Center for Studies in Demography and Ecology

Child Gender and the Transition to Marriage

by

Shelly Lundberg
University of Washington

Elaina Rose
University of Washington

UNIVERSITY OF WASHINGTON CSDE Working Paper No. 02-01

Child Gender and the Transition to Marriage*

Shelly Lundberg
lundberg@u.washington.edu
(206) 543-6149

Elaina Rose
erose@u.washington.edu
(206) 543-5237

Department of Economics
University of Washington
Mail Code #353330
Seattle, WA 98195

October 18, 2001
(Original: October 2000)

ABSTRACT

We estimate the effect of a child's gender on the mother's probability of marriage or remarriage using data from the PSID Marital History and Childbirth and Adoption History Files. We find that the birth of a son speeds the transition into marriage when the child is born nonmaritally. A competing risks analysis shows that this effect derives solely from the increased probability of marriage to a son's father. We find no significant effect of child gender on the mother's remarriage probabilities when children are born within a previous marriage.

* We thank Fran Goldscheider and seminar participants at Brown University, the University of Chicago, and the University of Bristol for helpful comments.

Child Gender and the Transition to Marriage

I. INTRODUCTION

Both divorce and nonmarital births have increased dramatically in recent decades, prompting concerns about the impact of single-parenthood on children, as well as inquiry into the forces leading to marital dissolution and nonmarital childbearing. One factor that has been found to affect marital stability is the gender of the children. Several authors (Spanier and Glick 1981, Morgan, Lye and Condran 1988, Mott 1994, and Katzev et al 1994) have reported that, in the U.S., having a son relative to a daughter increases the likelihood that a marriage will remain intact.

Why are marriages with sons more stable than marriages with daughters? Sociological studies of child gender effects on marriage and divorce have emphasized the social norms that dictate a more active role for fathers in the parenting of sons than daughters. In economic terms, this gender difference in the paternal role can influence marital stability in two distinct ways. First, if fathers are more productive at parenting sons than daughters, perhaps because they have a special role in the emotional and social development of boys, and if children are more likely to live with a mother after divorce, then having a son increases the value of the marriage. Second, fathers may simply place a higher value on marriage and family if they have a son due to gender preference, or because they spend more time with the child and are more involved with family activities. In either case, the greater family involvement of fathers of boys appears to be associated with increased marital satisfaction for mothers and fathers of boys, and a reduced propensity to divorce.

If the birth of a son increases the value of marriage more than the birth of a daughter, then we might expect child gender to affect the probability of entering into marriage following a nonmarital birth, as well as the probability of divorce. Many nonmarital births involve cohabiting couples and couples in long-term romantic relationships (Bumpass and Lu 2000 and McLanahan et al 2001), and it would seem likely that the same factors leading to success in marriage, including male children, would lead to success in a nonmarital relationship. Moreover, mothers of sons may have a greater demand for, or face a greater supply of, husbands other than the child's father than do mothers of daughters.

The likelihood that a previously married woman remarries may also depend on the gender composition of her children. If men are more effective stepfathers of boys than girls, then a mother of sons will have a higher demand for a husband than a mother of daughters. If, in addition, potential husbands are more eager to marry women with sons than daughters, mothers of sons will face a greater supply of men in the marriage market. We expect, therefore, both supply and demand factors to increase the relative remarriage rates of mothers of boys. If these forces are stronger when the potential husband is the child's biological father, we also expect the effect of a child's gender on the mother's likelihood of remarriage to be less pronounced than the effect on marriage subsequent to a nonmarital birth.

Our objective is to test whether a child's gender affects the transition to marriage, and particularly marriage subsequent to a nonmarital birth. As with the issue of child gender and divorce, the answer to this question has important implications for the wellbeing of boys relative to girls. For instance, if mothers of boys are more likely to marry, and remain married, then girls will be more likely to grow up in single-parent households. Furthermore, if the increased

propensity of mothers of sons to marry reflects a greater supply of potential husbands, women with sons will be more advantaged in the marriage market than women with daughters.

Section II discusses two literatures related to our analyses: the literature on transitions into marriage by single mothers, and the literature on the effect of child gender on family outcomes. Section III describes our sample, which is drawn from the Panel Study of Income Dynamics (PSID), and presents descriptive data on child gender and marital transitions. Section IV presents a series of hazard models. First, we estimate the effect of child gender on the transition to marriage for mothers of nonmarital children. Then, we test whether a divorced or widowed woman's transition to remarriage depends on the gender of children born within previous marriages.

We find that having a boy relative to a girl increases the transition rate of mothers into marriage when the child was born nonmaritally. A competing risks analysis shows that this effect derives solely from the increased probability of marriage to a son's father. We find no evidence that child gender affects the likelihood of remarriage.

II. LITERATURE

Single Mothers and the Transition to Marriage

Concern about the high rates of poverty and welfare dependency among families headed by single women has prompted a great deal of recent research on the causes of changing patterns of fertility and marriage. The empirical literature on the marriage (or remarriage) behavior of single mothers has focused on the incentive effects of welfare benefits and other transfer programs on the probability that a woman will marry within a specified

period, or on the rate of transition into marriage. An economic model of the decision to marry begins with a single agent who compares expected well-being in marriage with that associated with remaining single. All else equal, an increase in the generosity of welfare benefits would be expected to increase the value of remaining single relative to the expected benefits of marriage, and so to reduce the probability that a single mother marries.

In general, studies have found support for the prediction that welfare payments affect the marriage behavior of single mothers. Hutchens [1979] found that higher AFDC guarantees reduce the probability that mothers remarry following divorce, while Hoffman and Duncan [1988] find no remarriage effects for divorced women. Grogger and Bronars [1997] use a sample of never-married mothers, and find that welfare benefits significantly reduce the marriage probabilities of white but not black women.

