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Abstract

One empirical regularity across many societies is "hypergamy" – the tendency for women to marry up – with respect to social status, education, income, and other characteristics associated with economic well-being. This paper introduces hypergamy into an economic analysis of marriage markets. I focus on partners' education and use U.S. Census data for 1980, 1990 and 2000, a period over which women's education increased substantially relative to men's. Under constant hypergamy, economic theory predicts that this shift in the education distribution would lead to a worsening of marriage prospects for more educated women and for less educated men.

Contrary to recent accounts in the popular media, there was no such worsening for women with high levels of education. In fact, there was a significant decline in the "success gap" – the difference in the marriage rates of highly educated women relative to those at the peak of the inverted-U-shaped education-marriage profile. A contemporaneous decline in hypergamy allowed the marriage market to absorb the increased number of educated women.

However, at the bottom of the education distribution, the imbalance was not resolved by a change in marriage matching patterns. The likelihood of marriage for men with less than a high school education declined precipitously. Women's marriage propensities declined as well, but not nearly as much as men's. In this range, there was an *increase* in hypergamy, as less educated women reached higher into the education distribution for their husbands in 2000 than in prior cohorts.

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I. Introduction

Marriage has changed substantially in the last several decades. The most notable change is the overall decline. At any given age, individuals are less likely to be, or have ever been, married. According to Becker's [1977] work, the decline can be explained by the increase in women's labor supply and market human capital which has reduced the gains from specialization and exchange in marriage. Other explanations for the shift include the improvement in birth control technology (Akerloff et al [1995] and Goldin and Katz [2002]) and the increase in welfare generosity (Murray, 1984) [1]. Grossbard-Schechtman [1993] relates the decline in women's propensity to marry to the "marriage squeeze", which, given women's tendency to marry older men, disadvantaged women born during the post-World War II baby boom. Wilson [1987] emphasizes the role of the deteriorating labor market for less-skilled men as a key factor in the decline in marriage within the black community. Changes in family policy such as the liberalization of divorce laws, as well as shifts in social norms, have reinforced these trends.

Patterns in education have changed considerably as well. Overall, the population of both men and women in the U.S. has become more educated, and women have become more educated relative to men. However, these relationships are by no means monotonic. Transitory events have led to temporary increases in educational attainment for some age groups. For instance, the World War II GI Bill substantially improved men's access to higher education. (Bound and Turner, 2002). At the same time, as Goldin [1998] points out, college attendance increased among women seeking educated spouses. Card and Lemieux [2001] note a surge in college attendance and graduation of men born in the late 1950's in order to avoid the Vietnam War draft, which receded after the threat of draft was removed. The decline high school completion beginning in the 1970's, particularly for men, is documented in Card and Lemieux [2000].

[1] Although there is some question about the empirical significance of the incentive effects of transfer programs (Moffitt, 1992).

There are a number or reasons to think that the shifts in the education distribution would affect marriage matching patterns. Mare [1991] and Pencavel [1998] have studied changes in assortative mating patterns over the last several decades, and found that spouses have become more similar over the period.[2] My focus is the effect on what anthropologists refer to as "hypergamy" – i.e., the tendency for women to "marry up" – which is observed with respect to a variety of outcomes and across a across a variety of environments.[3] As I will show later, there is a clear tendency toward hypergamy with respect to education in the U.S. in the period 1980-2000.

Work outside economics tends to focus on the role of social norms in generating the empirical regularity of hypergamy. Economic theory can explain hypergamy as the outcome of a model of specialization and exchange in which men specialize in the labor market and women specialize in home production. Gains from marriage will be greater for couples who are hypergamous with respect to labor market productivity, or characteristics associated with productivity. Lam's [1988] work implies that as the gains from specialization and exchange decline, positive assortative mating will increase. A decline in hypergamy would result, as well.

Regardless of whether it is attributable to comparative advantage, or to social norms, the presence of hypergamy implies an asymmetry in marriage patterns. If women tend to marry up, and if the characteristic on which partners match is distributed similarly by sex, women at the top of the distribution, and men at the bottom of the distribution will have more limited options. In and of itself, this factor would lead to a negative relationship between education and the likelihood of marriage for women, and a positive relationship for men.

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[2] In fact, Mare [1999] finds less assortative mating on education in the period 1940-1980. Using data from the Panel Study of Income Dynamics (PSID), Rose [2001] finds evidence of a decline in assortative mating and hypergamy with respect to college completion, and parent's education between 1970 and 1990. However, Behrman, Rosenzweig and Taubman [1994] find negative assortative mating on endowments associated with earnings.

[3] One example relates to areas of rural north India, where, according to Miller [1981], strong pressures for hypergamy implied a lack of suitable husbands for high caste girls. This created a disequilibrium that was resolved through female infanticide. In another context, the Talmud advises men to "go down a step to take a wife, " (Yevamot, 63a). I am grateful to Levis Kochin and David Twersky for references from the Talmud.

The disadvantage in the marriage market experienced by more successful women – what I will refer to here as a "success gap" - was bemoaned recently by a number of media commentators. For instance, in discussing Sylvia Hewlett's work on the topic, Maureen Dowd stated in a 2002 *New York Times* column: "the rule of thumb seems to be that the more successful the woman, the less likely it is that she will find a husband or bear a child. For men the reverse is true."[4] Most of the letters printed in response to the column echoed this sentiment.

According to Dowd's assessment, the greater the concentration of women at the top of the distribution, the greater the disadvantage for this group in the marriage market. This is consistent with economic theory - *if* the level of hypergamy is held constant. However, if hypergamy falls – due to a coincident transformation of social norms or shift in the source of the gains from marriage, or as the result of market pressures – then there may be no increase in the success gap. In particular, findings in a number of recent papers suggest that the role of specialization and exchange in marriage has declined in the past several decades.[5] A shift in the motivation for marriage from specialization and exchange towards consumption of public goods will lead to a decline the success gap, along with the decline in hypergamy.[6]

A similar story can be told regarding men at the bottom of the economic and education distribution. The decline in high school graduation rates since the 1970's, and the deteriorating market for less-skilled male labor documented by Juhn [1992], combine to reduce the returns to market work for less-educated men. This hinders their ability to contribute to a traditional specialization-and-exchange marriage and exacerbates their marriage market disadvantage. However, as with women at the top of the distribution, this disadvantage may be countered by a decline in hypergamy.

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[4] Dowd [2002].
[5] For example, Lundberg and Rose [1999] and Gray [1997]. Blau [1998] reports that women in 1988 spend significantly less, and men spend somewhat more, time on housework than in 1978.
[6] Goldstein and Kenney report that women with college education are more relatively more likely to be married in 1980 than in 1960.

In this paper, I use data from the U.S. Census of Population to track the education-marriage profiles, and marriage-matching patterns, for individuals age 40-44, over the period 1980-2000. Following much of the literature on assortative mating, I focus on the outcome "education", as it is less likely to be endogenous with respect to marriage outcomes than say, income or wages. The Census's large sample sizes and fine breakdowns of education allow for precise estimates of the effect of each additional year of education (for the most part) in order to test for non-linearities and non-monotonicities.

For women the relationship between education and the likelihood of marriage is an inverted-U, peaking at about twelve years of education. The difference of nearly 14 percentage points between the likelihood of having ever been married for women with 19 vs. 12 years of education in 1980 is consistent with a considerable success gap. However, that differential declined to less than 5 percentage points by 2000. The results for the outcome "currently married" are similar, although this profile exhibits "sheepskin effects" at 12- and 16- years of education.

Overall, the Census data indicate a tendency towards hypergamy: Husbands are more likely to be educated than their wives than vice versa. However, over the period, spouses' education became more similar and hypergamy declined. The decline in hypergamy was concentrated at the upper end of the education distribution.

Section II of this paper describes the variables used in the analysis and documents trends in key variables over the period. Section III tracks the relationship between education and marriage over time. In Section IV, I develop and present estimates of hypergamy, and track shifts in education-hypergamy profiles over time. Section V concludes.

II. Data

The data are from the United States Census of Population Public Use Microdata Sample (PUMS) (5% sample.). Unless otherwise specified, analyses pertain to individuals age 40-44.

Education

One complication is that the coding of education changed between 1980 and 1990. In 1980, each respondent reported the number of years of school attended and whether the final year was completed. The questions in 1990 and 2000 focused more on degrees attained. For 1980, some of the lower levels education were grouped together because of small cell counts. The resulting variable is "Edu-1". To obtain a measure that is comparable across years, some categories were further collapsed. The resulting comparable measure is "Edu-2". The correspondence between the education measures is outlined in Appendix Table A.I-1.

Table 1 reports characteristics of the sample in each year for men and women, and for whites and blacks separately. Women's education increased more than men's over the period. On average, women age 40-44 had 12.50 years of education in 1980, which increased to 13.35 in 2000. The education distribution in Figure 1 indicates that this was driven by an increase in post-secondary education at several levels. The education of men age 40-44 increased from 1980 to 1990, and declined in the subsequent decade. The spike in college education for men age 40-44 in 1990 indicated distribution in Figure 2 is consistent with Card and Lemieux's (2000) finding that draft avoidance in the 1960's led to a surge in college education. Figure 3 plots the differences in the distributions for men and women. For all levels of education above high school graduation, the difference between the percentage of women in the category and the percentage of men in the category increased over the twenty year period, and for virtually every level from high school completion and below, the differences between the percentages declined. Clearly, there was a shift in the distribution of education across the population, with relatively more women

with greater than high school education, and relatively more men with high school education or less.

Marriage

For most of the analyses, the outcome is "marriage". Two measures of marital status are used: whether the individual is currently married ("Currently Married" or "Current" for short), and whether the individual has ever been married ("Ever Married", or "Ever"). "Current" is a dummy variable which equals one if the individual is currently married – whether living with spouse or separated. "Ever" equals one if "Current" equals one or if the individual is a widow or is divorced.

While there has clearly been a decline in marriage, the vast majority of both men and women have been married at some time in their lives by age 40-44. Even in 2000, 89.0 percent of all women, and 85 percent of all men had been married at some point. Due to the possibility of divorce (and to a minor extent, widowhood), fewer individuals report being currently married than having ever been married. The percentage of women currently married fell from 81 percent in 1980 to 72 percent in 2000; the comparable numbers for men are 85 and 72 percent, respectively.

Differences by Race

The second two panels of Table 1 report statistics for whites and for blacks. As whites dominate the sample, it is not surprising that the patterns for whites are similar to those for the sample as a whole, with marriage rates and education being somewhat higher.

Education has increased more markedly for black men relative to white men over the period, but the increase for black women is similar to that of white women. Marriage rates for blacks, however, are substantially lower than those for whites, and their decline over the period

has been more precipitous. For instance, in 1980, 66 percent of black women in the sample were currently married, the percentage fell by 16 percentage points, to 50 percent by 2000.[7]

Motherhood

One ancillary analysis tracks the outcome "motherhood" with respect to education. Unfortunately, only an imperfect measure of motherhood is available from the Census for all three years. For 2000, data are only available on individuals residing within a household; parents of children residing elsewhere may be misclassified. Also, in some years it is not possible to distinguish step-children from biological children. The analysis uses a measure that classifies step-children as biological children, which is not as precise as other measures but has the advantage of being consistent in all years. Appendix Table A.I-2 details the method used to develop the measure of motherhood for all three years, and compares this with alternative measures. The variable is called "Mother"

Data are available on "Children Ever Born", for 1980 and 1990. This would include children residing elsewhere as well as co-resident children. I created the variable "Mom" based on this measure, and tracked this relationship between education and this outcome for 1980 and 1990.

