. From these we cannot tell if mobility is changing differently for different parts of the income distribution. To assess mobility in different portions of the distribution we turn to non-parametric measures.

Equation 1 can be taken as a reduced form estimate of the effect of parental income and its correlates. This leaves the mechanism creating the relationship undetermined. In fact, it is quite possible for the correlation between parent's and children's economic status to remain constant even though the effect of some correlates of parental income increase while others decrease. To account for this possibility, in our third estimate of mobility we control several other family background characteristics of children. By controlling some exogenous correlates of income, we can remove some of the ambiguity in our first measure. However, like other studies of intergenerational mobility, we do not make a definitive attempt to decompose $\beta_p$ into its causal components.

Our last measure is a transition matrix, which displays the probability that a parent who had income in a particular third of the parental income distribution will have a child who income is in the same third of the children's income distribution. By comparing these probabilities across cohorts, we see whether the correlation between parents and children changes differently for different parts of the parental income distribution.

## IV. Data

We use the Panel Study of Income Dynamics (PSID). The PSID is a longitudinal data set initiated with a core sample of approximately 4,800 families in 1968. As children in the original sample have established their own households, they and all members of their new households were included in the data set, thereby increasing the sample size over time. Our PSID sample includes all males born between 1949 and 1965 whose parents were respondents to the survey and who had positive income, wages, or earnings when they were thirty years old. We divide the

sample into four cohorts and estimate the effect of parental income separately for each cohort. We then test the significance of the differences among these estimates.

Table 1 describes our sample. The cohorts are relatively small and they span only sixteen years. However, they span the time period in which important changes were taking place. The sons in these cohorts were reaching age thirty during a period when economic inequality was growing. Significant parts of the childhood of the youngest two cohorts occurred after 1968 when important social welfare policies had been passed and were growing.

We average parental income over the years when a child was aged nineteen to twenty-five[4]. Families without at least three years of income were excluded in order to minimize error in the measurement of the parents' permanent income. We inflate all income values to 1995 dollars using the CPI-U-X1.

For some models we control additional family background characteristics. These include family size, parents' education, parents' marital status, and the child's race. We also include a measure of the child's labor market experience in our analysis in order to get a better measure of life-time economic status. We measure experience as the sum of all hours the individual worked from age nineteen through age twenty-nine. The Appendix describes these variables in detail and provides descriptive statistics for them.

We estimate the effect of family income on three measures of son' economic status, namely hourly wages, annual earnings, and household income. In most models of intergenerational mobility, economists estimate the effect of a measure of parental economic status on the same measure for the child. Thus they estimate the effect of, say father's wage on son's wage or father's earnings on son's earnings. This is because they often are following in the tradition of Galton (1886) and others who try to estimate the "inheritability" of traits. In this framework it makes sense to estimate the effect of a parental characteristic on the same

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[4] Presumably parental income during the child's entire childhood affects children's well-being. However, we cannot average income over such a long period and retain and still have a sample that spans several years. We assume that parental income during children's very early adulthood is strongly correlated with their parental income when they were growing up. We estimated similar models for the youngest three cohorts measuring parental income when children were twelve to fourteen years old and obtained substantially similar results. We also created a data set that included some measures of parental income during early adolescence and some during early adulthood. We then used a Chow test to determine if the coefficients in the sample with income measured at a young age were the same as the coefficients for the sample with income measured later. We failed to reject the null hypothesis that these coefficients were the same at the 1percent level.

characteristic among children just as one would estimate the effect of parental eye color on child's eye color but not on child's I.Q.. However, as noted the economic model that predicts a relationship between the economic status of parents and children is mainly a human capital model that emphasizes parental investment in children. Because we adopt the logic of the human capital model, we take family income as an indicator of parent's potential monetary investment in children.

We mainly confine our analysis to sons for two reasons. First, most of the previous research on the intergenerational transmission of economic status has been on sons and we compare our results to these earlier studies. Second, the economic status of women at age thirty is likely to be a worse measure of their permanent economic status than the economic status of men at age thirty. Women's wages and earnings are influenced by their fertility choices. At age thirty some women will have had children and taken time off from work to care for them. Others will have children in the future and take time off. The current wages of the former will be lower than the current wages of the latter even when their life-time earnings will be the same. The age of first birth has increased, but it has increased more for highly educated women than for women with fewer years of schooling. We have wage and earnings data only for workers. If the characteristics of women who work have changed over time and these changes are associated with parental income, it could bias the trend in effect of parental income on labor market outcomes. These factors should have a much smaller affect on the trend in the relationship between parental income and daughter's family income and daughter's educational attainment.