Some recent studies have used the duration of a spell of single motherhood rather than the probability that a woman marries within some specified time period as the outcome of interest. This approach is consistent with a dynamic version of the simple marital status choice model, in which a woman is searching for a marriage partner rather than comparing static utilities in two states. A woman samples each period from a distribution of potential husbands, and decides to marry if her current "draw" from this distribution is above some reservation, or minimum acceptable, husband quality. In this framework, higher welfare benefits increase the relative value of continuing to search, and induces a woman to increase her reservation level of husband quality. This reduces the probability that any potential husband is acceptable, reduces the rate of transition into marriage, and so increases the expected duration of a spell of single motherhood.

Blackburn [2000] finds that higher welfare payments reduce the rate of transition into marriage only for white never-married mothers, and not for black mothers. Lefebrve and Merrigan [1998], using Canadian data, find that welfare benefits reduce the hazard of exiting single parenthood into either marriage or cohabitation. Both studies find that exit rates fall as the age of the mother increases. The dependence of these transitions on welfare generosity seems to indicate that the decision of single mothers to marry is responsive to expected relative well-being in the single and married states.

Child Gender and the Value of Marriage

A child's gender affects a variety of family outcomes. The most striking difference between families with sons and families with only daughters is the extent and type of involvement of fathers: fathers of boys tend to have stronger ties to the family than fathers of girls. Men spend more time with their sons (Yeung et al 1994), and also with their children overall, if they have sons (Barnett and Baruch 1986). Fathers of sons are more involved with their children's discipline, schoolwork and other activities than are fathers of daughters (Lamb et al 1987, Morgan et al 1988). Moreover, mothers report greater emotional attachment of their husbands to sons than to daughters (Morgan et al).

Marriages with sons are characterized by more traditional gender roles than marriages with daughters. Lundberg and Rose [2000] find that men work about 40 hours per year more after the birth of a son relative to a daughter, and that the hourly earnings of fathers of sons increase more after childbirth than do the earnings of fathers of daughters. The increase in labor supply appears to be at the expense of men's leisure, rather than time with the child.

Several authors (Barnett and Baruch, Katzev et al 1994, Cox et al 1999, Mizell and Steelman 2000) report greater satisfaction of partners in marriages with sons than with only daughters. Teachman and Schollaert [1989] find that couples whose first child is a boy tend to have a subsequent child sooner, and attribute their finding to the greater stability of the relationship associated with the birth of a son. [1]

Clearly, family dynamics differ in families with sons and families with daughters. Marriages with sons tend to be more stable and more traditional, and are characterized by greater father involvement on a variety of dimensions. These patterns suggest that either the mother, the father, or both parents place a higher value on father involvement with sons than with daughters, and that this increases the perceived value of marriage, relative to divorce.

The same factors that affect the stability and functioning of marriages likely affect the stability and functioning of nonmarital relationships. In particular, we would expect that having a nonmarital son would lead to a greater likelihood of marriage than having a nonmarital daughter. Moreover, a child's gender may affect the likelihood that a single mother marries a man other than her child's father in one of two ways. Mothers of boys may have a stronger demand for marriage, either because mothers of sons feel that their child needs a male role model, or because mothers of daughters expect a stepfather to have a more negative impact on their child.[2] Alternatively, women with sons may face a greater supply of husbands than women with daughters if men find it easier to form a bond with a family that includes a boy. To our knowledge, no one has addressed the question of how a child's gender affects family formation

[1] There is also a literature in child development that documents differences in how parents socialize their sons and daughters. See Maccoby [1998] for a survey.

[2] While boys tend to fare worse than girls subsequent to divorce, girls are more adversely, or less positively,

– be it marriage to the father subsequent to a nonmarital birth, or marriage to a stepfather following divorce/widowhood or nonmarital birth.

III. DATA

Our analysis uses data from the Panel Study of Income Dynamics (PSID). The PSID is a longitudinal data set that began in 1968 and has been updated annually through 1993. In 1985 two supplementary files, the Marriage History File (MHF) and the Childbirth and Adoption History File (CAHF), were added to the PSID. These files contain retrospective histories of marriage and parenthood for all adults living in PSID households in 1985, and have been updated annually. Data from the main PSID files were merged with the data from the histories in order to capture additional factors associated with the likelihood of subsequent marriage. These include: mother's year of birth, race, education, and age at the time the child was born, and the gender and the parity of the birth. Means and standard deviations of the variables used in the analysis are reported in Table 1.

For the analysis of transitions to marriage subsequent to a nonmarital birth, the unit of observation is a nonmarital birth. The marriage and fertility histories were used to identify births to unmarried women and compute the duration until subsequent marriage (i.e., the child's age at the marriage) for mothers of each of these children. There were a total of 4899 births to women reported on the CAHF and 733 were nonmarital. 297 of these nonmarital births were prior to any marriage for the mother, the remaining 436 occurred subsequent to at least one marriage.

---

affected by a parent's remarriage (Hetherington et al 1985).

Because of incomplete or inconsistent histories, 104 births could not be identified as marital or nonmarital, and observations associated with these births were excluded from the analysis.[3, 4]

The sex ratio (number of males/number of females) for the 733 nonmarital births is 1.06, which is similar to the biologically expected sex ratio at birth of 1.055 (Johanssen and Nyggren, 1991). This suggests that there is no systematic tendency for mothers to over-or under report births of sons.