The statistics in Table 1 indicate that motherhood, as well as marriage, declined over the period. In 1980, 80 percent of women age 40-44 had a child co-residing, but the percentage fell to 66 percent by 2000. As women in this age group may have had children in their teens or early twenties that are no longer co-resident, I compute the proportions for women age 35-49 and 30-34. For each age category, the proportion of women who were mothers fell by about 10 percentage points over the twenty-year period.

[7] The remainder of the sample consists of individuals classified as Asian or "Other". As this is a heterogeneous group, I didn't do any disaggregated analyses with respect to the remainder.

Women are more likely to report having children ever born than having children co-residing. This is as expected, because the former measure includes children living with another family member and those who have moved out of the household, while the latter does not. Not surprisingly, the difference between the two measures is larger for older women, as they are more likely to have adult children.

Cohabitation

Another ancillary analysis tracks the outcome "married or cohabiting". For 1980, cohabiting was defined according to Casper et al's [2000] measure of Persons of Opposite Sex Sharing Living Quarters (POSSLQ). For 1990 and 2000 cohabiters were identified by the Census as "unmarried partners". While cohabitation overall has increased, it is still relatively uncommon among individuals in their early 40's. For instance, in 2000, only 3 percent of women in the sample were cohabiting, while 72 percent were married.[8]

III. Education/Marriage Profiles

Figures 4 and 5: Women, Education and Marriage

The percentage of women currently and ever married by each level of education is reported in Table 2 and plotted in Figures 4 and 5 for each of the three years. The 1980 data use "Edu-1", and the 1990 and 2000 data use "Edu-2" – the measure that is less precise but comparable across years..

Figure 4 shows that in 1980, the percentage currently married is (weakly) increasing with each year of education up to twelve years, at which point there is a spike. There is a decline for each of the following levels of education, and then a spike at sixteen years of education, after which the slope of the profile becomes strikingly negative.

[8] Although the qualitative research of Manning and Smock (2003) indicates that even the 2000 measure may undercount cohabiters.

The profile shifts downward, particularly at lower levels of education, in each of the two subsequent decades. For 1990, there are still spikes in the profile at twelve and sixteen years of education; otherwise the profile is flatter. In 2000, other than the two spikes, the profile appears to be essentially flat or increasing from high school graduation forward.

The profiles for "Ever" are similar to those for "Current", but they are smoother – there are no spikes at twelve and sixteen years of education. For 1980, the likelihood of having ever been married is substantially lower at 19 years of education (82.6 percent) relative to the maximum at year 13 (96.2 percent). The difference of 13.6 percentage points reflects a success gap consistent with Dowd and Hewlett's statements. However, this difference fell in each of the two subsequent decades. By 2000, the difference fell to 4.9 percentage points (90.5 – 85.6 percent). The compression in the profiles at high levels of education indicates that the widely noted decline in marriage, at least for women in this age group, has been driven mainly by women at lower levels of education.

The spikes in the "Current" profile at twelve and sixteen years of education are reminiscent of Hungerford and Solon's [1987] "sheepskin effects" in earnings which are found when estimating the relationship between education and earnings. Sheepskin effects in earnings are the much greater estimated increases in earnings at the twelfth and sixteen year of education relative to other years of education – indicating a premium for degree completion. But there are no sheepskin effects in the "Ever" profile. The difference between the two profiles is that "Ever" includes divorced and widowed women, and "Current" does not. As widowhood in this age group is rare, the difference between the two profiles reflects divorced women and suggests that women who tend to drop out from college are more likely to "drop out" from marriage.[9]

[9] Another possibility is that women who are divorced are more likely to be attending college at the date of the interview. I examined this using the 1980, which asks whether the individual has completed the respective year of education, or is still attending or dropped out. The percentages currently attending women (men) in the sample were: 3.8 (2.9) percent of married, 4.7 (3.1) percent of widowed, 6.7 (3.3) percent of divorced, 4.9 (3.2) percent of separated and 6.0 (4.1) percent of never married. To the extent that interviews were conducted over the summer, the

Table 3: Logit Regressions to Test for Significant Changes

But are the relationships and shifts suggested by Figures 4 and 5 statistically significant? Table 3 presents coefficients from a logit model of the relationship. Columns (1) through (6) pertain to the outcome "Current" and Columns (7) through (12) pertain to the outcome "Ever". Columns (1) is based on a regression for one year - 1980 – with dummy variables indicating the individual has *at least* that level of "Edu-1".

The estimates in columns (2) through (6) are derived from a pooled regression model, for 1980, 1990 and 2000. The dummy variables corresponding to each year of education in these columns are based on "Edu-2". Because they also represent having at least that level of education, the coefficients in columns (2), (3) and (5) represent the effect of the additional year of education on the latent variable associated with the outcome, for the year indicated. Columns (4) and (6) report the differences in the coefficients between decades. Significant coefficients are emphasized by reporting that cell in bold

Education is measured as having *at least* that level of education, so the coefficients reflect the effect of moving to that level from the previous level on the latent variable associated with the outcome of marriage. For instance, in 1980, going from eight to nine years of education increases the latent variable by about 16.5 percent, and this change is statistically significant (t=5.59); the effect of going from nine to ten years is positive and statistically significant (t=2.76), and the effect of going from ten to eleven years is not statistically significant (t=.94).

In 1980, at least throughout high school, education was associated with an increased likelihood of marriage. The coefficients are positive and significant for the 9^{th}, 10^{th}, and 12^{th} years of education, and insignificant for the 11^{th} year. However, each year of education between high school and college is associated with a significantly lower likelihood of marriage, until the "sheepskin" year 16 – typically, college graduation – when there is a significant increase.

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percentage currently attending do not reflect those still in school but between years in a program.

Beyond that point, however, each year of education is associated with a significantly lower likelihood of marriage. So, the success gap, and the sheepskin effects, are statistically, as well as quantitatively, significant.

The findings for 1990 reported in Column (3) are qualitatively similar to those for 1980. From high school graduation forward, the signs of the effects are the same, and all the coefficients are statistically significant. In 2000, unlike the other years, the effect of moving to the highest level of education was insignificant.

The coefficients in Columns (4) and (6) allow for testing whether the coefficients have changed significantly over time. In the 1990, the coefficients corresponding to the 18th and 19th year of education are significantly smaller in absolute value than those for 1980. The 2000 coefficients were significantly smaller (in absolute value) at practically every year of education from the twelfth grade forwards. Clearly, there was a significant decline in "success gap" in both the 1980's and 1990's.

Columns (7) through (12) are structured identically to columns (1) through (6). Other than the absence of sheepskin results, the impression is similar. In 1980, the effect of education on marriage was negative and significant for each year beyond the thirteenth. In 1990 and 2000, the effects were negative and significant for all of these education levels except for the very highest. The several positive coefficients in columns (10) and (12) indicate that the negative coefficients on education became significantly smaller in absolute value in the 1980's and the 1990's.

In summary, the success gap, as measured as the difference in the likelihood of marriage for women with high education relative to the likelihood for women with 12-16 years of education was significant in each of the three years, but fell significantly in the 1980's and the 1990's. The "sheepskin" effects in terms of the outcome "Current" are significant in each year, but there are no sheepskin effects in terms of the outcome "Ever".

Figures 6 and 7: Men, Education and Marriage

The education/marriage profiles for men are plotted in Figures 6 and 7, and associated statistics are reported in Tables 4 and 5.

In 1980, education appears to increase the likelihood a man is currently married for levels of education below high school completion. The profile is flat beyond that point, perhaps with some small declines between 12 and 15 years of education. The profiles shifted down and became steeper in each of the two decades.

The "Ever" profile is relatively flat from twelve years of education and beyond for each of the three years. The profiles shifted downward in each of the subsequent decades, particularly for the lower levels of education. For men, the decline in marriage over the last several decades reflects primarily a decline at the lower end of the education distribution.[10]

Figures 8-15: Education-Marriage Profiles by Race

The issue of the decline in marriage has been particularly salient for blacks. Wilson [1987] emphasizes the role of the declining pool of marriageable men in the black community due to the deteriorating labor market for less skilled men in urban areas. As this is mainly an issue for the least educated, we would expect that the positive relationship between education and marriage would be stronger for blacks than for whites. Figures 8 through 15 plot the Education-Marriage Profiles for Blacks and Whites[11] by sex, and the associate statistics are reported in Tables 6 through 13.

[10] Because cohabitation has become a partial substitute for marriage over the period (Bumpass et al, 1991), In Appendix II I look at the outcome "Cohabiting" – whether an individual is currently married or cohabiting. Appendix Figures A.II-1 and A.II-2 plot the proportion of women and men, respectively, who are currently married or cohabiting, for each of the three years, and the percentages and associated regression results are reported in Appendix Tables A.II-1 and A.II-2. In general, as cohabiting is relatively rare for individuals in their early 40's the patterns are very similar to those when cohabiters are not classified as married.

[11] I didn't report analyses for races other than Black and White, as this is a smaller and heterogeneous category.

The patterns for whites are very similar to the patterns for the full sample, which is not surprising as whites dominate the sample. However, the patterns for blacks are very different. With the exception of the effect of the nineteenth year of education in 1980 and 2000, there is no evidence of a success gap for black women. The profiles are either flat or increasing over most of the range for 1980 and 1990, and in 2000 the profile is positively sloped over most of the range.

As expected, the profiles are steeper for black men relative to white men, and became significantly steeper over the twenty year period. In 1980, the differences in currently married between the highest and lowest education categories were 6.8 (= 78.3 - 71.5) percentage points for black men, and 5.0 (= 85.1 - 80.1) percentage points for white men, but the figures were 37.5 (= 79.4 – 41.9) for blacks and 17.8 (= 82.8 – 65.0) percentage points for whites in 2000. While there has been a marked decline in marriage for blacks overall, the proportion of highly educated black men who are married is similar to that of white men: consistent with Wilson's theory the difference in black and white marriage rates lies primarily at the lower end of the education distribution.

Figures 16-18: Education and Motherhood

Because much of the popular concern regarding the success gap focuses on the fact that career success compromises women's opportunities for motherhood, I also track the relationship between education and motherhood for women age 40-44. Figures 16 through 18, and Tables 14-16, pertain to the measure "Mother", based on co-resident children, which can be computed from 1980, 1990, and 2000.

Figure 16 and Table 15 indicate that there was indeed a tradeoff between motherhood and marriage for women age 40-44 with more than a college degree. In 1980, 81.7 percent of women with exactly 16 years of education were mothers at age 40-44, while only 63.5 percent of women with a professional degree or doctorate had children, yielding a difference in the likelihood of motherhood of 18.2 percentage points. However, as with marriage, the difference fell in each of

the subsequent two decades: to 8.2 percentage points by 1990 and 5.0 percentage points by 2000. The results in Table 16 indicate that this "motherhood success gap" was statistically significant, and subsequent declines in the gap were statistically significant as well.

Because the children of women age 40-44 may have left the home at that point, motherhood will be understated for this age group, in particular. It is possible (but not likely) that the apparent decline in the gap is due to an increase in the tendency for more educated women to have their children sufficiently young that they have left the house by age 40-44. As a check, I look at the relationship between education and motherhood for women age 30-34 and 35-39 in Figures 17 and 18, the second two panels of Table 14, and Table16. While not as marked, there is a success gap for each of these groups, which declines significantly in the 1980's (and may increase at the highest level in the 1990's). Overall, for women, education is becoming less of an impediment to motherhood as well as to marriage.

Figures 16a-18a, and Tables 14a-16a pertain to the measure "Mom", which is based on children ever born, but not available for each year. The results using "Mom" show a decline in the motherhood success gap, consistent with those using the other measure.

