Intergenerational Income Mobility among Daughters in the United States

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Abstract

The empirical literature on intergenerational income mobility in the United States has focused predominantly on sons. This paper partly redresses that imbalance by using data from the Panel Study of Income Dynamics to investigate intergenerational mobility among daughters. We find that intergenerational transmission of income status is somewhat weaker for daughters than for sons, but is still quite substantial. We also find that assortative mating is an important element in the intergenerational transmission process.

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I. Introduction

The early empirical literature on intergenerational income mobility in the United States focused mainly on the association of earnings between fathers and sons. This literature suggested that the elasticity of son's earnings with respect to father's earnings is 0.2 or less.[1] Most of these studies, however, used single-year or other short-run measures of father's earnings. Presumably, we should be more interested in estimating the intergenerational association in *long-run* income status, in which case reliance on short-run measures induces a downward errors-in-variables bias. In addition, the peculiar homogeneity of some of the early studies' samples[2] aggravated the errors-in-variables bias by diminishing the "signal" proportion of the sample variation in measured earnings.

A more recent wave of studies has set out to reduce this bias by using intergenerational data from two longitudinal surveys, the Panel Study of Income Dynamics (PSID) and the National Longitudinal Surveys (NLS) of labor market experience.[3] Because these data pertain to national probability samples, they avoid the homogeneity of the earlier samples. Furthermore, the longitudinal nature of the data has enabled exploration of the empirical importance of using long-run instead of short-run income

[1] Becker and Tomes (1986).

[2] For example, the fathers in Behrman and Taubman's (1985) study were drawn from a sample of white male twins in which both members of each twin pair had served in the armed forces and then cooperated with a succession of surveys.

[3] See Solon (forthcoming) for a detailed survey of the new studies and a discussion of the biases in the earlier literature.

measures. Most of the evidence from the new studies suggests that the elasticity between the permanent components of son's and father's earnings is about 0.4.

Unfortunately, both the old and new literatures focused very disproportionately on sons.[4] Only a few studies have presented fragments of evidence on intergenerational mobility among daughters. The purpose of the present paper is to help redress that imbalance. Using data on daughters in the PSID, we provide new evidence in a framework that highlights the roles of both the daughter's own earnings and, if she is married, the earnings of her husband. We find that intergenerational transmission of income status is somewhat weaker for daughters than for sons, but is still quite substantial. We also find that assortative mating is an important element in the intergenerational transmission process.

The next section of the paper reviews the small existing literature on daughters. Section III describes our data, Section IV lays out our econometric framework, Section V presents our empirical results, and Section VI summarizes our findings.

II. Previous Research on Daughters

The PSID-based studies most like our own are Minicozzi (1997) and Shea (1997).[5] Minicozzi estimates a 0.41 coefficient in the regression of the log of a two-year average of the daughter's annual earnings (when ages 28 and 29) on the log of an estimate

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[4] The senior author of the present paper is at least as guilty of this lapse as anyone.

[5] The PSID-based studies by Behrman and Taubman (1990) and Mulligan (1997) pool daughters and sons together and do not produce separate estimates by gender. Lillard and Kilburn (1996) estimate a complex and highly restrictive model of earnings covariances among various family members, but it is difficult to tell from their results what the empirical association between daughter's and parents' observed incomes actually is.

of the present discounted value of her parents' lifetime earnings. Daughters with zero earnings at age 28 or 29 are omitted from the analysis,[6] and other sources of daughter's family income, such as husband's earnings, are not considered. Shea estimates a 0.54 coefficient in the regression of the log of a multi-year average of the daughter's annual earnings on the log of a multi-year average of her parents' family income. He also estimates a 0.39 coefficient in the regression in which the dependent variable is instead the log of a multi-year average of the daughter's family income. Shea does not look specifically at the role of husband's earnings in the latter estimate.

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[6] In our own PSID samples analyzed below, almost 20 percent of the daughters show zero earnings in 1991.