For the analysis of transitions to remarriage, the unit of observation is the mother, and the duration is the time from the end of one marriage (by divorce or widowhood) until the beginning of the next one. We note that this sample is, on average, both older than the sample of mothers of nonmaritals (29.8 years vs, 22.3 years at the beginning of the spell) and more educated (12.7 years vs. 11.9 years). These mothers are both more likely to marry (67 percent vs. 54 percent), and remarry more quickly than unmarried mothers (3.1 years vs. 4.2 years). Because mothers of boys are both more likely to marry subsequent to a nonmarital birth and less likely to divorce subsequent to a marital birth, we would expect the sex ratio for this sample of previously-married single mothers to be lower than that of the population as a whole. In fact, for the sample, women have .95 daughters vs. .91 sons (a sex ratio of 0.96), and 69 percent of the mothers have at least one daughter while only 66 percent have at least one son.

[3] In 83 of these 104 cases the date of the beginning and/or end of at least one of the mother's marriages were not reported in the marital histories. In 20 cases, the child's gender or month of birth was not reported, and/or it was impossible to determine if the child was born nonmaritally because the child was born in a year in which a marital transition occurred, but the month of the birth and/or marital transition was not reported. In one case the implied age of the mother was negative.

[4] Because they are likely to be more reliable, only mothers' histories are used to construct the data set. In fact, men report only about half as many nonmarital children as do women (388 vs.733, respectively).

IV. THE TRANSITION TO MARRIAGE SUBSEQUENT TO NONMARITAL BIRTH

Table 2 shows that a higher proportion of women marry subsequent to the nonmarital birth of a boy: 56 percent of nonmarital births of boys, relative to 51 percent of nonmarital births of girls, are followed by a marriage within the PSID sample frame. However, the hypothesis that child's gender and the mother's likelihood of marriage are not independent can be rejected at only a modest level of significance (p=.17).

When we disaggregate marriage into two categories – marriage to the baby's father, and marriage to another man, differences are clearer. 19.6 of the mothers of boys, but only 14.6 percent of the mothers of girls, marry the father, and the difference is statistically significant (p=.08). However, there is no significant difference in the likelihood that a mother marries a man other than the father if she has a boy (36.5 percent) and if she has a girl (36.3 percent).

Given that the mother marries, does child gender affect the timing of that marriage? The average duration until marriage is higher when the woman has a daughter: 4.6 years, vs. 3.8 years for sons. Average durations until marriage to the father are virtually identical – 1.9 years for mothers of boys, and 1.8 years for mothers of girls. However, women who marry someone other than the child's father marry sooner if they have a son (4.9 years) than if they have a daughter (5.7 years).

Survivor Functions

The effects of child gender on duration are illustrated by the inverse survivor functions in Figures 1-3. Figure 1 shows the proportion of single mothers who have married by duration

since the birth (i.e., by the child's age), and by the child's gender. Clearly, at every age, mothers of boys are more likely to be married than mothers of girls. Also, the line is (weakly) steeper for mothers of boys than mothers of girls in the first 10 years, and the gap is greatest at age 8 through 10.

Figure 2 shows the proportion of women who have married the father, again by child's age and gender. Here also, mothers of boys are more likely to have married at every age than mothers of girls. The gap widens between ages 2 and 8.

Figure 3 shows a similar graph, but where the outcome is marriage to a man *other* than the father at each duration. From age 8-14, mothers of boys are more likely to be married than mothers of girls; however, the (inverse) survival rates are similar under age 8 and over age 14.

These tables and figures suggest that mothers of boys are more likely to marry a child's father subsequent to a nonmarital birth than mothers of girls, and that the rate of transition to marriage with a man other than the father is faster for mothers of nonmarital boys, as well. We now turn to a series of hazard models to test whether the apparent differences in the rates of transition into marriage subsequent to nonmarital birth are significant. We also interact the variable for child's gender with mother and child characteristics in order to see whether the gender effects vary with these characteristics.

Hazard Models

We employ the Cox proportional hazard model (Cox 1972, 1975) in which the instantaneous hazard rate into marriage subsequent to a nonmarital birth is specified for individual i, t years subsequent to the birth, conditional on having remaining single until time t, as:

$$h(t, x_i) = l_0(t)\exp(b x_i)$$

The baseline hazard, $l_0(t)$ is a non-parametric, time-varying function, x_i is a vector of regressors that includes a dummy variable indicating whether the child was a boy, and b is the vector of coefficients to be estimated.

The first advantage of using a hazard framework is that we can address the questions of both the likelihood of marriage, and the duration until marriage, within a single model. Second, we can allow for the right censoring which naturally occurs because women may marry beyond the point at which they are observed on the PSID. Third, by controlling for the mother's characteristics, such as her age and education, we can increase the precision of the estimates. Fourth, by interacting measures of these characteristics with the child's gender we can test whether the effects of child gender vary by these characteristics.

We adjust the standard errors to account for the fact that we have multiple observations for some women.

Table 3 presents the results from three sets of hazard models of the transition to marriage subsequent to nonmarital birth. In the first two columns, we estimate the effects of child gender on the transition rate into any marriage – either to the father, or to someone other than the father. In the first of the two columns we control for the mother's age when the child was born, her years of education, the year of the child's birth, whether it was her first child, and whether she is white.[5] In the second of the two columns we measure age, education, and year of the child's birth by using a series of dummy variables in order to allow for non-linear effects.

[5] Education is missing for 26 of the 733 observations. Rather than delete these observations we also include a dummy variable indicating education missing.