IV. Matching

Theory predicts that, if hypergamy remains constant, a greater concentration of women at the top of the education distribution will lead to a decline in marriage for women at the top, and for men at the bottom, of the distribution. The Census data show, as expected, a decline in marriage rates for men at the bottom of the education distribution, but not for women at the top of the distribution. In fact, for women, education was substantially less of an impediment for marriage in 2000 than in 1980. To resolve this paradox, I test for a decline in hypergamy by examining marriage matching patterns for men and women age 40-44

I characterize married couples as "Hypogamous" if the husband had less education than the wife, "Same" if the spouses reported the same level of education, and "Hypergamous" if the

husband had more education than the wife. The results for couples in which the wife (husband) is age 40-44 are reported in the top panel of Table 17, and in the graphed bar charts in Figure 19 (20).

For wives age 40-44 in 1980, the largest category was "Hypergamous" (38 percent), followed by "Same Education" (37 percent) and "Hypogamous" (26 percent). The difference of 12 percentage points between the proportion of couples in which the wife married up, vs. down, indicates hypergamy overall. However, in each of the subsequent two decades, hypergamy fell, and hypogamy increased. The patterns for husbands are similar.

To compare the extent of asymmetry among various age groups and cohorts, and across the education distribution, I define "Net Hypergamy" as the percentage of couples in a particular group that are hypergamous minus the percentage that are hypogamous. Figure 21 (22) plots this index along the education distribution for wives (husbands) age 40-44. By regression to the mean, women at the top (bottom) of the distribution are more likely to marry down (up), and the reverse is true for men. So, the profiles for wives tend to slope down, and the profiles for husbands tend to slope up.

For both men and women, we see a decline in Net Hypergamy– i.e., we see an decline in the tendency for women to marry up – at the top of the education distribution in each decade. The results at the bottom of the distribution are less comparable. At low levels of education, women are more likely to be in hypogamous marriages. The results for men are more mixed.

V. Conclusions, Implications and Directions for Future Research

Marriage and education patterns have shifted dramatically in the last several decades. This paper relates the two by introducing hypergamy into an economic analysis of marriage markets. When matching patterns remain constant, an increase in the concentration of women at the top of the education distribution, and men at the bottom of the distribution will disadvantage more educated women and less educated men in the marriage market. In this paper, I tested this

implication of the theory using data from the 1980, 1990 and 2000 U.S. Census, for men and women age 40-44 in those years..

Contrary to popular beliefs, the increased concentration of women at the top of the education distribution has not resulted in a worsening of the marriage market prospects of more educated women. The "success gap" declined substantially in the 1980's and 1990's. The marriage market accommodated the shift through a decline in hypergamy at the upper end of the education distribution.

On the other hand, the declining economic prospects of men at the bottom of the education distribution have rendered many below the threshold of marriagiability. The likelihood of a 40-44 year old man with 11 years of education being married fell by over 20 percentage points over the 20-year period, a greater decline than that for women of the same education level. There was no decline in hypergamy at this end of the spectrum; in fact, some measures indicate an increase in hypergamy for this group, as women have increasingly been reaching upward in the education distribution for husbands.

Several caveats regarding causality must be considered in evaluating these results. For instance, if later cohorts of more educated women are less negatively selected in terms of unobservables associated with marriage, the decline in the success gap could be attributed to a change in the pattern of selection into marriage. Alternatively, it may be that couples do not match on education, but on some characteristic associated with education, and matching on this characteristic remains more stable over time.[12] Also, education may respond to marriage itself – with women in the earlier cohorts being less likely to remain in school while married. The latter issue can be addressed with a panel data set which tracks the marital and education histories of respondents. Other approaches for dealing with causality involve instrumental variables techniques.

[12] To capture more subtle elements of family background, in Rose [2001] I estimate marriage and matching patterns with respect to parents' education using PSID data.

There are some important implications of these results. First, for women, higher education is no longer the hindrance to marriage, and motherhood, that it once was. The perception that women face a stark choice between career and family is becoming less accurate in each successive decade.

Second, the decline in marriage is overwhelmingly a phenomenon of the less educated segments of the population, particularly among blacks. Men's education-marriage profiles have gone from being relatively flat in 1980 to strongly steep in 2000. The worsening labor market opportunities for less-skilled men have severely limited their ability to contribute to marriage. In terms of policy, measures designed to encourage marriage are more likely to be successful when targeted towards improving the economic prospects of men at the bottom of the economic spectrum.

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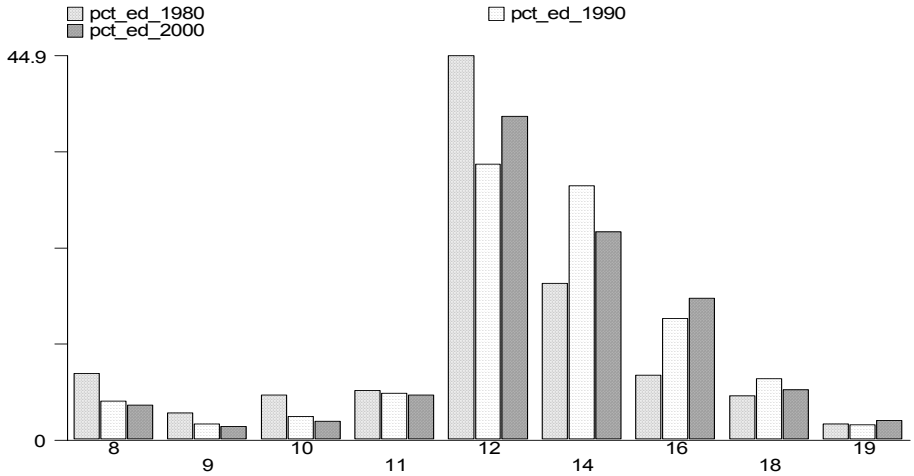

Figure 1: Education Distribution, Women Age 40-44, by Year

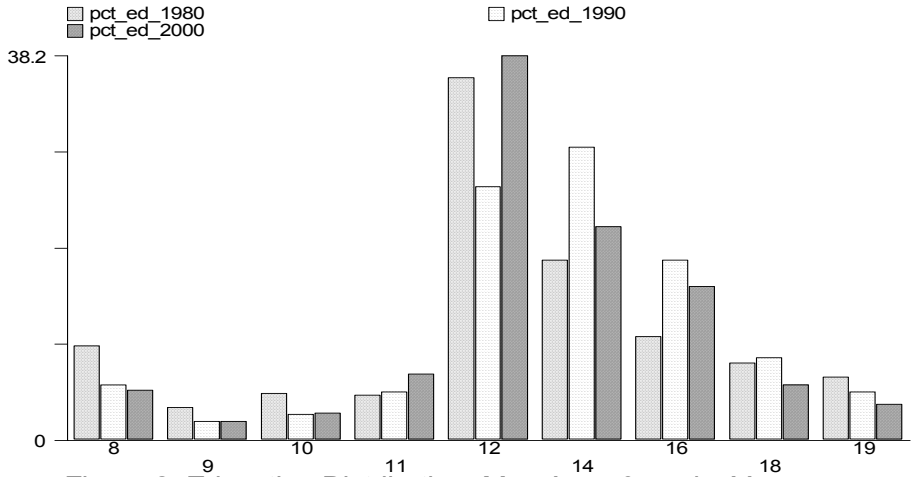

Figure 2: Education Distribution, Men Age 40-44, by Year

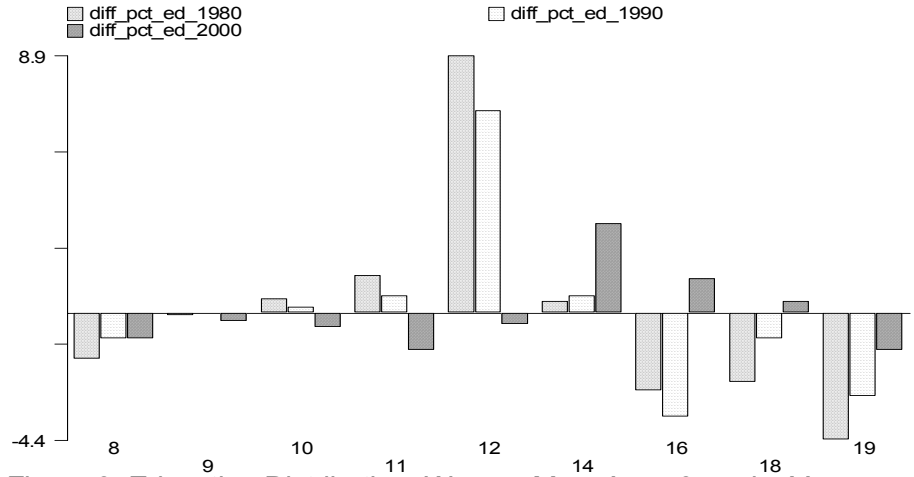

Figure 3: Education Distribution, Women-Men, Age 40-44, by Year

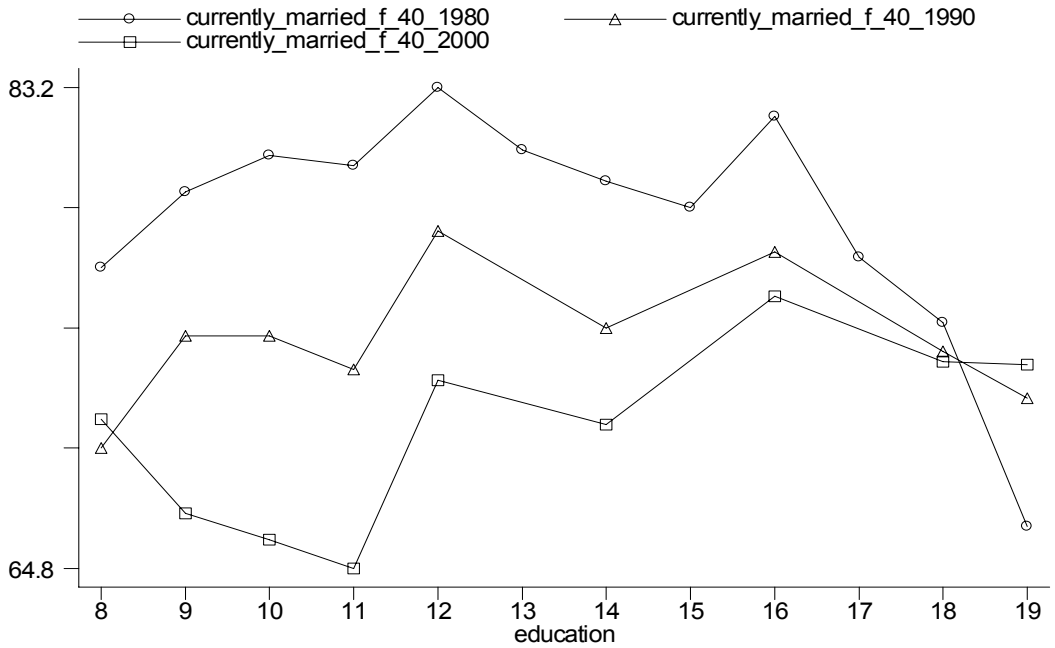

Figure 4: Percent Currently Married (All Women, Age 40-44)