Two other studies of intergenerational mobility among daughters have used the NLS data. Peters (1992) estimates a 0.11 elasticity between a multi-year average of daughter's annual earnings and a multi-year average of her father's annual earnings.[7] Peters also estimates a 0.28 elasticity between a multi-year average of daughter's family income and a multi-year average of her parents' family income. Again, this analysis does not highlight the role of husband's earnings. Altonji and Dunn (1991) estimate a 0.22 coefficient in the regression of a multi-year average of the daughter's log annual earnings on a multi-year average of her father's log annual earnings. Their dependent variable does not average in years of earnings less than $100. They also estimate a 0.26 coefficient in the regression of a multi-year average of the daughter's log family income on a multi-year average of her father's log family income, and they estimate a 0.37 coefficient when the explanatory variable is instead a multi-year average of her mother's log family income.

Unlike the other studies, Altonji and Dunn do give some attention to husband's earnings. They report a 0.26 sample correlation between multi-year averages of the age-adjusted log earnings of the daughter's husband and her father. They do not, however, provide a direct accounting of the contribution of that correlation to the intergenerational elasticity of the daughter's family income.

Finally, a few studies of countries other than the United States also point to the potential importance of assortative mating for daughters' intergenerational mobility. Using a sample from York, England, Atkinson, Maynard, and Trinder (1983) estimate

[7] It is not clear from Peters' description whether the variables in her regressions are logs of averages or averages of logs, nor is it clear how she treats zero observations of daughter's earnings.

that the elasticity of the daughter's husband's earnings with respect to her father's earnings is just as great as the elasticity of a son's earnings with respect to his own father's earnings. Lillard and Kilburn (1995) report a similar finding for Malaysia. In a study of Brazil, Lam and Schoeni (1993) stress the importance of assortative mating in explaining the strong association between the daughter's husband's wage rate and her father's years of schooling.[8]

Our purpose in this paper is to clarify and add to the findings in the budding literature on intergenerational income mobility among daughters. Recognizing that daughter's own earnings often comprise a minority share (and not infrequently, a zero share) of her family income, we consider broader measures of her income. We develop an econometric framework that helps quantify the role of husbands' earnings in daughters' intergenerational mobility. And, for purposes of comparison, we perform a parallel analysis of sons' mobility, which similarly contributes to the sons literature by focusing on *family* income and on the role of their wives' earnings.

III. Data

The Panel Study of Income Dynamics is a longitudinal survey conducted by the University of Michigan's Survey Research Center. The PSID began in 1968 with a national probability sample of about 5,000 families, and it has conducted annual reinterviews each year since. For purposes of intergenerational mobility research, the

[8] See Becker (1991) and Lam (1988) for theoretical analyses of assortative mating. Kremer (1997) reports that the spouse correlation in years of schooling in the United States is a little above 0.6. Haider (1998) reports similar results for schooling and also estimates that the spouse correlation in hourly wage rates is above 0.3. He explains that the spouse correlation in annual earnings is much smaller because the spouse correlation in annual hours of work is slightly negative.

crucial feature of the survey is that it has followed children from the original families as they have grown into adulthood and formed their own households. As a result, it is now possible to relate the children's income status as adults to the status of their parents as annually reported by the parents themselves since the outset of the survey.

Our daughters sample consists of daughters from the original 1968 sample who also participated in the 1992 survey.[9] Their income reports in that survey pertain to the 1991 calendar year. We use only the Survey Research Center component of the sample, i.e., we exclude the Survey of Economic Opportunity component (the so-called "poverty sample"). We also restrict our analysis to the cohort born between 1951 and 1966. Daughters born before 1951, who were older than 17 at the 1968 interview, are excluded to avoid overrepresenting daughters who left home at late ages. The 1966 birth year restriction assures that the daughters' 1991 income measures are observed at ages of at

[9] We therefore exclude daughters who had disappeared from the survey by 1992 because of death, refusal to cooperate, or inability of the Survey Research Center to locate them. Solon's (1992) discussion of sample attrition notes a tendency for greater attrition among low-income individuals and explains why this probably results in an attenuation bias in the estimation of intergenerational elasticities.

least 25 years. Income observations at younger ages would be particularly noisy measures of long-run status. By the same token, where more than one daughter from the same family meets all of our other sample restrictions, only the oldest is retained in our analysis, because her 1991 status is likely to be a more accurate indicator of her long-run status. Because the PSID's information on individual earnings pertains to heads of household and wives (including female cohabitors), we restrict our daughters sample to heads and wives. We exclude cases in which family income is non-positive or the individual earnings variables are imputed by "major assignments."