In both cases we find that the transition to marriage is significantly faster for mothers of boys than for mothers of girls. The odds ratios of 1.24 (z=2.0) and 1.26 (z=2.18) indicate that mothers of boys are about 25 percent more likely to marry than mothers of girls at any given time. Also, the results in the first column indicate that younger mothers, mothers having their children in later years, and white mothers are more likely to marry. The results in the second column indicate that these effects are highly non-linear. The age effect is only significant for women age 25 and over relative to younger women, and the period effect only holds for children born in 1980 and later. Having at least 12 years of education does improve a woman's likelihood of marriage, although having at least 16 years of education has no significant effect.

We then perform a competing risks analysis in which there are two ways to exit single motherhood—marriage to the child's father or to a stepfather. Columns (3) and (4) report the same pair of specifications as columns (1) and (2), but the outcome is marriage to the father only. Observations for which women marry someone other than the father are treated as having been censored at the point of that marriage.

The effect of gender is significant here, as well. Both specifications indicate that mothers of boys are 40 percent more likely to marry at any time than mothers of girls (z=1.8, 1.7, respectively). The only other significant predictors of the likelihood of marriage to the father are whether the mother is white and whether the child is the woman's first; both are associated with a faster transition to marriage.

In the last two columns we present the results for marriage to someone other than the father. Here, we find no significant effect of child gender. Younger mothers (particularly mothers under age 20), more educated mothers (particularly mothers with at least 12 years of

education), and white mothers are more likely to marry sooner.

Table 4 presents a series of specifications in which each of the regressors is interacted with the dummy variable for "Boy." There are no significant interaction terms in the linear specifications. However, the non-linear specifications indicate that the effect of gender depends somewhat on mother's race and age, the period in which the child was born, and the child's parity. The results in column (2) indicate that the effect of gender on the transition to marriage *to either the father or another man* is weaker for children born in 1970 or later. The effect of being a boy on the transition to marriage *to the father* is significantly stronger for women under age 25 (z=1.7), for children with white mothers (z=1.7), and for firstborn children (z=2.0). [6]

[6] It might appear from the estimates reported in Table 4 that the only effect of child's gender occurs for women who had the child in 1970 or earlier, as the coefficient on "Boy * Child Born 1970 or Later" is the opposite sign, but the same magnitude as the coefficient on "Boy". However we performed our analysis for the period 1970 and Later and found significant effects for key subsamples, for example, for women under age 25. These results are available from the authors on request.

IV. CHILD GENDER AND THE TRANSITION TO REMARRIAGE

In this section we explore the relationship between the gender composition of a woman's offspring and the transition to marriage subsequent to the end of a marriage, either because of divorce or husband's death.

Table 5 presents some descriptive statistics relating to this transition. Women with both sons and daughters are less likely to remarry than mothers of son(s) and mothers of daughter(s). This is probably because women in the first category have, on average, more children than women in the second two. Mothers of sons only are somewhat more likely to remarry than mothers of daughters only (68 % vs. 65 %), but the difference is not statistically significant (p=.40). Of those who have children of only one gender, women with daughters actually marry sooner (2.9 years) than women with sons (3.7 years).

Figure 4 shows the likelihood that a mother remarries by years since the end of the previous marriage, and whether she has only sons or only daughters. For the first ten years, particularly from years six through ten, mothers of daughters appear somewhat *more* likely to have remarried than mothers of sons, but the survival propensities are virtually the same beyond ten years from the end of the marriage.

Table 6 shows estimates of the hazard functions that have specifications similar to those reported in Table 3. Here, the duration is the time from the end of a marriage until the beginning of a subsequent marriage; i.e., remarriage. We use two measures of the gender composition of a woman's offspring: the number of sons (daughters) she has, and whether she has at least one son (daughter). Other regressors in columns (1) and (3) include the year the previous marriage ended, the mother's age when the previous marriage ended, her education, and whether she is

white; the results in columns (2) and (4) reports results of comparable non-linear specifications.

There are no apparent differences in the effects of sons and daughters in any of the specifications; all p-value for tests of equality of respective boy and girl coefficients are well above .5. Mothers who were younger at the time of the end of the first marriage, mothers with 12 or more years of education, and white mothers make more rapid transitions to remarriage.

Why would child gender affect the likelihood of marriage subsequent to a nonmarital birth, but not remarriage subsequent to the end of marriage? First, significant effects of child gender are limited to the propensity to marry the baby's father. As remarriages are overwhelmingly to men who are not the fathers of the children, we would expect the results for remarriage to be similar to those for marriage to stepfathers subsequent to nonmarital birth. Second, the sample for the analysis of the transition to remarriage is inherently selective with respect to child's gender. Mothers who are in the pool to remarry are somewhat more likely to have daughters than sons, as marriages with only daughters are more likely to end in divorce than marriages with sons.[7]

V. CONCLUSION

Women who bear children out-of-wedlock are more likely to marry if they have a son than if they have a daughter and, when they do marry, they tend to marry sooner. The effect is significant when the outcome is marriage to the child's father; we find no significant effect of child gender on the likelihood of marriage to a stepfather – either subsequent to a nonmarital birth or subsequent to a previous marriage. The significant effect on marriage to the father of a

nonmarital child is significantly stronger when the mother was under age 25 when the child was born, when the child was born before 1970, for the first child, and for white mothers.

These results reinforce other findings in the social sciences regarding the effect of child's gender on parental and spousal behavior within marriage. Fathers of sons are more engaged with their families. Women with sons are more likely to get married, as well as to have happier, more stable, and more traditional marriages, than women with daughters.