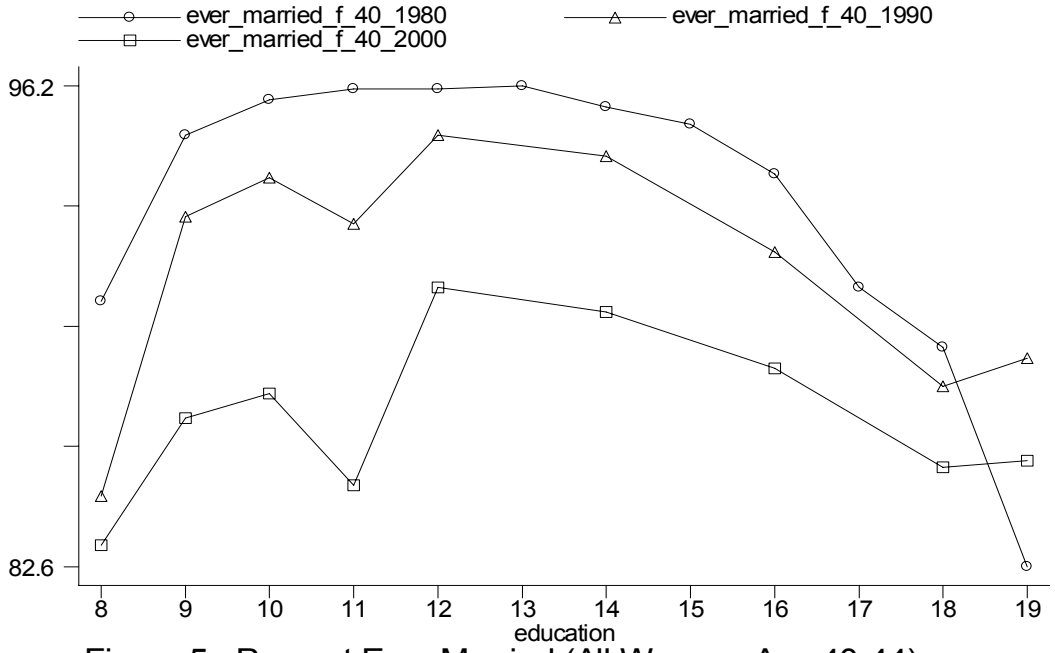

Figure 5: Percent Ever Married (All Women, Age 40-44)

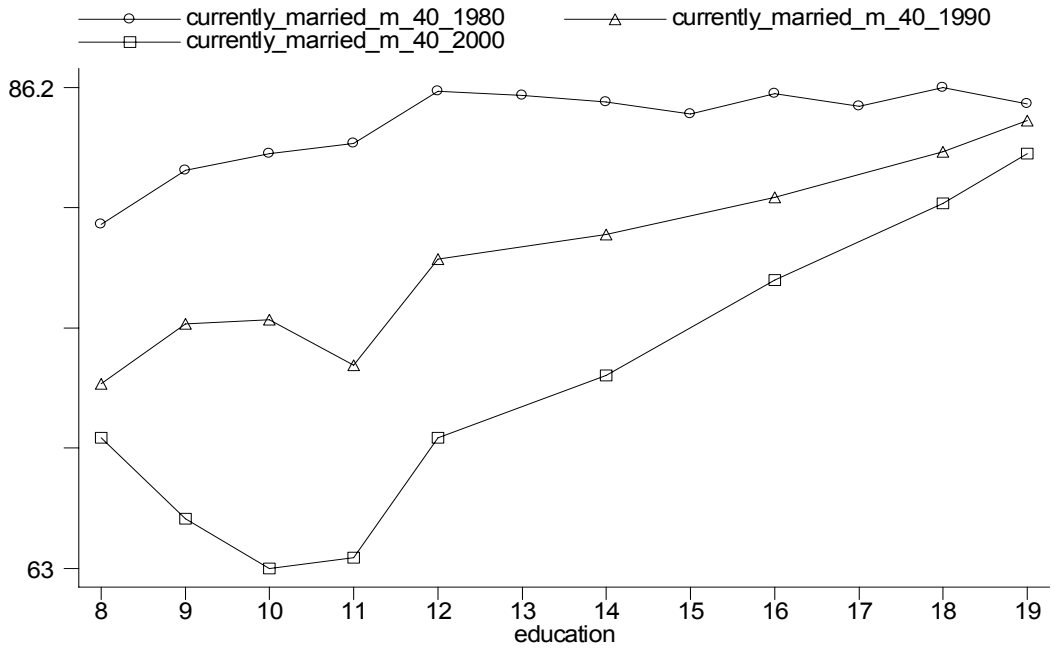

Figure 6: Percent Currently Married (All Men, Age 40-44)

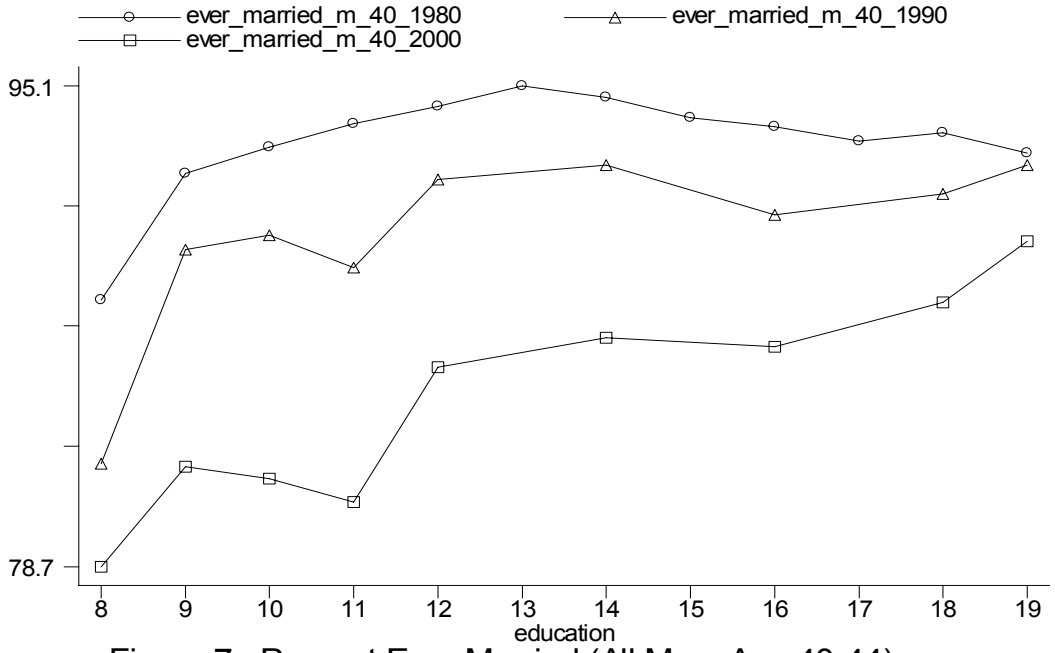

Figure 7: Percent Ever Married (All Men, Age 40-44)

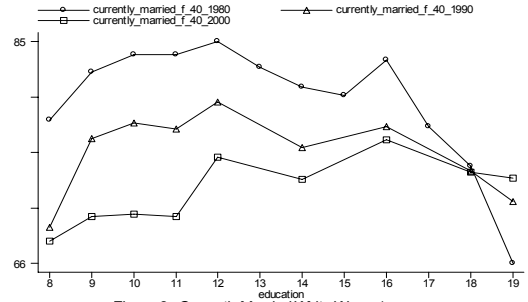

Figure 8: Currently Married White Women)

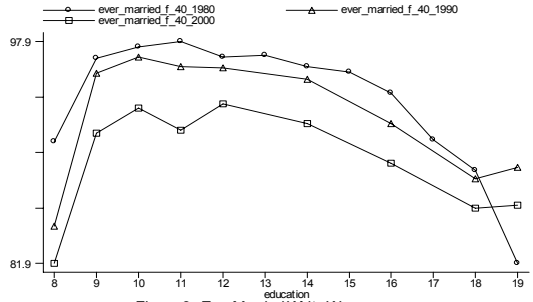

Figure 9: Ever Married White Women

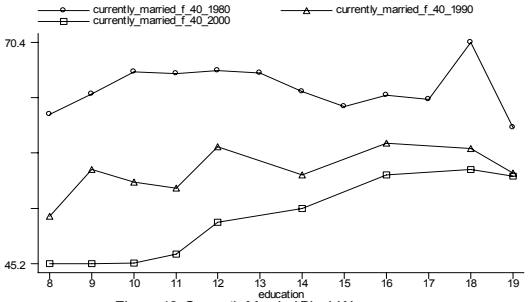

Figure 10: Currently Married Black Women

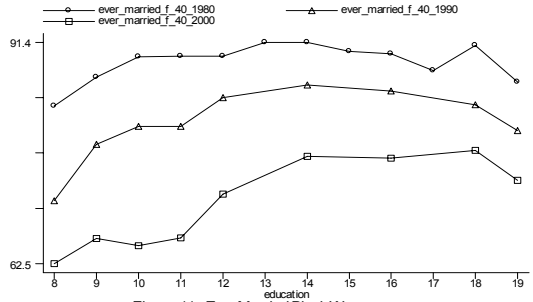

Figure 11: Ever Married Black Women

Figures 8-11: Percent Married, by Race, Women Age 40-44

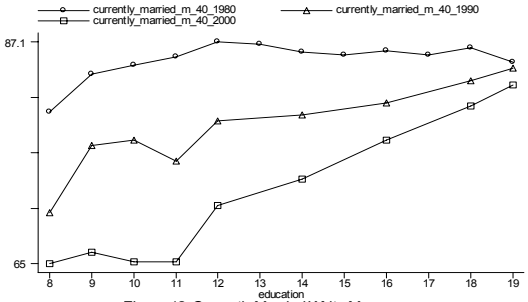

Figure 12: Currently Married White Men

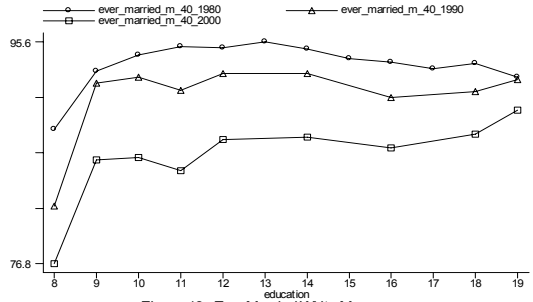

Figure 13: Ever Married White Men

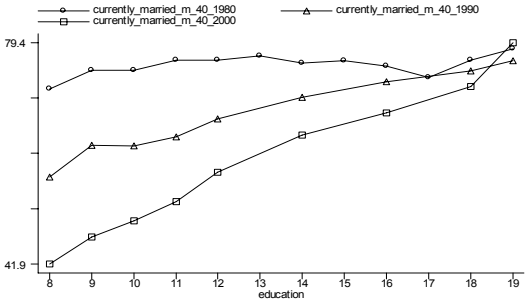

Figure 14: Currently Married Black Men

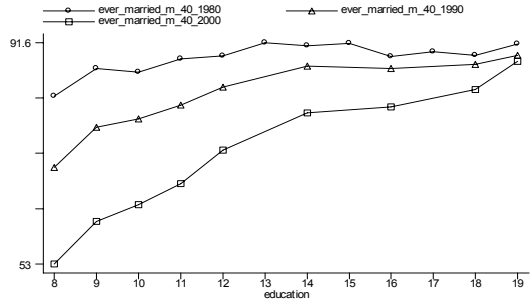

Figure 15: Ever Married Black Men

Figures 12-15: Percent Married, by Race, Men Age 40-44

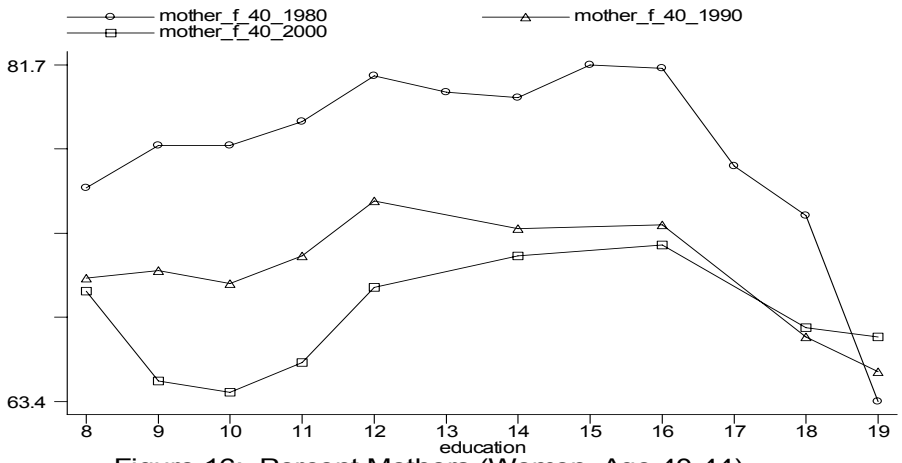

Figure 16: Percent Mothers (Women, Age 40-44)