Following much of the recent literature, we reduce the errors-in-variables problem from noisy measurement of parents' long-run income by averaging parental income over multiple years. In particular, we use family income for the years 1967-1971 (as reported in the 1968-1972 interviews) for the 1968 head of household. We exclude cases in which any of these income observations are missing, non-positive, or based on major assignments of individual earnings.

As shown in Table 1, the resulting sample contains 533 daughters. The sample's mean age in 1991[10] is 33.6, and its mean log family income in 1991 is 10.5, which implies a geometric mean of $36,500 for the level of family income. In the daughters' families of origin, the mean age in 1967 of the 1968 household heads is 39.0, and the geometric mean of 1967 family income is $9,062. When we use a five-year average of parental log income for 1967-1971 to smooth out transitory fluctuations, as expected the sample variance

[10] We measure daughter's age as 1991 minus birth year as recorded in the 1992 interview file. We measure the 1968 household head's age on the basis of his or her birth year as recorded in the 1983 interview. When that information is missing, we base it instead on the age variable recorded in the 1968 interview.

declines to 80 percent (the square of 0.56/0.63) of the sample variance for the single-year 1967 measure.

IV. Econometric Framework

Let y_{1i} denote the permanent component of log family income for a daughter from family i, and let y_{0i} denote the same variable for her parents. Following most of the empirical literature on intergenerational mobility, we will express the intergenerational persistence of income status with the regression equation

(1) $$y_{1i} = \alpha + \rho y_{0i} + \varepsilon_i$$

where the error term ε_i reflects the combined effects on daughter's income of factors orthogonal to parental income and the slope coefficient ρ is the intergenerational elasticity of long-run income.

Because the available longitudinal surveys do not track either daughters or their parents long enough to enable direct measurement of permanent income, we model the daughter's log family income in year t as

(2) $$y_{1it} = y_{1i} + \delta_1 + \gamma_1 A_{1it} + \lambda_1 A_{1it}^2 + v_{1it}$$

where A_{1it} is her age in year t and v_{1it} is a transitory fluctuation around her long-run income-age profile due to both actual transitory movement and random measurement error. Similarly, we model the parents' log family income in year s as

(3) $$y_{0is} = y_{0i} + \delta_0 + \gamma_0 A_{0is} + \lambda_0 A_{0is}^2 + v_{0is}$$

where A_{0is} is the age of the parental household head in year s. The quadratic specifications for the age profiles are less restrictive than they may seem at first, because different quadratics are allowed for the daughter's and parents' generations, which are observed over different age ranges.

The implied relationship between the daughter's log income in year t and the parents' log income in year s is

$$(4) \qquad y_{1it} = (\alpha + \delta_1 - \rho\delta_0) + \rho y_{0is} + \gamma_1 A_{1it} + \lambda_1 A_{1it}^2 - \rho\gamma_0 A_{0is} - \rho\lambda_0 A_{0is}^2 + \varepsilon_i + v_{1it} - \rho v_{0is} .$$

If least squares estimation is performed for this regression of the daughter's log income in year t on the parents' log income in year s and age controls for both generations, the correlation between the key regressor y_{0is} and the error component v_{0is} induces an errors-in-variables bias in the estimation of the intergenerational elasticity ρ. In particular, if all the error components are uncorrelated with each other, parental permanent income, and both generations' ages, then the least squares estimator of ρ in this regression is subject to the classical errors-in-variables inconsistency

$$(5) \qquad \text{plim } \hat{\rho} = \rho\sigma_y^2 / (\sigma_y^2 + \sigma_v^2) < \rho$$

where σ_y^2 denotes the population variance in parents' permanent status y_{0i} and σ_v^2 is the variance of the measurement noise v_{0is}.