Social scientists have placed great emphasis in recent years on the impact of single-parenthood on children. Our results suggest that issues of gender equity within the family arise as well, as the financial and emotional resources associated with growing up in a two-parent household (see McLanahan and Sandefur 1994) are more likely to be conferred on sons than on daughters. Even in developed countries such as the U.S., the dice may be loaded against girls, as well as against their mothers.

[7] We also estimated a series of specification where the measures of sons and daughters were interacted with other regressors, and found no significant differences between respective sons and daughters coefficients.

References

Barnett, R.C. and G.K. Baruch, "Determinants of Fathers' Participation in Family Work," *Journal of Marriage and the Family*, 1987, 49 29-40.

Blackburn, McKinley L., "Welfare Effects on the Marital Decisions of Never-Married Mothers," *Journal of Human Resources*, Winter 2000, 35:1, 116-142.

Bumpass, Larry and Hsien-Hen Lu, "Trends in Cohabitation and Implications for Children's Family Contexts in the U.S.," *Population Studies*, 54, 29-41.

Cox, David R., "Regression Models and Life Tables," *Journal of the Royal Statistical Society*, May 1972, B34, 187-220.

Cox, David R., "Partial Likelihood," *Biometrika*, May/Aug 1975, 62:2, 269-76.

Cox, Martha, Blair Paley, Margaret Burchinal and D. Chris Payne, "Marital Perceptions and Interactions Across the Transition to Parenthood," *Journal of Marriage and the Family*, August 1999, 61, 611-625.

Grogger, Jeff and Stephen Bronars, "The Effect of Welfare Payments on the Marriage and Fertility Behavior of Unwed Mothers: Results from a Twins Experiment," National Bureau of Economic Research Working Paper: 6047, May 1997.

Hetherington, E. Mavis, Martha Cox and Roger Cox, "Long-Term Effects of Divorce and Remarriage on the Adjustment of Children," *Journal of the American Academy of Child Psychiatry*, 1985, 24:5, 518-30.

Hoffman, Saul and Greg Duncan, "A Comparison of Choice-Based Multinomial and Nested/Logit Models: The Family Structure and Welfare Use Decisions of Divorced or Separated Women," *Journal of Human Resources*, Fall 1988, 23:4, 550-562.

Hutchens, Robert, "Welfare, Remarriage, and Marital Search," *American Economic Review*, 1979, 69:3, 369-379.

Johansson, Sten and Ola Nygren, "The Missing Girls of India," *Population and Development Review*, 1991, 17:1 35-51.

Katzev, Aphra R., Rebecca L. Warner and Alan C. Acock, "Girls or Boys - Relationship of Child Gender to Marital Instability", *Journal of Marriage and the Family*, February 1994, 56:1, 89-100.

Lamb, M.E., J.H. Pleck and J.A. Levine, "Effects of Increased Paternal Involvement on Fathers and Mothers," In *Reassessing Fatherhood: New Observations on Fathers and the Modern Family*, ed. C. Lewis and M. O'Brien, 1987.

Lefebvre, Pierre and Philip Merrigan, "The Impact of Welfare Benefits on the Conjugal Status of Single Mothers in Canada," *Journal of Human Resources*, Summer 1998, 33:3, 742-757.

Lundberg, Shelly and Elaina Rose, "The Effects of Sons and Daughters on Men's Labor Supply and Wages", forthcoming, *Review of Economics and Statistics*.

Maccoby, Eleanor E., *The Two Sexes: Growing Up Apart, Coming Together*, Cambridge: Harvard University Press, 1998.

McLanahan, Sara and Gary Sandefur, "*Growing Up with a Single Parent: What Hurts and What Helps*," Cambridge: Harvard University Press, 1994.

McLanahan, Sara, Garfinkel, Irwin, Reichman, Nancy, and Julien Teitler. "Unwed Parents or Fragile Families? Implications for Welfare and Child Support Policy," in Wu and Wolfe (eds.), *Out of Wedlock: Trends, Causes, and Consequences of Nonmarital Fertility.* Russell Sage Foundation, 2001.

Mizell, C. Andre and Lara Carr Steelman, "All My Children: The Consequences of Sibling Group Characteristics on the Marital Happiness of Young Mothers," *Journal of Family Issues*, October 2000, 21:7 858-87.

Morgan, S. Philip, Diane Lye and Gretchen Condron, "Sons, Daughters and the Risk of Marital Disruption", *American Journal of Sociology* July 1988, 94:1, 110-29.

Mott, Frank L., "Sons, Daughters and Father's Absence - Differentials in Father-Leaving Probabilities and in-Home Environments", *Journal of Family Issues*, March 1994, 15:1, 97-128.

Spanier, Graham B. and Paul C. Glick, "Marital Instability in the United States: Some Correlates and Recent Changes," *Family Relations*, 31, 329-38, 1981.

Teachman, Jay D. and Paul T. Schollaert, "Gender of Children and Birth Timing", *Demography*, August 1989, 26:3, 411-423.

Yeung, W. Jean, et al, "Children's Time with Fathers in Intact Families", mimeo, University of Michigan, March 1999.