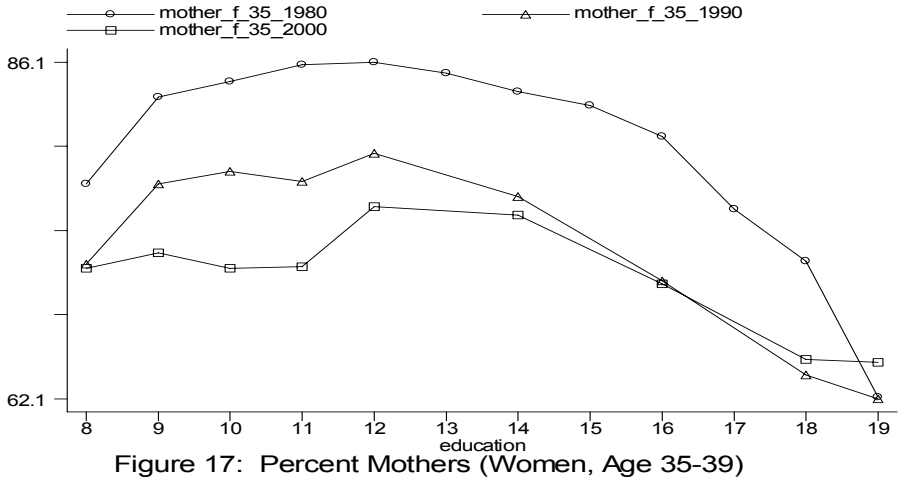

Figure 17: Percent Mothers (Women, Age 35-39)

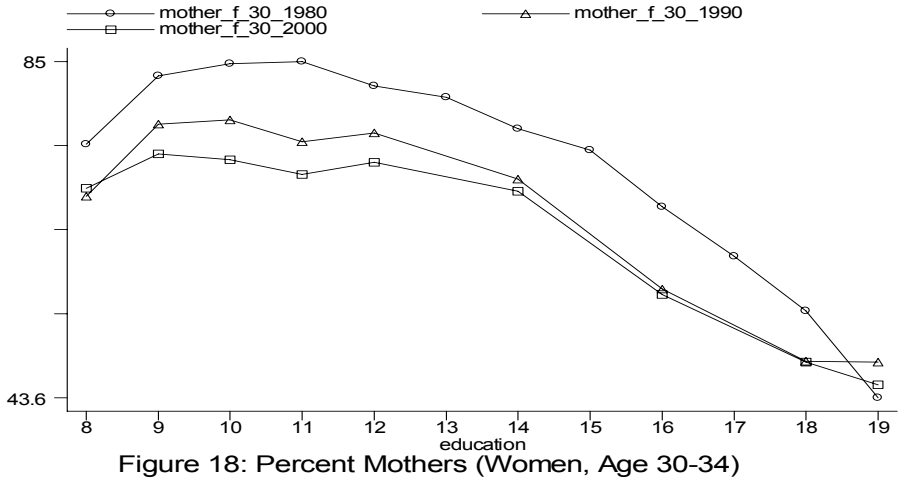

Figure 18: Percent Mothers (Women, Age 30-34)

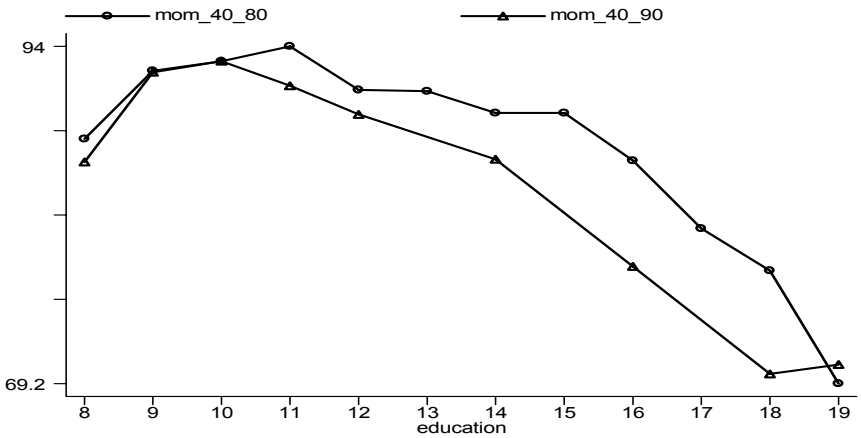

Figure 16a: Percent "Moms" (Women, Age 40-44)

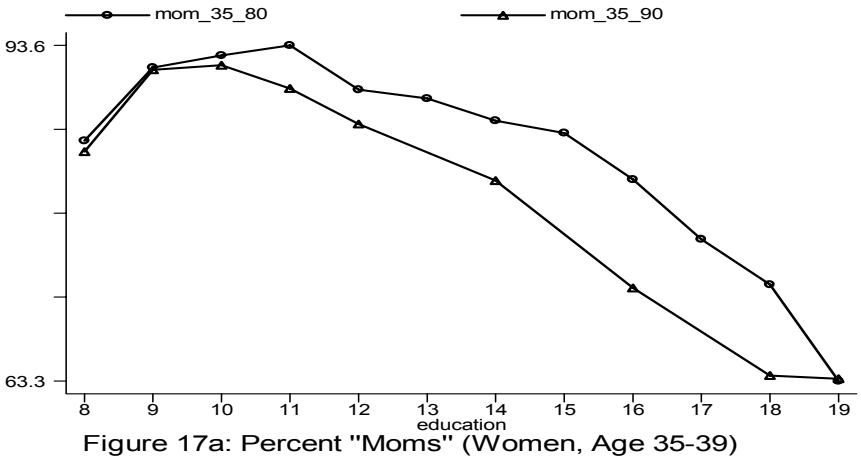

Figure 17a: Percent "Moms" (Women, Age 35-39)

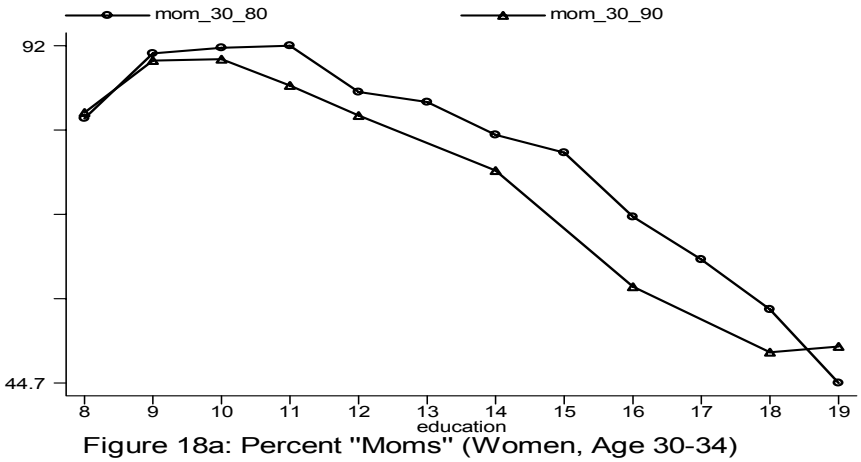

Figure 18a: Percent "Moms" (Women, Age 30-34)