Table 2 shows the means and standard deviations for log parental income and the three measures of son's economic status. Mean parental income hardly changed over time, but sons' income, wages, and earnings at age thirty all declined somewhat. The standard deviation of both parents' and sons' family income increased for the youngest three cohorts, reflecting the rise in economic inequality over this period. The standard deviation of son's earnings also increased over this period.

## V. Results

The first column in Table 3 shows unstandardized OLS regression coefficients ($\beta_p$) from equation 1 estimated separately for each cohort. In models predicting son's family income and $\beta_p$ declined over time. The decline from the oldest to the youngest cohort is fairly

large and statistically significant at the .05 level for both outcomes. Although $\beta_p$ also declined in models predicting son's wages, this decline is relatively small and not statistically significant. If the effect of parental income on earnings but not wages declined, it suggests that most of the decline is from changes in rich and poor children's work hours and not changes in their wage rates. These results also suggests that the decline in the effect of parental income on son's family income is mainly due to the decline in the effect of parental income on son's earnings rather than on changes in assortative mating.

Note that for the oldest two cohorts $\beta_p$ is close to the most common estimates from other studies using PSID data and averaging income over several years. The coefficient for children born between 1949 and 1957 is .410 for earnings. As noted above in the three studies that use PSID data, average father's earnings over five years and include sons born between 1951 and 1959, the estimates are .39, .41, and .53.

The same trend occurs with the βeta in these models. However, βeta is less than $\beta_p$ in all cohorts for models predicting son's income and earnings. This means that $\beta_p$ under-states the extent of intergenerational mobility for these outcomes. However, βeta is larger than $\beta_p$ in models predicting wages.

Table 4 controls the child's race, family size, mother's education, parents' marital status, and son's labor market experience. Because these measures affect children's outcomes and are correlated with parental income, the apparent decline in the effect of parental income could be due to a decline in the effect of these variables. As is the case in all previous research, controlling these other background characteristics reduces the effect of parental income. However, the downward trend in the effect of parental income on son's family income and earnings remains. Thus the decline in the effect of parental income is not due a decline in the effect of its most frequently cited correlates. Again the trend in βetas provide essentially these same conclusion as trends in $\beta_p$.

Table 5A and 5B shows a transition matrix for parent's income and children's earnings and income. We do not include the matrix for wages because it is similar to the one for earnings. It shows a decline in the probability that children whose parents were in the poorest third of the income distribution would have earnings in the poorest third of their earnings distribution. This decline was greater than the decline in the probability that a child born to parents in the richest third of the income distribution would be in the richest third of their earnings distribution. This

same pattern occurs for son's income except that there is no clear downward trend in the probability that children whose parents are in the richest third of the income distribution will have income in the top third of their own income distribution.

**Accounting for the Trend.** What could account for the downward trend in the effect of parental income on children's economic status? We have argued that government expenditures have reduced the investment gap between rich and poor children. We return to this hypothesis below, but there are other technical reasons that the correlation could have declined and we first address these.

On possibility is that sons' economic status at age thirty has become a worse measure of their permanent economic status. This could happen if sons take longer to complete their schooling, if they take more time off from school and work to travel or do volunteer work, or if they are otherwise less likely to settle into their permanent job status by age thirty. If sons who delay assuming adult roles have higher wages or steeper earnings trajectories once they take their job, economic outcomes at age thirty could be a worse measure of permanent economic status than in the past. However, if delays like these result in lower permanent incomes, measurement error in economic status might not change. If affluent sons do these things more than low-income sons, and the effects on economic status are permanent, this could explain the downward trend in the effect of parental income. It is also possible that such delays mean that fewer thirty-year-old sons have wages and earnings data, resulting in bias due to sample changes.

If this explanation were true, we would expect work experience at age thirty to have declined. Appendix Table A1 shows that mean labor market experience declined by 760 hours (4.4 percent) between the oldest and the youngest cohorts. However, the correlation between parental income and son's labor market experience went from .005 for the oldest cohort to -.133 for the youngest cohort, so the decline in experience was greater among affluent than poor children. However, even for the youngest cohort the correlation is small and controlling labor market experience did not eliminate the trend in the effect of parental income.