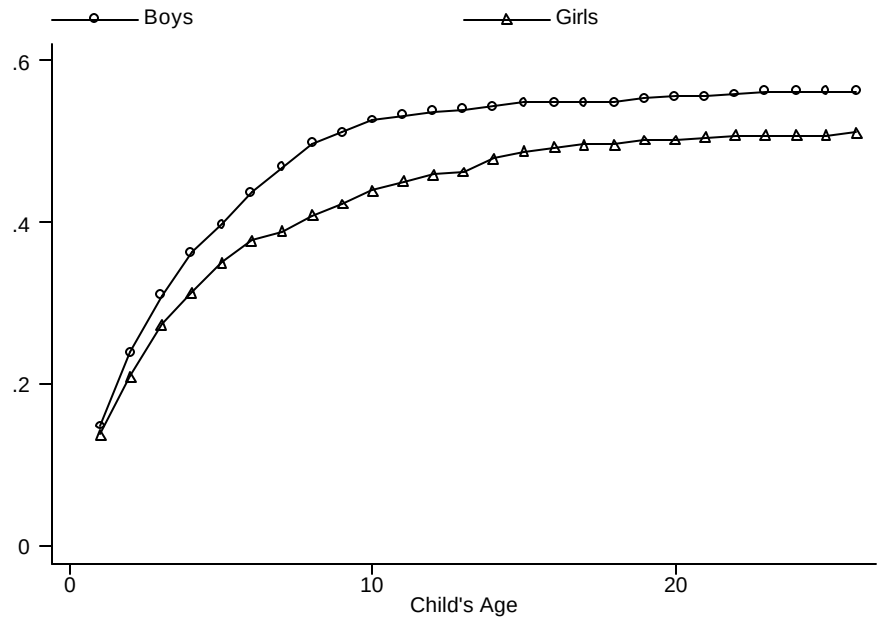

Figure 1
Proportion of Nonmarital Children Whose Mothers Married
By Age and Gender of Child

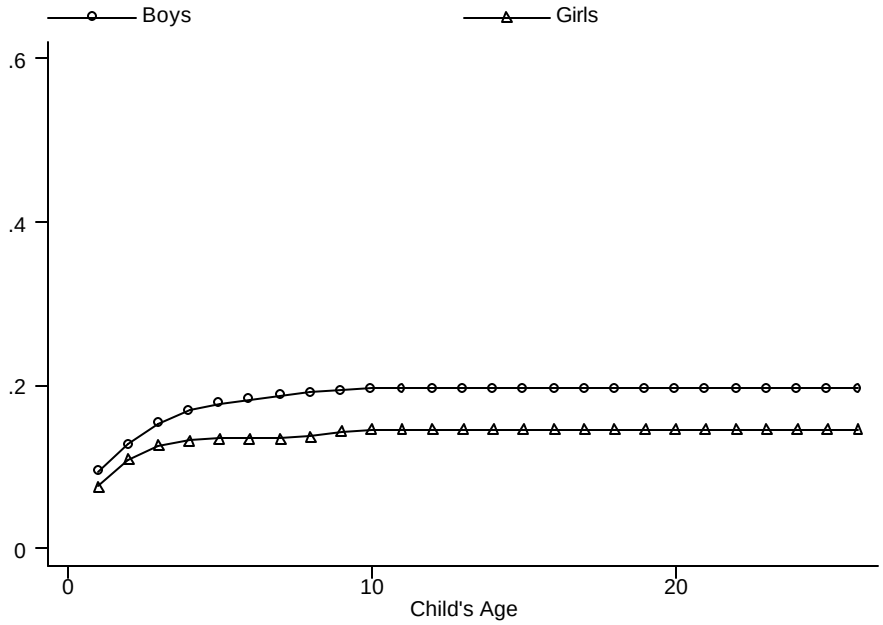

Figure 2
Proportion of Nonmarital Children Whose Mothers Married their Fathers
By Age and Gender of Child

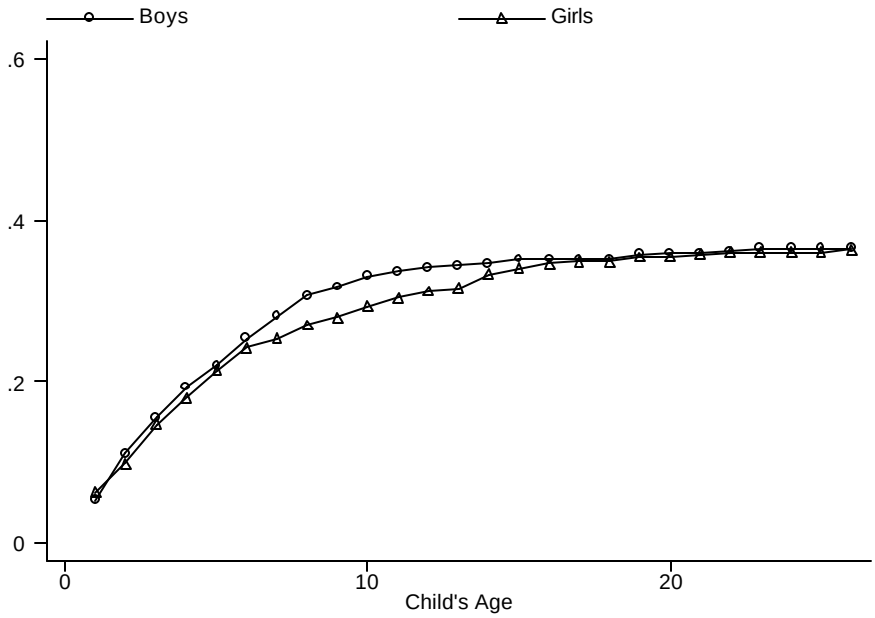

Figure 3
Proportion of Nonmarital Children Whose Mothers Married Men Other than their Fathers
By Age and Gender of Child