Like many recent studies of intergenerational mobility, we will reduce this errors-in-variables bias by measuring parental status with a multi-year average of parental log income. Specifically, we will apply least squares to the regression

$$(6) \qquad y_{1it} = (\alpha + \delta_1 - \rho\delta_0) + \rho\bar{y}_{0i} + \gamma_1 A_{1it} + \lambda_1 A_{1it}^2 - \rho\gamma_0 \bar{A}_{0i} - \rho\lambda_0 \overline{A}_{0i}^2 + \varepsilon_i + v_{1it} - \rho\bar{v}_{0i}$$

where $\bar{y}_{0i} = \sum_{s=1967}^{1971} y_{0is} / 5$ is the five-year average of the 1968 household head's log family incomes for 1967 through 1971, $\bar{A}_{0i}$ is his or her average age over those years (which, of course, is his or her age in 1969), $\overline{A^2_{0i}}$ denotes the average of his or her squared age over those years (which is just two plus the square of age in 1969), and $\bar{v}_{0i}$ averages the measurement noise over the five years. When we apply least squares to this regression, the probability limit of the resulting $\hat{\rho}$ is the same as in equation (5) except that σ_v^2, the single-year noise variance, is replaced by the variance of the averaged noise $\bar{v}_{0i}$. Under a broad range of assumptions, the latter variance is smaller, which presumably is the main reason that, in Table 1, the sample variance of the five-year average of parental log income is only 80 percent of that of the 1967 value. Accordingly, the errors-in-variables bias in estimating the intergenerational elasticity will be reduced, though not eliminated.[11]

[11] As shown below, the resulting estimate of ρ is 0.43. If instead we use single-year measures of parental log income, as in equation (4), we estimate ρ as 0.32 using 1967 income, 0.34 using 1968 income, 0.38 using 1969 income, 0.41 using 1970 income, and 0.38 using 1971 income.

Once we have estimated the intergenerational income elasticity in this way, we will perform a more detailed analysis of the 70 percent of our daughters sample that is married. For that subsample, in addition to estimating equation (6), we will re-estimate the equation with a new dependent variable, the log of the sum of the daughter's earnings (E_{wit}) and her husband's earnings (E_{hit}).[12] Letting β denote the elasticity of the couple's combined earnings with respect to the daughter's parents' income, we then will decompose β into the portions associated with the daughter's own earnings and her husband's earnings.

[12] We measure both earnings variables with the PSID's "total labor income" measures.

That decomposition can be written as

(7) $\beta = S\beta_h + (1-S)\beta_w$

where β_w is the elasticity of the daughter's own earnings with respect to her parents' income, β_h is the elasticity of her husband's earnings with respect to her parents' income, and $S = E_h / (E_w + E_h)$ is the typical share of husband's earnings in combined earnings.

For purposes of inferring the β's on the right side of equation (7), it is useful to write the log of the couple's combined earnings as

(8) $\log(E_{wit} + E_{hit}) = \log(E_{hit}) - \log(S_{it})$

where S_{it} is the share of husband's earnings in couple i's combined earnings in year t. Then in addition to estimating β by re-estimating equation (6) with $\log(E_{wit} + E_{hit})$ as the dependent variable, we also can re-estimate the equation with $\log(E_{hit})$ as the dependent variable and with $\log(S_{it})$ as the dependent variable. The difference between the coefficient vectors in these last two regressions is identically equal to the coefficient vector in the regression with $\log(E_{wit} + E_{hit})$ as the dependent variable. Estimating the regression with $\log(E_{hit})$ as the dependent variable, as was done in the English and Malaysian studies mentioned in Section II, produces an estimate of β_h, the elasticity of husband's earnings with respect to the daughter's parents' income. Estimating the regression with $\log(S_{it})$ as the dependent variable produces an estimate of β_S, the elasticity of the husband's share with respect to the daughter's parents' income. Since $\beta_S = (1-S)(\beta_h - \beta_w)$, β_S will be close to zero if $\beta_w \cong \beta_h$, that is, if the elasticities of the daughter's earnings and her husband's earnings with respect to her parents' income are nearly the same.[13]