If younger cohorts of sons take longer to achieve their permanent job status, we might expect more thirty-year-olds to be living with their parents and fewer to have wages and earnings. In the oldest cohort 91.6 percent of sons were head of their own household compared to 91.2 percent in the youngest cohort. But the percent of thirty-year-old sons with earnings

declined from 90.5 percent for the oldest cohort to 85.7 for the youngest. This suggests the possibility of some differential selection.

Although this evidence does not suggest that changes in measurement error or sample selection are likely to be a large source of error in the trend in $\beta_p$, we re-estimated equation 1 for thirty-five year old sons (not shown). Thirty-five year olds should be less susceptible to any problems associated with son's assuming adult roles at a later age. We have data for only three cohorts of thirty-five year olds. The birth dates for these cohorts correspond to the birth dates for the oldest three cohorts of thirty-year-olds. For all outcomes the trend in $\beta_p$ is the same for thirty-five year olds as for thirty year olds: it declines from the oldest cohort to the youngest cohort.

If government investments in children reduced the effect of parental income on economic outcomes, we would expect the effect of parental income on son's educational attainment to decline because much of the government effort was intended to equalize educational investments. Table 6 shows that the effect of parental income on son's educational attainment declined for each cohort and that the decline between the oldest and youngest cohorts is statistically significant at the .05 level.

To see whether the decline in the effect of parental income on children's years of schooling accounts for the decline in the effect of parental income on son's economic outcomes, we added the son's own years of schooling to equation 1. This is shown in Table 7. Comparing this table to Table 3 shows that much of the effect of parental income on son's economic outcomes is mediated by the son's education (or its correlates). In fact by the youngest cohort parental income has almost no effect on son's income or earnings net of its effect on son's education.

If the decline in $\beta_p$ is due to government investments in children, the effect of family background characteristics other than family income might not have declined because government programs were mainly intended to address the problem associated with low parental income. Only a few programs were intended to address other parental characteristics such as low cognitive ability or ineffective parenting. Table 8 shows that the effect of parental education (controlling parental income) on children's outcomes actually increased over time. Thus the decline in the effect of parental income is not simply part of an overall decline in the effect of family background characteristics on children's economic outcomes.

If non-family investments equalized total investments for children, we should be able to measure the effect of these investments. To do this, we would need to estimate the effect of parental income for children who were exposed to the non-family investments and children who were not. We cannot do this very well for programs such as food stamps or Pell Grants, that were national programs. But we can get some idea of how government investments affect children's outcomes by comparing children who grew up in states that provide more or less investment in schooling.

In the United States government spending for elementary and secondary schooling varies considerably from state to state and it has increased over time. Elementary and secondary schooling is probably the single largest government investment in children. It also varies a lot over states and it has increased over time. If this kind of investment reduces the effect of parental income on children's outcomes, then controlling school expenditures should $\beta_p$. College tuition in state universities also varies a lot across states and tuition has also increased over time. But while states were raising tuition they were also providing more aid in the form of grants to pay for college costs. Lower tuition costs should allow more low-income children to attend college and therefore reduce the effect of parental income on children's years of schooling.

The first column in Table 9 shows that controlling these state-level policy variables reduces the effect of parental income. The effect of state per pupil expenditures for elementary and secondary schooling is not statistically significant at the .05 level. Higher college tuition reduces years of schooling while larger grants for college expenses increases years of schooling. Both effects are significant at the .01 level.

The next two columns show these same models for children whose family income is above or below the median of the parent's income distribution. The most important result here is that parental income has almost no effect on educational attainment for children in the bottom half of the family income distribution, but it has a large effect in the top half of the distribution. This could mean that together the various forms of means-tested financial aid make it possible for nearly all poor children who want to attend college to attend. Including per pupil school expenditures and college costs reduces the effect of parental income for children in the top half of the distribution. For these children higher college tuition is associated with fewer years of schooling and larger grants for college expenses is associated with an increase in years of schooling. But these effects are small and statistically insignificant for low-income children.

## VI. Conclusions

The effect of parental income on son's earnings and family income declined for cohorts born between 1949 and 1965. The effect of parental income on son's wages also declined, but the decline was less pronounced than the decline for earnings and income and not statistically significant. Thus part of the decline in the effect of parental income on earnings was due to changes in hours of work.

The effect of parental income on children's educational attainment also declined over this same period. This decline accounts for a substantial part of the effect of parental income on son's economic outcomes. The educational attainment of low-income children is only weakly predicted by their parent's income, while the educational attainment of high-income children is strongly associated with their parent's income.