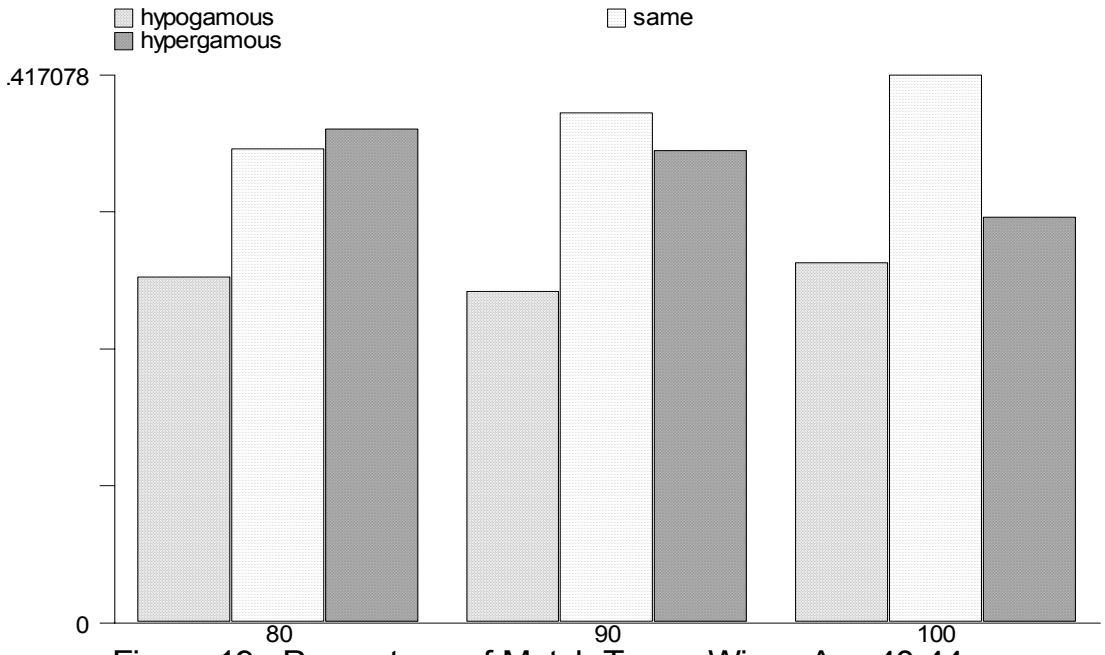

Figure 19: Percentage of Match Type : Wives Age 40-44

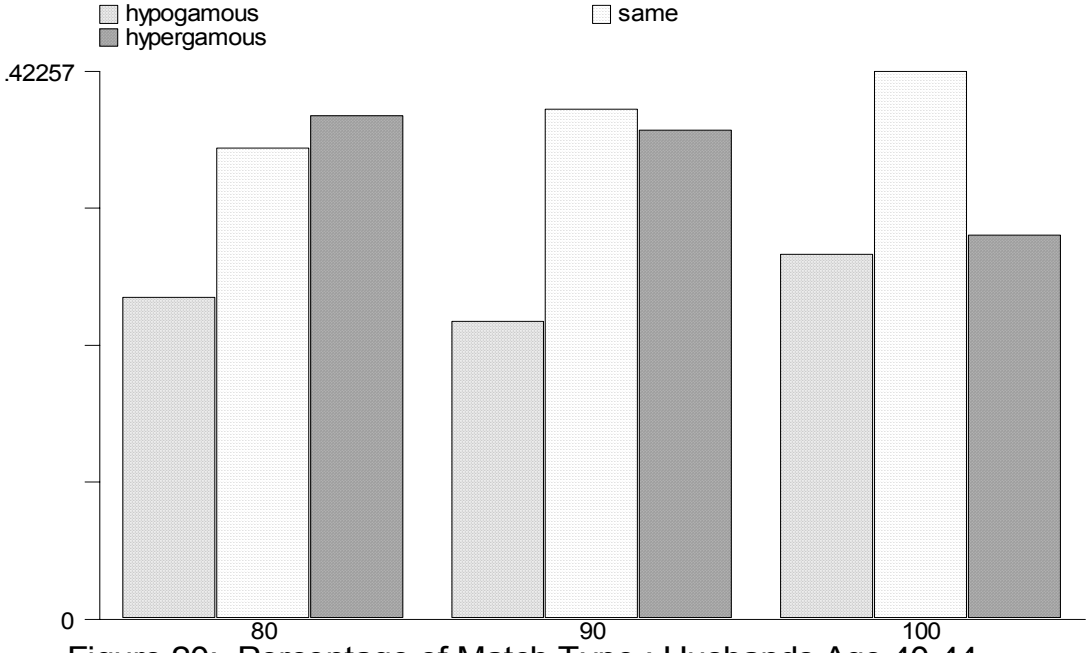

Figure 20: Percentage of Match Type : Husbands Age 40-44

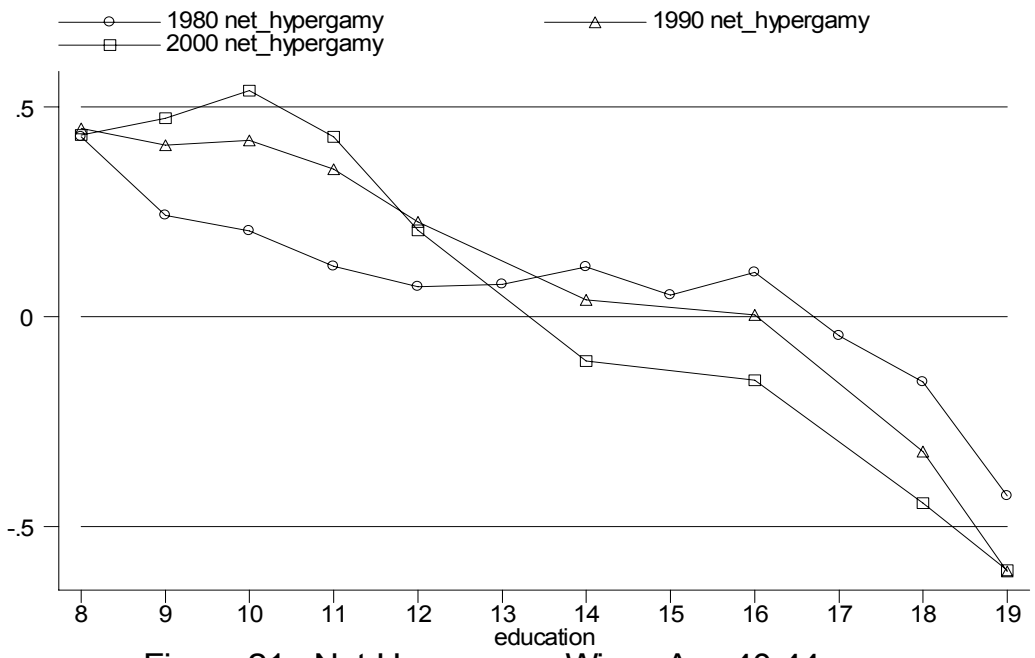

Figure 21: Net Hypergamy, Wives Age 40-44

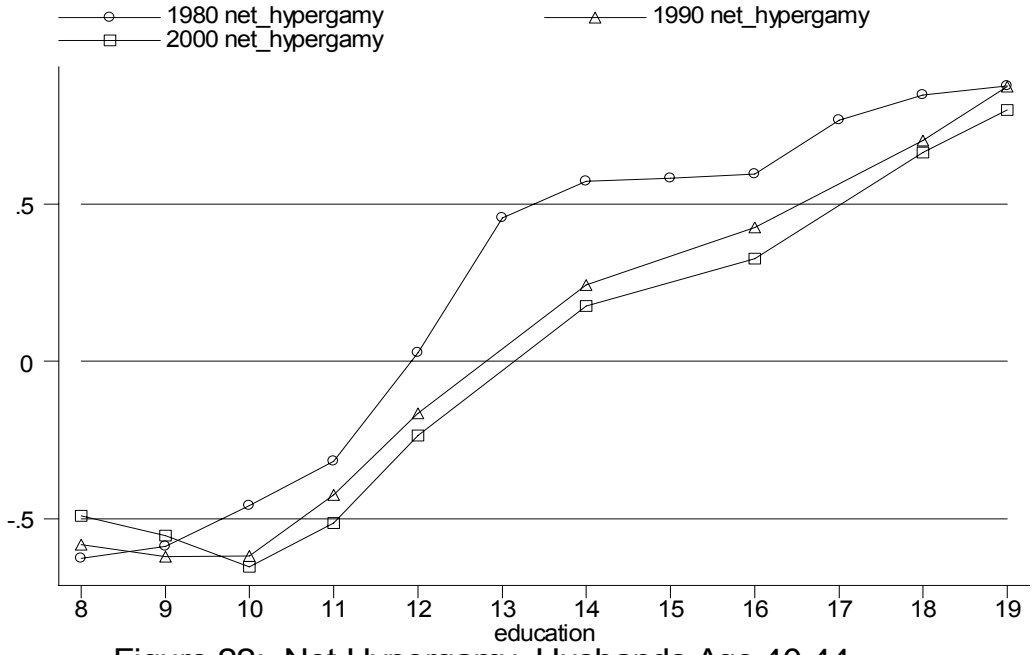

Figure 22: Net Hypergamy, Husbands Age 40-44

Table 1: Means (Standard Deviations)
Individuals Age 40-44, Unless Otherwise Specified

		Women			Men		
		1980	1990	2000	1980	1990	2000
All	Education (Meaured as Edu-2)	12.50 (2.5)	13.37 (2.5)	13.35 (2.4)	13.01 (3.0)	13.74 (2.7)	13.24 (2.6)
	Currently Married	0.81 (0.4)	0.75 (0.4)	0.72 (0.5)	0.85 (0.4)	0.79 (0.4)	0.72 (0.5)
	Ever Married	0.95 (0.2)	0.93 (0.3)	0.89 (0.3)	0.93 (0.2)	0.91 (0.3)	0.85 (0.4)
	N	298382	451241	566050	285184	433806	549878
White	Education (Meaured as Edu-2)	12.62 (2.4)	13.53 (2.4)	13.54 (2.4)	13.16 (2.9)	13.93 (2.7)	13.43 (2.5)
	Currently Married	0.83 (0.4)	0.77 (0.4)	0.74 (0.4)	0.86 (0.3)	0.80 (0.4)	0.73 (0.4)
	Ever Married	0.96 (0.2)	0.94 (0.2)	0.91 (0.3)	0.94 (0.2)	0.92 (0.3)	0.87 (0.3)
	N	250650	375956	438778	244044	368816	433549
Black	Education (Meaured as Edu-2)	11.98 (2.4)	12.78 (2.4)	12.94 (2.2)	11.89 (2.7)	12.64 (2.5)	12.61 (2.2)
	Currently Married	0.66 (0.5)	0.56 (0.5)	0.50 (0.5)	0.75 (0.4)	0.67 (0.5)	0.58 (0.5)
	Ever Married	0.89 (0.3)	0.83 (0.4)	0.72 (0.4)	0.88 (0.3)	0.83 (0.4)	0.73 (0.4)
	N	33127	43754	64759	27343	35922	55916
All	Mother (Age 40-44)	0.80 (0.4)	0.73 (0.4)	0.70 (0.5)			
	Mom (Age 40-44)	0.89 (0.3)	0.85 (0.4)				
	Mother (Age 35-39)	0.83 (0.4)	0.76 (0.4)	0.73 (0.4)			
	Mom (Age 35-39)	0.87 (0.3)	0.81 (0.4)				
	N	357751	504186	567280			
	Mother (Age 30-34)	0.76 (0.4)	0.70 (0.5)	0.66 (0.5)			
	Mom (Age 30-34)	0.79 (0.4)	0.75 (0.4)				
	N	448973	542553	496148			
All	Currently Married or Cohabiting	0.82 (0.4)	0.77 (0.4)	0.75 (0.4)	0.86 (0.3)	0.82 (0.4)	0.75 (0.4)
	N	298382	451241	566050	285184	433806	549878

Table 2
Percentage Married, by Education Level
All Women, Age 40-44

Education (Ed-2)	**Currently Married (Figure 1)**			**Ever Married (Figure 2)**		
Year	1980	1990	2000	1980	1990	2000
8	76.3	69.4	70.5	90.1	84.6	83.2
9	79.2	73.7	66.9	94.8	92.5	86.8
10	80.6	73.7	65.9	95.8	93.6	87.5
11	80.2	72.4	64.8	96.1	92.3	84.9
12	83.2	77.7	72	96.1	94.8	90.5
13	80.8	.	.	96.2	.	.
14	79.6	74	70.3	95.6	94.2	89.8
15	78.6	.	.	95.1	.	.
16	82.1	76.9	75.2	93.7	91.5	88.2
17	76.7	.	.	90.5	.	.
18	74.2	73.1	72.7	88.8	87.7	85.4
19	66.4	71.3	72.6	82.6	88.5	85.6

Table 3
Effect of Additional Education on Likelihood of Marriage
Incremental Effects of Additional Year of Education from Logit Model
(t-statistics in parentheses)
All Women Age 40-44

	Currently Married						**Ever Married**					
	Ed-1	**Three years Pooled (Ed-2)**					**Ed-1**	**Three years Pooled (Ed-2)**				
	1980	1980	1990	1990-1980	2000	2000-1990	1980	1980	1990	1990-1980	2000	2000-1990
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
9	**0.165**	**0.165**	**0.210**	0.046	**-0.169**	**-0.380**	**0.694**	**0.694**	**0.807**	0.113	**0.281**	**-0.526**
	(5.59)	**(5.59)**	**(7.37)**	(1.11)	**(6.37)**	**(9.73)**	**(13.60)**	**(13.60)**	**(17.96)**	(1.66)	**(7.88)**	**(9.16)**
10	**0.089**	**0.089**	-0.002	**-0.091**	-0.046	-0.045	**0.236**	**0.236**	**0.169**	-0.067	0.059	-0.109
	(2.76)	**(2.76)**	(0.05)	**(2.01)**	(1.57)	(1.03)	**(3.87)**	**(3.87)**	**(3.10)**	(0.82)	(1.44)	(1.60)
11	-0.026	-0.026	**-0.066**	-0.040	**-0.047**	0.019	0.068	0.068	**-0.192**	**-0.261**	**-0.213**	-0.021
	(0.94)	(0.94)	**(2.68)**	(1.08)	**(2.08)**	(0.57)	(1.22)	(1.22)	**(4.42)**	**(3.68)**	**(6.72)**	(0.39)
12	**0.202**	**0.202**	**0.284**	**0.082**	**0.331**	**0.047**	-0.010	-0.010	**0.414**	**0.424**	**0.530**	**0.116**
	(9.89)	**(9.89)**	**(18.24)**	**(3.21)**	**(25.53)**	**(2.33)**	(0.24)	(0.24)	**(15.51)**	**(8.57)**	**(29.94)**	**(3.62)**
13	**-0.164**						0.025					
	(8.35)						(0.63)					
14	**-0.074**	**-0.227**	**-0.203**	0.023	**-0.079**	**0.124**	**-0.148**	**-0.100**	**-0.112**	-0.012	**-0.079**	0.033
	(3.00)	**(17.54)**	**(22.95)**	(1.49)	**(10.40)**	**(10.62)**	**(3.01)**	**(3.93)**	**(6.71)**	(0.40)	**(6.78)**	(1.63)
15	**-0.062**						**-0.109**					
	(2.25)						**(2.06)**					
16	**0.222**	**0.149**	**0.157**	0.008	**0.246**	**0.089**	**-0.260**	**-0.392**	**-0.417**	-0.025	**-0.171**	**0.246**
	(7.92)	**(7.33)**	**(13.97)**	(0.35)	**(25.67)**	**(6.03)**	**(5.18)**	**(11.34)**	**(22.73)**	(0.65)	**(12.68)**	**(10.81)**
17	**-0.331**						**-0.455**					
	(10.6)						**(9.86)**					
18	**-0.132**	**-0.393**	**-0.203**	**0.190**	**-0.130**	**0.073**	**-0.179**	**-0.541**	**-0.407**	**0.134**	**-0.245**	**0.162**
	(3.56)	**(15.47)**	**(13.02)**	**(6.37)**	**(9.00)**	**(3.45)**	**(3.39)**	**(14.25)**	**(18.48)**	**(3.06)**	**(13.22)**	**(5.64)**
19	**-0.378**	**-0.447**	**-0.088**	**0.359**	-0.005	**0.083**	**-0.516**	**-0.608**	0.075	**0.683**	0.015	-0.059
	(9.74)	**(13.33)**	**(3.23)**	**(8.31)**	(0.20)	**(2.33)**	**(10.12)**	**(13.95)**	(1.95)	**(11.77)**	(0.52)	(1.23)
N		298382	451241		566050			298382	451241		566050	
	298382	1315673					298382	1315673				