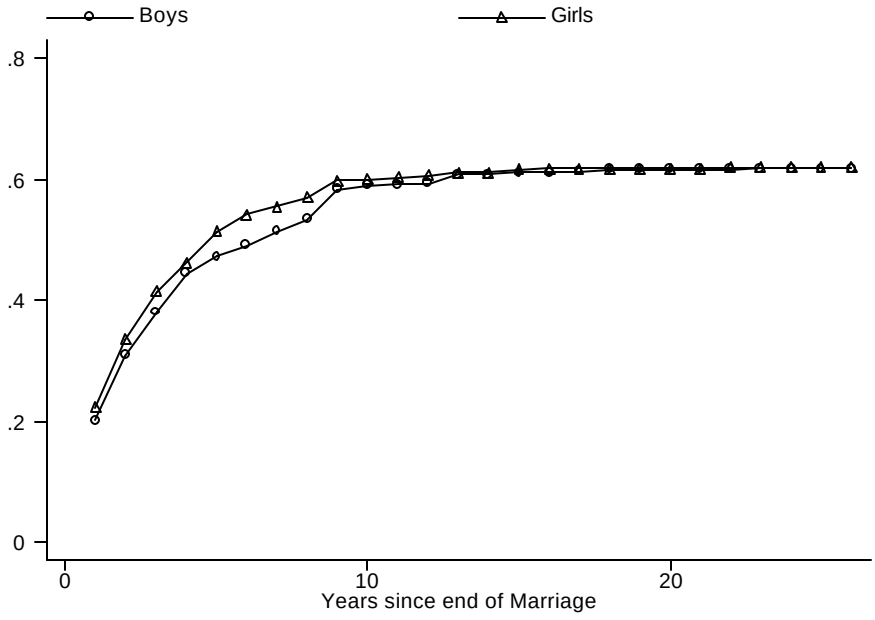

Figure 4
Proportion of Children Whose Mother Remarried
By Gender of Child and Years Since End of Marriage

Table 1
Means and Standard Deviations of Key Variables

Transition to Marriage Subsequent to Nonmarital Birth		Transition to Remarriage Subsequent to End of Marriage	
Variables that Vary by Mother (N=418)		**All Variables Vary by Mother Only (N=468)**	
Mother White	0.62	Mother White	0.87
Mother's Years of Education (N=407)	11.9 (1.8)	Mother's Years of Education (N=464)	12.7 (2.0)
Mother's Year of Birth (- 1900)	60.0 (7.6)	Mother's Year of Birth (- 1900)	53 (6.7)
Variables that Vary by Child/Birth (N=733)			
If Mother Marries Subsequent to Birth	0.54	If Mother Remarries	0.67
Years Until Marriage, if Married Subsequent to Birth	4.2 (4.5)	Years Between Marriages, if Remarries	3.1 (3.5)
Mother's Age at Child's Birth	22.3 (5.0)	Mother's Age When Marriage Ended	29.8 (7.0)
Child is Boy	0.515	Number of Sons When Marriage Ended	0.91 (0.85)
Parity = 1	0.57	Number of Daughters When Marriage Ended	0.95 (0.82)
		Any Sons When Marriage Ended	0.66
		Any Daughters When Marriage Ended	0.69

Table 2
Single Mothers who Marry within the PSID Sample Frame, and Duration Until Marriage, By Child's Gender and Whether Marries Father

	Boys	Girls	Total	p-value
Mother Marries	212	181	393	
Mother Marries Father	74	52	126	
Mother Marries Man Not Father	138	129	267	
Mother Does not Marry	166	174	340	
Total	378	355	733	
Percent of Boys' (Girls') Mothers that Marry	56.1	51.0	53.6	0.17
Percent of Boys' (Girls') Mothers that Marry Father	19.6	14.6	17.2	0.08
Percent of Boys' (Girls') Mothers that Marry Man Not Father	36.5	36.3	36.4	0.96
Mean Years Until Marriage – If Marries (s.d.)	3.9 (4.0)	4.6 (4.9)		
Mean Years Until Marriage – If Marries Father (s.d.)	1.9 (2.2)	1.8 (2.3)		
Years Until Marriage – If Marries Man Not Father (s.d.)	4.9 (4.4)	5.7 (5.2)		

Table 3
Determinants of Transition Rate into Marriage following Nonmarital Birth
Hazard Ratios from Cox Proportional Hazard Model
(z-scores in parentheses)

	Marriage to Father or Other		**Marriage to Father Only**		**Marriage to Other Only**	
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Boy	**1.24**	**1.26**	**1.40**	**1.37**	0.99	1.05
	(2.0)	**(2.2)**	**(1.8)**	**(1.7)**	(.04)	(0.4)
Mother's Age When Child Born	**0.96**		1.0		**0.94**	
	(2.7)		(0.02)		**(2.9)**	
Mother Age 18 or Over When Child Born		0.87		1.36		**0.71**
		(0.9)		(0.9)		**(1.8)**
Mother Age 20 or Over When Child Born		0.90		1.36		**0.68**
		(0.8)		(1.3)		**(2.3)**
Mother Age 25 or Over When Child Born		**0.62**		0.69		0.86
		(2.8)		(1.3)		(0.7)
Mother's Years of Education	**1.07**		0.92		**1.15**	
	(1.5)		(1.2)		**(3.1)**	
Mother 12 + Years of Education		**1.57**		0.99		**1.79**
		(2.7)		(0.03)		**(3.0)**
Mother 16 + Years of Education		0.78		0.42		1.29
		(0.7)		(1.4)		(0.7)
Year of Child's Birth	**0.95**		1.02		0.98	
	(6.2)		(1.3)		(1.3)	
Child Born 1970 or Later		0.82		0.65		1.06
		(1.3)		(1.2)		(0.2)
Child Born 1980 or Later		**0.51**		1.40		0.77
		(5.1)		(1.5)		(1.6)
If First Child	1.12	1.13	**1.43**	**1.46**	0.92	0.86
	(1.1)	(1.13)	**(1.7)**	**(1.8)**	(0.6)	(1.1)
Mother White	**2.34**	**2.30**	**1.64**	**1.67**	**2.24**	**2.28**
	(5.8)	**(5.7)**	**(2.2)**	**(2.2)**	**(4.5)**	**(4.5)**
Log likelihood	-2369	-2370	-791	-787	-1551	-1547