We hypothesize that the decline in the effect of parental income was due to an increase in non-family investments in children and present some tentative evidence to support this hypothesis. This evidence shows that state education financing policies affect children's educational attainment.

# Appendix

*Economic Status Data Set*

We select all individuals between the ages of thirty and forty-six in the Individual Level File of the PSID in 1995 (i.e., born between 1949 and 1965), who had parents in the PSID, and who had positive wages, income, or earnings when they were thirty years old. We trimmed the upper and lower 1% of the wage, income, and earnings distribution. To link these individuals to their parents, we use the Parent Identification File.

*Education Data Set*

To construct the educational attainment data set data set we include all individuals between the ages of twenty-five and forty-three in 1992 in the Individual Level File.[5] In this data set we measure the educational attainment in years of the respondents when they were twenty-five years old.

*Variable definitions*

**Family size** is averaged over the period when the child was aged nineteen through twenty-five.

**Parental education** is the mother's years of schooling when the child was nineteen years old. When this value was missing we used mother's education for the first available subsequent year up to the time when the child was age twenty-five. If the mother's education was still missing, we used the education of the father when the child was twenty-five.

**Parent's marital status** is an indicator variable set equal to one if the child's parents were married when the child was nineteen.

[5] Because the early release data in the Individual Level File did not contain education values we only used final release data sets. Thus, our final year in the education data set is based on 1993 final release data. To maximize our trend data we did utilize earl release data (1994-1996 waves) for the economic status variables.

Table A1: Means and Standard Deviations for Control Variables by Data Set

| Variables | Earnings Models | Income Models | Wage Models |
|---|---|---|---|
| **Experience** | | | |
| 1949-1953 | 17,101 | 17,098 | 17,204 |
| | (6446) | (6324) | (6360) |
| 1954-1957 | 17,359 | 17,249 | 17,442 |
| | (6982) | (6969) | (7059) |
| 1958-1961 | 16,182 | 16,049 | 16,223 |
| | (7212) | (7264) | (7194) |
| 1962-1965 | 16,341 | 16,785 | 16,537 |
| | (7084) | (7373) | (7132) |
| **Black** | | | |
| 1949-1953 | .082 | .075 | .077 |
| | (.275) | (.264) | (.268) |
| 1954-1957 | .091 | .093 | .090 |
| | (.287) | (.291) | (.287) |
| 1958-1961 | .096 | .100 | .096 |
| | (.296) | (.300) | (.294) |
| 1962-1965 | .108 | .108 | .105 |
| | (.311) | (.311) | (.308) |
| **Parents' Education** | | | |
| 1949-1953 | 11.43 | 11.50 | 11.50 |
| | (2.62) | (2.65) | (2.64) |
| 1954-1957 | 11.71 | 11.68 | 11.71 |
| | (2.63) | (2.61) | (2.62) |
| 1958-1961 | 11.73 | 11.73 | 11.74 |
| | (2.47) | (2.50) | (2.46) |
| 1962-1965 | 12.01 | 12.02 | 12.02 |
| | (2.63) | (2.56) | (2.61) |
| **Family Size** | | | |
| 1949-1953 | 4.07 | 4.06 | 4.04 |
| | (2.01) | (2.01) | (2.00) |
| 1954-1957 | 4.17 | 4.21 | 4.17 |
| | (2.00) | (2.02) | (2.01) |
| 1958-1961 | 3.68 | 3.65 | 3.70 |
| | (1.74) | (1.73) | (1.75) |
| 1962-1965 | 3.48 | 3.48 | 3.48 |
| | (1.45) | (1.46) | (1.45) |

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Table 1 PSID Sample Characteristics for Men

| Year Born | Year Turned Thirty | Number of Cases | | |
|---|---|---|---|---|
| | | Wages | Earn. | Income |
| 1949-1953 | 1979-1983 | 247 | 246 | 252 |
| 1954-1957 | 1984-1987 | 337 | 337 | 355 |
| 1958-1961 | 1988-1991 | 355 | 353 | 363 |
| 1962-1965 | 1992-1995 | 298 | 302 | 320 |