V. Results

All of our empirical analyses use least squares to estimate equation (6), with various choices of dependent variable and sample. We begin by estimating the elasticity of daughter's family income with respect to her parents' family income for our full sample of 533 daughters. As shown in the first column of Table 2, the estimated elasticity is 0.43. This estimate is similar to Shea's (1997) estimate of 0.39 in his PSID-based analysis of daughter's family income. It also is similar to most recent estimates of the elasticity of son's earnings with respect to father's earnings, but, as we will see below, sons show larger elasticity estimates when parents' family income is the measure of parental status.

In an analysis not shown in the table, we crudely adjust each generation's family income measure for family size and composition by dividing income by the official poverty line for a family of that type. The elasticity of the daughter's "income-to-needs ratio" with respect to that of her parents is estimated at 0.49 (with estimated standard error 0.05), even higher than the elasticity estimate for unadjusted income. This result is suggestive of substantial intergenerational persistence in family structure.

One of the main contributions of our study is to explore the role of assortative mating in intergenerational mobility of married daughters. Toward that end, we now

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[13] Of course, one might try to estimate β_w more directly by re-estimating equation (6) with daughter's log earnings as the dependent variable. That approach is awkward, however, because of the frequency with which daughter's earnings are zero. This also is why it is not very useful to write equation (8) instead as $\log(E_{wit} + E_{hit}) = \log(E_{wit}) - \log(1 - S_{it})$.

exclude the female household heads who comprise 30 percent of our original sample, and we focus on the remaining 372 married daughters.[14] As shown in the second column of Table 2, when we re-estimate the intergenerational elasticity in family income for this subsample, the estimate falls slightly to 0.41. To begin exploring the roles of each spouse's earnings, we also re-estimate the intergenerational elasticity with $\log(E_{wit} + E_{hit})$, the log of the sum of the daughter's earnings and her husband's earnings, as the dependent variable. Doing so reduces the estimated intergenerational elasticity slightly further to 0.39.

Because the analysis in the last column of Table 2 will require taking the log of husband's earnings, we are forced to drop seven cases in which husband's 1991 earnings are zero. When we re-estimate the intergenerational elasticities with the remaining sample of 365 daughters, the estimates fall to 0.39 when the dependent variable is log family income and 0.35 when it is the log of the couple's combined earnings. Next we follow the procedure discussed in Section IV for decomposing the latter estimate into the parts associated with the daughter's earnings and her husband's earnings.

First, we estimate the elasticity of the daughter's husband's earnings with respect to her parents' income. The estimate of 0.36 is very close to the 0.35 estimate for the couple's combined earnings. The fourth row of the table, which reports the estimated elasticity of the daughter's husband's share of their combined earnings with respect to her parents' income, makes explicit that the discrepancy is only 0.01 and is insignificantly different from zero. As explained in Section IV, this result suggests that $\beta_w \cong \beta_h$, i.e., the

[14] This subsample also excludes one married daughter whose own earnings and husband's earnings in 1991 were both zero. Including this case in the subsample raises the estimated intergenerational elasticity in family income from 0.408 to 0.409.

elasticities of the daughter's earnings and her husband's earnings with respect to her parents' income are nearly the same.

As shown in equation (7), the elasticity of the couple's combined earnings with respect to her parents' income is just a weighted average of these two elasticities. The two elasticities contribute similarly in the sense that the two numbers averaged together are about the same as each other. In another sense, though, the elasticity of the husband's earnings contributes more importantly. The weight on the husband's elasticity is his share in their combined earnings and, for most couples, that is a majority share. In our regression sample of 365 married daughters, the mean value of the husband's earnings share is 0.71. The median also is 0.71, even the 25th percentile is more than half at 0.54, and the 75th percentile is 0.95. If we use a weight of $S = 0.71$ in equation (7), we conclude that, if there were no assortative mating in the sense of a zero elasticity between the daughter's husband's earnings and her parents' income, the elasticity of the couple's combined earnings with respect to her parents' income would be only a little more than one-fourth of what it actually is.