Table 4
Percentage Married, by Education Level
All Men, Age 40-44

Education	**Currently Married (Figure 3)**			**Ever Married (Figure 4)**		
Year	1980	1990	2000	1980	1990	2000
8	79.6	71.9	69.3	87.8	82.2	78.7
9	82.2	74.8	65.4	92.1	89.5	82.1
10	83	75	63	93	90	81.7
11	83.5	72.8	63.5	93.8	88.9	80.9
12	86	77.9	69.3	94.4	91.9	85.5
13	85.8	.	.	95.1	.	.
14	85.5	79.1	72.3	94.7	92.4	86.5
15	84.9	.	.	94	.	.
16	85.9	80.9	76.9	93.7	90.7	86.2
17	85.3	.	.	93.2	.	.
18	86.2	83.1	80.6	93.5	91.4	87.7
19	85.4	84.6	83	92.8	92.4	89.8

Table 5
Effect of Additional Education on Likelihood of Marriage
Incremental Effects of Additional Year of Education from Logit Model
(t-statistics in parentheses)
All Men Age 40-44

	Currently Married						**Ever Married**					
	Ed-1	**Three years Pooled (Ed-2)**					**Ed-1**	**Three years Pooled (Ed-2)**				
	1980	1980	1990	1990-1980	2000	2000-1990	1980	1980	1990	1990-1980	2000	2000-1990
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
9	**0.174**	**0.174**	**0.144**	-0.030	**-0.176**	**-0.320**	**0.482**	**0.482**	**0.609**	**0.127**	**0.218**	**-0.391**
	(5.63)	**(5.63)**	**(4.97)**	(0.71)	**(7.24)**	**(8.46)**	**(11.36)**	**(11.36)**	**(15.42)**	**(2.19)**	**(7.43)**	**(7.94)**
10	0.054	0.054	0.011	-0.043	**-0.106**	**-0.117**	**0.140**	**0.140**	0.054	-0.086	-0.029	-0.083
	(1.52)	(1.52)	(0.32)	(0.89)	**(3.96)**	**(2.74)**	**(2.75)**	**(2.75)**	(1.14)	(1.24)	(0.89)	(1.44)
11	0.036	0.036	**-0.110**	**-0.146**	0.021	**0.131**	**0.125**	**0.125**	**-0.117**	**-0.242**	**-0.051**	0.066
	(1.09)	(1.09)	**(4.13)**	**(3.44)**	(1.06)	**(3.93)**	**(2.50)**	**(2.50)**	**(3.07)**	**(3.85)**	**(2.03)**	(1.45)
12	**0.194**	**0.194**	**0.273**	**0.079**	**0.262**	-0.011	**0.117**	**0.117**			**0.335**	-0.010
	(7.64)	**(7.64)**	**(15.92)**	**(2.58)**	**(22.08)**	(0.53)	**(3.00)**	**(3.00)**			**(22.82)**	(0.34)
13	-0.021						**0.121**		**0.345**	**0.228**		
	(0.83)						**(2.97)**		**(14.03)**	**(4.95)**		
14	-0.025	**-0.049**	**0.071**	**0.121**	**0.147**	**0.075**	-0.064	0.039	**0.079**	0.040	**0.078**	-0.001
	(0.83)	**(3.19)**	**(7.11)**	**(6.55)**	**(18.14)**	**(5.83)**	(1.35)	(1.63)	**(5.17)**	(1.41)	**(7.42)**	(0.05)
15	-0.043						**-0.141**					
	(1.38)						**(2.94)**					
16	**0.077**	0.037	**0.110**	**0.073**	**0.240**	**0.130**	-0.053	**-0.176**	**-0.224**	-0.048	-0.026	**0.198**
	(2.51)	(1.75)	**(9.61)**	**(3.07)**	**(22.94)**	**(8.38)**	(1.17)	**(5.66)**	**(13.71)**	(1.36)	(1.94)	**(9.46)**
17	-0.048						-0.084					
	(1.52)						(1.87)					
18	0.072	-0.013	**0.153**	**0.166**	**0.220**	**0.067**	0.060	-0.055	**0.078**	**0.132**	**0.136**	0.058
	(1.86)	(0.50)	**(9.07)**	**(5.42)**	**(13.16)**	**(2.81)**	(1.10)	(1.51)	**(3.44)**	**(3.10)**	**(6.74)**	(1.93)
19	-0.064	-0.027	**0.110**	**0.137**	**0.166**	0.056	**-0.123**	**-0.093**	**0.145**	**0.238**	**0.212**	0.067
	(1.82)	(0.93)	**(4.62)**	**(3.67)**	**(6.95)**	(1.65)	**(2.53)**	**(2.34)**	**(4.50)**	**(4.65)**	**(7.22)**	(1.53)
N		285184	433806		549878			285184	433806		549878	
	285184	1268868					285184	1268868				

Table 6
Percentage Married, by Education Level
White Women, Age 40-44

Education	**Currently Married (Figure 5)**			**Ever Married (Figure 6)**		
Year	1980	1990	2000	1980	1990	2000
8	78.3	69.1	67.9	90.7	84.6	81.9
9	82.4	76.7	70	96.7	95.6	91.3
10	83.9	78	70.2	97.5	96.8	93.1
11	83.9	77.5	70	97.9	96.1	91.5
12	85	79.8	75.1	96.8	96	93.4
13	82.8	.	.	96.9	.	.
14	81.1	75.9	73.2	96.1	95.2	92
15	80.4	.	.	95.7	.	.
16	83.4	77.7	76.6	94.2	92	89.1
17	77.7	.	.	90.8	.	.
18	74.3	73.9	73.8	88.6	88	85.9
19	66	71.3	73.3	81.9	88.8	86.1

Table 7
Percentage Married, by Education Level
Black Women, Age 40-44

Education	**Currently Married (Figure 9)**			**Ever Married (Figure 10)**		
Year	1980	1990	2000	1980	1990	2000
8	62.2	50.6	45.2	83.1	70.7	62.5
9	64.5	55.9	45.2	86.8	78.1	65.8
10	67	54.5	45.3	89.5	80.4	64.9
11	66.8	53.8	46.3	89.6	80.4	65.9
12	67.2	58.5	49.9	89.6	84.2	71.6
13	66.9	.	.	91.4	.	.
14	64.8	55.3	51.5	91.4	85.8	76.5
15	63.1	.	.	90.2	.	.
16	64.4	58.9	55.3	89.9	85	76.3
17	63.9	.	.	87.7	.	.
18	70.4	58.3	55.9	91	83.2	77.3
19	60.7	55.5	55.2	86.2	79.9	73.4

Table 8
Effect of Additional Education on Likelihood of Marriage
Incremental Effects of Additional Year of Education from Logit Model
(t-statistics in parentheses)
White Women Age 40-44

	Currently Married						**Ever Married**					
	Ed-1	**Three years Pooled (Ed-2)**					**Ed-1**	**Three years Pooled (Ed-2)**				
	1980	1980	1990	1990-1980	2000	2000-1990	1980	1980	1990	1990-1980	2000	2000-1990
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
9	**0.265**	**0.265**	**0.385**	**0.119**	**0.099**	**-0.286**	**1.089**	**1.089**	**1.385**	**0.296**	**0.850**	**-0.535**
	(7.22)	**(7.22)**	**(10.68)**	**(2.32)**	**(2.77)**	**(5.65)**	**(15.19)**	**(15.19)**	**(20.60)**	**(3.01)**	**(15.89)**	**(6.23)**
10	**0.103**	**0.103**	0.076	-0.027	0.011	-0.065	**0.277**	**0.277**	**0.337**	0.060	**0.246**	-0.091
	(2.58)	**(2.58)**	(1.95)	(0.48)	(0.29)	(1.20)	**(3.15)**	**(3.15)**	**(3.93)**	(0.49)	**(3.82)**	(0.85)
11	0.005	0.005	-0.030	-0.035	-0.011	0.020	**0.209**	**0.209**	**-0.230**	**-0.438**	**-0.232**	-0.002
	(0.14)	(0.14)	(0.98)	(0.76)	(0.36)	(0.47)	**(2.48)**	**(2.48)**	**(3.25)**	**(3.99)**	**(4.54)**	(0.02)
12	**0.079**	**0.079**	**0.139**	0.060	**0.259**	**0.120**	**-0.435**	**-0.435**	-0.009	**0.426**	**0.271**	**0.280**
	(3.15)	**(3.15)**	**(7.11)**	(1.88)	**(15.16)**	**(4.62)**	**(6.84)**	**(6.84)**	(0.21)	**(5.60)**	**(9.60)**	**(5.55)**
13	**-0.161**						0.020					
	(7.22)						(0.41)					
14	**-0.116**	**-0.248**	**-0.228**	0.020	**-0.101**	**0.127**	**-0.232**	**-0.160**	**-0.194**	-0.034	**-0.201**	-0.007
	(4.21)	**(17.18)**	**(23.05)**	(1.15)	**(11.45)**	**(9.54)**	**(4.00)**	**(5.41)**	**(9.68)**	(0.95)	**(13.56)**	(0.26)
15	-0.048						-0.093					
	(1.57)						(1.54)					
16	**0.202**	**0.126**	**0.102**	-0.024	**0.183**	**0.081**	**-0.320**	**-0.466**	**-0.549**	-0.083	**-0.336**	**0.214**
	(6.51)	**(5.62)**	**(8.29)**	(0.94)	**(16.76)**	**(4.93)**	**(5.61)**	**(11.96)**	**(26.36)**	(1.88)	**(20.88)**	**(8.12)**
17	**-0.365**						**-0.507**					
	(10.77)						**(10.05)**					
18	**-0.187**	**-0.454**	**-0.208**	**0.246**	**-0.152**	**0.055**	**-0.235**	**-0.621**	**-0.451**	**0.170**	**-0.298**	**0.153**
	(4.66)	**(16.41)**	**(12.34)**	**(7.61)**	**(9.51)**	**(2.38)**	**(4.15)**	**(14.98)**	**(18.89)**	**(3.56)**	**(14.43)**	**(4.83)**
19	**-0.395**	**-0.494**	**-0.131**	**0.362**	-0.024	**0.108**	**-0.541**	**-0.662**	0.080	**0.742**	0.018	-0.062
	(9.42)	**(13.51)**	**(4.49)**	**(7.73)**	(0.91)	**(2.76)**	**(9.91)**	**(14.08)**	(1.93)	**(11.83)**	(0.56)	(1.16)
N		250650	375956		438778			250650	375956		438778	
	250650	1065384					250650	1065384				