Table 2 Means and Standard Deviations for Parents' Income and Son's Outcomes

| Outcome and Year of Birth | Mean | Standard Deviation |
|---|---|---|
| Parents' Log Family Income | | |
| 1949-1953 | 10.847 | .542 |
| 1954-1957 | 10.902 | .592 |
| 1958-1961 | 10.891 | .609 |
| 1962-1965 | 10.896 | .669 |
| | | |
| Son's Log Family Income | | |
| 1949-1953 | 10.683 | .646 |
| 1954-1957 | 10.616 | .667 |
| 1958-1961 | 10.579 | .667 |
| 1962-1965 | 10.545 | .737 |
| | | |
| Son's Log Hourly Wages | | |
| 1949-1953 | 2.748 | .542 |
| 1954-1957 | 2.666 | .549 |
| 1958-1961 | 2.572 | .592 |
| 1962-1965 | 2.571 | .580 |
| | | |
| Son's Log Annual Earnings | | |
| 1949-1953 | 10.317 | .811 |
| 1954-1957 | 10.289 | .714 |
| 1958-1961 | 10.202 | .776 |
| 1962-1965 | 10.155 | .807 |

Table 3, Unstandardized and Standardized OLS Regression Coefficients for the Effect of Parental Income on Son's Outcomes

| Outcome and Year of Birth | $\beta_p$ [t-statistics] | Beta |
|---|---|---|
| **Son's Annual Earnings at Age 30** | | |
| 1949-1953 | .459 [4.316] | .311 |
| 1954-1957 | .362 [4.369] | .301 |
| 1958-1961 | .275 [3.665] | .216 |
| 1962-1965 | .198 [2.472]* | .164 |
| **Son's Family Income at Age 30** | | |
| 1949-1953 | .423 [4.242] | .364 |
| 1954-1957 | .422 [6.082] | .371 |
| 1958-1961 | .281 [4.095] | .260 |
| 1962-1965 | .215 [2.891]* | .195 |
| **Son's Hourly Wages at Age 30** | | |
| 1949-1953 | .297 [4.167] | .297 |
| 1954-1957 | .249 [4.422] | .268 |
| 1958-1961 | .243 [4.149] | .250 |
| 1962-1965 | .237 [4.003] | .273 |

* The difference in the unstandardized coefficient for this cohort compared to the oldest cohort is statistically significantly at the .05 level.

Table 4, Unstandardized and Standardized OLS Regression Coefficients for the Effect of Parental Income on Son's Outcomes Controlling Parents Education and Age, Family Size, Son's Race and Labor Market Experience

| Outcome and Year of Birth | $\beta_p$ [t-statistics] | Beta |
|---|---|---|
| **Son's Annual Earnings at Age 30** | | |
| 1949-1953 | .379 [3.216] | .257 |
| 1954-1957 | .297 [2.974] | .246 |
| 1958-1961 | .165 [1.818] | .130 |
| 1962-1965 | .128 [1.517]* | .106 |
| **Son's Family Income at Age 30** | | |
| 1949-1953 | .370 [3.754] | .318 |
| 1954-1957 | .340 [4.448] | .300 |
| 1958-1961 | .196 [2.501] | .181 |
| 1962-1965 | .170 [2.131]* | .154 |
| **Son's Hourly Wages at Age 30** | | |
| 1949-1953 | .273 [3.573] | .273 |
| 1954-1957 | .193 [.2.533] | .208 |
| 1958-1961 | .129 [1.754] | .133 |
| 1962-1965 | .169 [2.535] | .194 |

Notes:
1) The difference in the unstandardized coefficients for cohorts 1 and cohort 4 is statistically significant in every panel.

Table 5A: Transition Matrix for Parent's Income and Children's Earnings

| | Probability Child in Poorest Third | Probability Child in Middle Third | Probability Child in Richest Third |
|---|---|---|---|
| Poorest Third | | | |
| 1949-1953 | .606 | .248 | .147 |
| 1954-1957 | .580 | .304 | 116 |
| 1958-1961 | .471 | .374 | .155 |
| 1962-1965 | .486 | .391 | .123 |
| | | | |
| Middle Third | | | |
| 1949-1953 | .316 | .392 | .291 |
| 1954-1957 | .351 | .378 | .270 |
| 1958-1961 | .340 | .377 | .283 |
| 1962-1965 | .342 | .354 | .304 |
| | | | |
| Richest Third | | | |
| 1949-1953 | .224 | .293 | .483 |
| 1954-1957 | .261 | .250 | .489 |
| 1958-1961 | .250 | .293 | .457 |
| 1962-1965 | .259 | .294 | .447 |