Table 4
Determinants of Transition Rate into Marriage following Nonmarital Birth
Hazard Ratios from Cox Proportional Hazard Model
(z-scores in parentheses)

	Marriage to Father or Other		**Marriage to Father Only**		**Marriage to Other Only**	
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Boy	1.09 (0.1)	1.22 (0.5)	0.30 (0.5)	**0.23 (1.7)**	2.44 (0.5)	**2.67 (1.7)**
Boy * Mother's Age When Child Born	0.97 (0.9)		0.98 (0.6)		0.96 (1.0)	
Boy * Mother Age 18 or Over When Child Born		1.19 (0.6)		2.10 (1.1)		0.84 (0.5)
Boy * Mother Age 20 or Over When Child Born		1.07 (0.3)		1.44 (0.7)		0.73 (0.9)
Boy * Mother Age 25 or Over When Child Born		**0.58 (1.7)**		**0.40 (1.8)**		0.72 (0.9)
Boy * Mother's Years of Education	1.07 (1.0)		1.14 (1.2)		1.04 (0.5)	
Boy * Mother 12 + Years of Education		1.09 (0.3)		0.74 (0.7)		1.32 (0.8)
Boy * Mother 16 + Years of Education		5.23 (1.5)		(a)		3.76 (1.3)
Boy * Year of Child's Birth	1.00 (0.2)		1.00 (0.1)		1.00 (0.0)	
Boy * Child Born 1970 or Later		**0.57 (2.0)**		1.34 (0.5)		0.57 (1.3)
Boy * Child Born 1980 or Later		1.38 (1.4)		0.92 (0.2)		1.52 (1.5)
Boy * If First Child	1.21 (0.8)	1.25 (1.0)	1.66 (1.2)	**2.27 (1.9)**	0.84 (0.7)	0.71 (1.2)
Boy * Mother White	1.01 (0.1)	1.05 (0.2)	1.91 (1.6)	**1.90 (1.7)**	**0.60 (1.8)**	0.66 (1.5)
Log Likelihood	-2332	-2364	-787	-780	-1516	-1541
Also includes:	(b)	(c)	(c)	(d)	(d)	(d)

(a): Could not be estimated.
(b): Mother White, Years of Mother's Education, Mother's Age at Child's Birth, Year of Child's Birth, If First Child, Education Missing, Boy * Education Missing.
(c): Mother White, Mother 12+ Years of Education, Mother 16+ Years of Education, Mother Age 18 or Over When Child Born, Mother Age 20 When Child Born, Mother Age 25 When Child Born, Child Born 1970 or Later, Child Born 1980 or Later, If First Child, Education Missing, Boy * Education Missing.
(d): Mother White, Mother 12+ Years of Education, Mother 16+ Years of Education, Mother Age 18 or Over When Child Born, Mother Age 20 When Child Born, Mother Age 25 When Child Born, Child Born 1970 or Later, Child Born 1980 or Later, If First Child, Education Missing.

Table 5
Likelihood that a Mother Remarries within the PSID Sample Frame, and Duration Until Remarriage
By Gender Composition of Her Children at End of Marriage

	At Least One Son and Daughter	At Least One Son, No Daughters	At Least One Daughter, No Sons	Total
Remarries	112	116	119	347
No Remarries	74	54	64	192
Total	186	170	183	539
Percent that Remarry	60 %	68 %	65%	64 %
Duration until Remarriage, If Remarry	2.9	3.7	2.9	3.2
Total Number of Children	2.6	1.4	1.4	1.8

Table 6
Determinants of Mothers' Transition Rate into Remarriage
By Gender of Her Children
(z-scores in parentheses)

	(1)	(2)	(3)	(4)
Number of Sons	1.04 (0.5)	0.99 (0.1)		
Number of Daughters	1.04 (0.4)	1.00 (0.02)		
p (Number of Sons = Number of Daughters)	0.9	0.9		
Any Sons			1.17 (1.2)	1.12 (0.8)
Any Daughters			1.09 (0.6)	1.06 (0.4)
p (Any Sons = Any Daughters)			0.59	0.7
Year When Marriage Ended	1.01 (0.6)		1.01 (0.6)	
Marriage Ended 1970 or Later		0.67 (1.2)		0.69 (1.1)
Marriage Ended 1980 or Later		1.03 (0.2)		1.03 (0.2)
Mother's Age When Marriage Ended	**0.96** **(3.8)**		**0.96** **(4.1)**	
Mother Age 20 or Over When Marriage Ended		1.05 (0.2)		1.02 (0.1)
Mother Age 25 or Over When Marriage Ended		0.83 (1.3)		0.82 (1.4)
Mother Age 30 or Over When Marriage Ended		0.80 (1.5)		**0.79** **(1.7)**
Mother's Education	1.04 (1.4)		1.04 (1.4)	
Mother Has 12+ Years of Education		**1.35** **(1.9)**		**1.35** **(2.0)**
Mother Has 16+ Years of Education		0.91 (0.5)		0.92 (0.5)
White	**1.88** **(3.5)**	**1.82** **(3.3)**	**1.87** **(3.5)**	**1.83** **(3.4)**
Log Likelihood	-1895	-1896	-1894	-1896