So what have we learned so far? First, our various estimates of the intergenerational income elasticity for daughters range between 0.35 and 0.43. While these estimates suggest a considerable degree of intergenerational mobility, they also suggest considerable intergenerational persistence, considerably more than one might have guessed from the early literature on sons. Second, assortative mating appears to play a crucial role. For the typical married daughter, a major factor in the intergenerational transmission of income status is that the elasticity of her husband's earnings with respect to her parents' income is just as great as the elasticity of her own earnings.

Finally, for comparison, in Table 3 we display the results of a parallel analysis for sons. For our full sample of 501 sons,[15] we estimate an intergenerational family income elasticity of 0.54, even higher than the corresponding 0.43 estimate for daughters. At first, this estimate may seem surprisingly high relative to the typical 0.4 estimate in the recent literature on sons' intergenerational earnings mobility. A closer look at the literature, however, reveals that higher estimates are common when parental status is measured by family income rather than father's earnings. In Solon (1992), for example, the regression of son's 1984 log earnings on father's 1967 log earnings produces an elasticity estimate of 0.39, but the regression of son's 1984 log family income on father's 1967 log family income produces an estimate of 0.48.[16] Given that the present study reduces the errors-in-variables bias by using a multi-year average of parental income, it is unsurprising that the elasticity estimate becomes even a little larger. In fact, when we use single-year measures of parental log income in our present sample, the resulting elasticity estimates are 0.43 with 1967 income, 0.46 with 1968 income, 0.45 with 1969 income, 0.43 with 1970 income, and 0.43 with 1971 income.

Restricting the sample to the 340 married sons leaves the estimated intergenerational family income elasticity at 0.54 and also produces an estimate of 0.59 for the elasticity of the couple's combined earnings with respect to his parents' family

[15] This sample excludes three sons whose 1991 incomes are recorded as $1. Including these sons does not affect our estimates by much. For example, including them results in an estimated intergenerational family income elasticity of 0.52 instead of 0.54.

[16] The same pattern appears in Minicozzi (1997), Mulligan (1997), Altonji and Dunn (1991), and Peters (1992).

income.[17] In the last column, where two sons with zero earnings in 1991 are dropped from the sample, the estimated intergenerational family income elasticity decreases to 0.51, and the estimated elasticity for the couple's combined earnings decreases to 0.55. When the latter elasticity is decomposed to explore the roles of the son's earnings and his wife's earnings, the elasticity for his own earnings is estimated at 0.52. As shown in the last row, the discrepancy between this estimate and the 0.55 estimate for combined earnings is small and statistically insignificant. As found for daughters, it appears again that the elasticities for own earnings and spouse's earnings are similar. In other words, assortative mating clearly is at work in the intergenerational transmission of income status for sons as well as daughters. It is less important, though, in the sense that the wife's elasticity enters equation (7) for sons with a smaller weight than the husband's elasticity receives in the equation for daughters. In our regression sample of 338 married sons, the mean value of the wife's earnings share is 0.29, and the median also is 0.29.

VI. Summary

Using the Panel Study of Income Dynamics to estimate intergenerational income elasticities for daughters, we have obtained estimates ranging from 0.35 to 0.43. These estimates are smaller than our corresponding estimates for sons, but are quite substantial. We also have found that assortative mating plays an important role in the intergenerational transmission process. Among married offspring, spouse's earnings

[17] This subsample also excludes two cases in which the son's earnings and his wife's earnings in 1991 were both zero. Including these cases raises the estimated intergenerational elasticity in family income to 0.58.

appear to be just as elastic as the offspring's own earnings with respect to the parents' income.

References

Altonji, Joseph G. and Dunn, Thomas A., "Relationships among the Family Incomes and Labor Market Outcomes of Relatives," *Research in Labor Economics*, 1991, *12*, 269-310.

Atkinson, A. B., Maynard, A. K., and Trinder, C. G., *Parents and Children: Incomes in Two Generations*, London: Heinemann, 1983.

Becker, Gary S., *A Treatise on the Family*, Cambridge: Harvard University Press, 1991.