Table 5B: Transition Matrix for Parent's Income and Son's Income

| | Probability Child in Poorest Third | Probability Child in Middle Third | Probability Child in Richest Third |
|---|---|---|---|
| Poorest Third | | | |
| 1949-1953 | .596 | .284 | .119 |
| 1954-1957 | .612 | .245 | .143 |
| 1958-1961 | .552 | .253 | .195 |
| 1962-1965 | .537 | .327 | .136 |
| | | | |
| Middle Third | | | |
| 1949-1953 | .259 | .407 | .333 |
| 1954-1957 | .357 | .374 | .270 |
| 1958-1961 | .353 | .328 | .319 |
| 1962-1965 | .378 | .341 | .280 |
| | | | |
| Richest Third | | | |
| 1949-1953 | .274 | .274 | .452 |
| 1954-1957 | .247 | .280 | .473 |
| 1958-1961 | .183 | .387 | .430 |
| 1962-1965 | .242 | .264 | .495 |

Table 6, OLS Regression Coefficients (t-Statistics)
and Standardized Regression Coefficient
for the Effect of Parental Income on Son's Education

| Outcome and Year of Birth | β | Beta |
|---|---|---|
| 1949-1953 | 1.316 | .406 |
| | (7.607) | |
| 1954-1957 | 1.097* | .337 |
| | (5.588) | |
| 1958-1961 | .582* | .186 |
| | (2.947) | |
| 1962-1965 | .724* | .360 |
| | (2.329) | |
| 1966-1967 | .130* | .077 |
| | (.353) | |

Notes:

1) The difference in the unstandardized coefficients for cohort 2 and cohort 4 is statistically significant at the 1% level.
2) * a statistically significant difference in the unstandardized coefficients for this cohort and the preceding cohort at the 5% level

Table 7, Effect of Parental Income on Son's Outcomes Controlling Son's Education

| Outcome and Year of Birth | $\beta_p$ (t-statistic) | Beta |
|---|---|---|
| Son's Annual Earnings at Age 30 | | |
| 1949-1953 | .208 | .142 |
| | (2.123) | |
| 1954-1957 | .179 | .144 |
| | (2.061) | |
| 1958-1961 | .144 | .110 |
| | (1.759) | |
| 1962-1965 | .005 | .008 |
| | (.201) | |
| Son's Family Income at Age 30 | | |
| 1949-1953 | .226 | .210 |
| | (2.571) | |
| 1954-1957 | .246 | .205 |
| | (3.428) | |
| 1958-1961 | .158 | .147 |
| | (2.146) | |
| 1962-1965 | .006 | .010 |
| | (.204) | |
| Son's Hourly Wages at Age 30 | | |
| 1949-1953 | .175 | .176 |
| | (2.338) | |
| 1954-1957 | .121 | .127 |
| | (2.075) | |
| 1958-1961 | .150 | .151 |
| | (2.291) | |
| 1962-1965 | .057 | .127 |
| | (3.685) | |

experience (for earnings and income)
2) The difference in the estimated effect for the first and fourth cohort is statistically significant at the 5% level.
T-statistics are in brackets.

Table 8, Effect of Parental Income ($\beta_p$) on Children's Years of Schooling Controlling State Education Policies

| Model | Total Sample | Above Median Income | Below Median Income |
|---|---|---|---|
| **Model 1**: Log Parental Income No Controls | 1.208<br>(18.034) | 1.584<br>(10.503) | .379<br>(2.624) |
| **Model 2**: Log Parental Income Controlling Parental Education and Child's Race | .835<br>(12.027) | 1.132<br>(7.328) | .130<br>(.902) |
| **Model 3** | | | |
| Log Parental Income | .827<br>(12.027) | 1.106<br>7.146 | .135<br>(.939) |
| State Per Pupil Expenditures on Schools | .056<br>(.845) | .128<br>(1.541) | -.106<br>(-.954) |
| **Model 4** | | | |
| Log Parental Income | .813<br>(11.706) | 1.104<br>(7.245) | .139<br>(.971) |
| State Per Pupil Expenditures on Schools | .024<br>.347 | .047<br>(.553) | -.078<br>(-.661) |
| College Tuition/$1,000 | -.216<br>(-3.141) | -.222<br>(-2.446) | -.079<br>(-.702) |
| Grants Per Resident Aged 15 to 24 Years | 1.803<br>(4.241) | 2.445<br>(4.723) | .084<br>(.103) |