Becker, Gary S. and Tomes, Nigel, "Human Capital and the Rise and Fall of Families," *Journal of Labor Economics*, July 1986, *4*, S1-39.

Behrman, Jere R. and Taubman, Paul, "Intergenerational Earnings Mobility in the United States: Some Estimates and a Test of Becker's Intergenerational Endowments Model," *Review of Economics and Statistics*, February 1985, *67*, 144-51.

Behrman, Jere R. and Taubman, Paul, "The Intergenerational Correlation between Children's Adult Earnings and Their Parents' Income: Results from the Michigan Panel Survey of Income Dynamics," *Review of Income and Wealth*, June 1990, *36*, 115-27.

Haider, Steven J., "The Long-Run Earnings Inequality of Families," Chapter 4 in *Econometric Studies of Long-Run Earnings Inequality*, Ph.D. dissertation, University of Michigan, 1998.

Kremer, Michael, "How Much Does Sorting Increase Inequality?" *Quarterly Journal of Economics*, February 1997, *112*, 115-39.

Lam, David, "Marriage Markets and Assortative Mating with Household Public Goods," *Journal of Human Resources*, Fall 1988, *23*, 462-87.

Lam, David and Schoeni, Robert F., "Effects of Family Background on Earnings and Returns to Schooling: Evidence from Brazil," *Journal of Political Economy*, August 1993, *101*, 710-40.

Lillard, Lee A. and Kilburn, M. Rebecca, "Intergenerational Earnings Links: Sons and Daughters," mimeo, RAND, 1995.

Lillard, Lee A. and Kilburn, M. Rebecca, "Assortative Mating and Family Links in Permanent Earnings," mimeo, RAND, 1996.

Minicozzi, Alexandra L., *Nonparametric Analysis of Intergenerational Income Mobility*, Ph.D. dissertation, University of Wisconsin, 1997.

Mulligan, Casey B., *Parental Priorities and Economic Inequality*, Chicago: University of Chicago Press, 1997.

Peters, H. Elizabeth, "Patterns of Intergenerational Mobility in Income and Earnings," *Review of Economics and Statistics*, August 1992, *74*, 456-66.

Shea, John, "Does Parents' Money Matter?" mimeo, University of Maryland, 1997.

Solon, Gary, "Intergenerational Income Mobility in the United States," *American Economic Review*, June 1992, *82*, 393-408.

Solon, Gary, "Intergenerational Mobility in the Labor Market," in Orley Ashenfelter and David Card, eds., *Handbook of Labor Economics*, Amsterdam: North-Holland, forthcoming.

Table 1 – Characteristics of Daughters Sample

Variable	Mean	Standard deviation	Minimum	Maximum
Daughter's age in 1991	33.57	4.76	25.00	40.00
Daughter's log family income in 1991	10.51	0.83	6.91	13.21
1968 household head's age in 1967	39.00	9.11	19.00	91.00
1968 head's log family income in 1967	9.11	0.63	5.30	11.09
1968 head's average of 1967-1971 log family incomes	9.31	0.56	7.24	11.36
Sample size	533			

Table 2 – Estimated Intergenerational Elasticities for Daughters

Dependent variable	Full daughters sample	Married daughters	Married daughters whose husbands have positive earnings
Log family income	0.429 (0.063)	0.408 (0.055)	0.387 (0.055)
Log of couple's combined earnings		0.386 (0.065)	0.348 (0.063)
Log of husband's earnings			0.360 (0.079)
Log of husband's share of combined earnings			0.012 (0.052)
Sample size	533	372	365

Numbers in parentheses are estimated standard errors.

Table 3 – Estimated Intergenerational Elasticities for Sons

Dependent variable	Full sons sample	Married sons	Married sons with positive earnings
Log family income	0.535 (0.059)	0.541 (0.062)	0.508 (0.058)
Log of couple's combined earnings		0.585 (0.067)	0.552 (0.063)
Log of son's earnings			0.523 (0.077)
Log of son's share of combined earnings			-0.030 (0.046)
Sample size	501	340	338

Numbers in parentheses are estimated standard errors.