Table 9
Effect of Additional Education on Likelihood of Marriage
Incremental Effects of Additional Year of Education from Logit Model
(t-statistics in parentheses)
Black Women Age 40-44

	Currently Married						**Ever Married**					
	Ed-1	**Three years Pooled (Ed-2)**					**Ed-1**	**Three years Pooled (Ed-2)**				
	1980	1980	1990	1990-1980	2000	2000-1990	1980	1980	1990	1990-1980	2000	2000-1990
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
9	0.097	0.097	**0.214**	0.116	0.000	**-0.214**	**0.288**	**0.288**	**0.392**	0.104	0.142	**-0.250**
	(1.57)	(1.57)	**(3.08)**	(1.25)	(0.00)	**(2.09)**	**(3.38)**	**(3.38)**	**(4.85)**	(0.89)	(1.82)	**(2.22)**
10	0.114	0.114	-0.058	-0.172	0.004	0.062	**0.256**	**0.256**	0.137	-0.119	-0.040	-0.177
	(1.76)	(1.76)	(0.83)	(1.81)	(0.05)	(0.62)	**(2.71)**	**(2.71)**	(1.60)	(0.93)	(0.53)	(1.55)
11	-0.010	-0.010	-0.030	-0.020	0.042	0.071	0.019	0.019	0.001	-0.018	0.044	0.043
	(0.19)	(0.19)	(0.59)	(0.27)	(0.85)	(1.01)	(0.23)	(0.23)	(0.02)	(0.17)	(0.85)	(0.52)
12	0.019	0.019	**0.193**	**0.173**	**0.144**	-0.049	-0.007	-0.007	**0.261**	**0.268**	**0.268**	0.006
	(0.48)	(0.48)	**(5.87)**	**(3.35)**	**(5.34)**	(1.15)	(0.11)	(0.11)	**(6.21)**	**(3.60)**	**(9.33)**	(0.12)
13	-0.014						**0.208**					
	(0.29)						**(2.58)**					
14	-0.095	**-0.088**	**-0.131**	-0.044	**0.066**	**0.197**	0.001	**0.176**	**0.127**	-0.049	**0.253**	**0.126**
	(1.48)	**(2.59)**	**(5.25)**	(1.03)	**(3.33)**	**(6.18)**	(0.01)	**(3.19)**	**(3.66)**	(0.75)	**(11.04)**	**(3.02)**
15	-0.074						-0.142					
	(0.99)						(1.15)					
16	0.055	-0.041	**0.149**	**0.189**	**0.150**	0.002	-0.029	-0.138	-0.063	0.076	-0.011	0.051
	(0.69)	(0.68)	**(3.93)**	**(2.67)**	**(5.35)**	(0.03)	(0.23)	(1.43)	(1.19)	(0.69)	(0.35)	(0.82)
17	-0.018						-0.221					
	(0.19)						(1.52)					
18	**0.291**	0.120	-0.027	-0.146	0.025	0.052	0.350	-0.063	-0.137	-0.074	0.059	**0.197**
	(2.44)	(1.51)	(0.49)	(1.53)	(0.54)	(0.73)	(1.91)	(0.51)	(1.91)	(0.52)	(1.07)	**(2.16)**
19	**-0.430**	**-0.277**	-0.115	0.162	-0.026	0.088	**-0.482**	-0.291	-0.218	0.072	**-0.213**	0.006
	(3.40)	**(2.54)**	(1.12)	(1.08)	(0.31)	(0.66)	**(2.53)**	(1.84)	(1.69)	(0.35)	**(2.18)**	(0.03)
N		33127	43754		64759			33127	43754		64759	
	33127	141640					33127	141640				

Table 10
Percentage Married, by Education Level
White Men, Age 40-44

Education	Currently Married (Figure 7)			Ever Married (Figure 8)		
Year	1980	1990	2000	1980	1990	2000
8	80.1	70.1	65	88.2	81.7	76.8
9	83.9	76.8	66.1	93.1	92.1	85.6
10	84.8	77.3	65.2	94.5	92.6	85.8
11	85.6	75.2	65.2	95.2	91.5	84.7
12	87.1	79.2	70.8	95.1	92.9	87.3
13	86.9	.	.	95.6	.	.
14	86.1	79.8	73.4	95	92.9	87.5
15	85.8	.	.	94.2	.	.
16	86.2	81	77.3	93.9	90.9	86.6
17	85.8	.	.	93.3	.	.
18	86.5	83.2	80.7	93.8	91.4	87.8
19	85.1	84.5	82.8	92.6	92.4	89.8

Table 11
Percentage Married, by Education Level
Black Men, Age 40-44

Education	Currently Married (Figure 11)			Ever Married (Figure 12)		
Year	1980	1990	2000	1980	1990	2000
8	71.5	56.6	41.9	82.3	69.8	53
9	74.7	62	46.5	87.1	76.8	60.4
10	74.7	61.9	49.2	86.4	78.3	63.4
11	76.4	63.4	52.5	88.7	80.7	67
12	76.4	66.5	57.4	89.3	83.8	72.9
13	77.1	.	.	91.6	.	.
14	75.9	70.1	63.7	91	87.5	79.3
15	76.3	.	.	91.4	.	.
16	75.4	72.8	67.5	89.2	87.1	80.4
17	73.5	.	.	90	.	.
18	76.4	74.6	72	89.4	87.8	83.4
19	78.3	76.3	79.4	91.3	89.4	88.3

Table 12
Effect of Additional Education on Likelihood of Marriage
Incremental Effects of Additional Year of Education from Logit Model
(t-statistics in parentheses)
White Men Age 40-44

	Currently Married						**Ever Married**					
	Ed-1	**Three years Pooled (Ed-2)**					**Ed-1**	**Three years Pooled (Ed-2)**				
	1980	1980	1990	1990-1980	2000	2000-1990	1980	1980	1990	1990-1980	2000	2000-1990
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
9	**0.254**	**0.254**	**0.345**	0.091	0.052	**-0.294**	**0.601**	**0.601**	**0.957**	**0.356**	**0.583**	**-0.373**
	(6.96)	**(6.96)**	**(9.86)**	(1.80)	(1.67)	**(6.29)**	**(11.72)**	**(11.72)**	**(18.56)**	**(4.90)**	**(14.76)**	**(5.75)**
10	0.069	0.069	0.024	-0.045	-0.042	-0.067	**0.227**	**0.227**	0.074	-0.153	0.021	-0.053
	(1.65)	(1.65)	(0.61)	(0.78)	(1.30)	(1.30)	**(3.62)**	**(3.62)**	(1.18)	(1.73)	(0.47)	(0.69)
11	0.063	0.063	**-0.116**	**-0.179**	-0.000	**0.116**	**0.162**	**0.162**	**-0.149**	**-0.311**	**-0.090**	0.058
	(1.59)	(1.59)	**(3.61)**	**(3.51)**	(0.01)	**(2.86)**	**(2.55)**	**(2.55)**	**(2.93)**	**(3.82)**	**(2.71)**	(0.96)
12	**0.130**	**0.130**	**0.229**	**0.099**	**0.261**	0.032	-0.038	-0.038	**0.192**	**0.230**	**0.219**	0.027
	(4.29)	**(4.29)**	**(11.00)**	**(2.69)**	**(17.81)**	(1.25)	(0.76)	(0.76)	**(5.95)**	**(3.88)**	**(11.26)**	(0.71)
13	-0.019						**0.109**					
	(0.68)						**(2.35)**					
14	-0.064	**-0.073**	**0.040**	**0.113**	**0.127**	**0.087**	**-0.116**	-0.018	0.008	0.026	0.011	0.004
	(1.93)	**(4.31)**	**(3.65)**	**(5.60)**	**(13.99)**	**(6.10)**	**(2.16)**	(0.68)	(0.44)	(0.81)	(0.94)	(0.18)
15	-0.031						**-0.166**					
	(0.90)						**(3.17)**					
16	0.037	-0.004	**0.076**	**0.079**	**0.213**	**0.138**	-0.058	**-0.212**	**-0.279**	-0.067	**-0.079**	**0.200**
	(1.12)	(0.16)	**(6.19)**	**(3.09)**	**(18.43)**	**(8.19)**	(1.18)	**(6.33)**	**(15.85)**	(1.76)	**(5.37)**	**(8.70)**
17	-0.038						-0.090					
	(1.14)						(1.90)					
18	0.061	-0.009	**0.147**	**0.156**	**0.205**	**0.058**	0.070	-0.056	**0.063**	**0.120**	**0.107**	0.044
	(1.49)	(0.32)	**(8.27)**	**(4.79)**	**(11.20)**	**(2.26)**	(1.21)	(1.46)	**(2.65)**	**(2.64)**	**(4.83)**	(1.34)
19	**-0.113**	**-0.081**	**0.096**	**0.177**	**0.138**	0.041	**-0.179**	**-0.143**	**0.133**	**0.276**	**0.202**	0.069
	(3.04)	**(2.67)**	**(3.83)**	**(4.51)**	**(5.28)**	(1.14)	**(3.47)**	**(3.43)**	**(3.91)**	**(5.13)**	**(6.28)**	(1.47)
N		244044	368816		433549			244044	368816		433549	
	244044	1046409					244044	1046409				

Table 13
Effect of Additional Education on Likelihood of Marriage
Incremental Effects of Additional Year of Education from Logit Model
(t-statistics in parentheses)
Black Men Age 40-44

	Currently Married						**Ever Married**					
	Ed-1	**Three years Pooled (Ed-2)**					**Ed-1**	**Three years Pooled (Ed-2)**				
	1980	1980	1990	1990-1980	2000	2000-1990	1980	1980	1990	1990-1980	2000	2000-1990
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
9	**0.163**	**0.163**	**0.221**	0.058	**0.185**	-0.037	**0.377**	**0.377**	**0.360**	-0.017	**0.302**	-0.057
	(2.34)	**(2.34)**	**(3.14)**	(0.59)	**(2.67)**	(0.37)	**(4.26)**	**(4.26)**	**(4.51)**	(0.15)	**(4.33)**	(0.54)
10	0.001	0.001	-0.004	-0.005	0.109	0.113	-0.067	-0.067	0.081	0.148	0.125	0.044
	(0.01)	(0.01)	(0.06)	(0.05)	(1.60)	(1.12)	(0.67)	(0.67)	(0.93)	(1.12)	(1.80)	(0.40)
11	0.092	0.092	0.065	-0.027	**0.134**	0.068	**0.214**	**0.214**	**0.150**	-0.065	**0.162**	0.012
	(1.37)	(1.37)	(1.17)	(0.31)	**(2.86)**	(0.94)	**(2.43)**	**(2.43)**	**(2.24)**	(0.59)	**(3.32)**	(0.15)
12	-0.000	-0.000	**0.134**	**0.135**	**0.195**	0.061	0.066	0.066	**0.216**	0.150	**0.282**	0.066
	(0.00)	(0.00)	**(3.61)**	**(2.08)**	**(7.35)**	(1.32)	(0.93)	(0.93)	**(4.68)**	(1.76)	**(9.88)**	(1.22)
13	0.042						**0.258**					
	(0.64)						**(2.65)**					
14	-0.071	0.001	**0.169**	**0.168**	**0.267**	**0.098**	-0.069	**0.223**	**0.300**	0.076	**0.351**	0.051
	(0.87)	(0.02)	**(5.59)**	**(3.22)**	**(11.53)**	**(2.56)**	(0.56)	**(3.57)**	**(7.41)**	(1.02)	**(13.05)**	(1.05)
15	0.022						0.044					
	(0.25)						(0.32)					
16	-0.048	-0.056	**0.130**	**0.186**	**0.166**	0.036	-0.250	**-0.241**	-0.032	0.209	0.071	0.103
	(0.51)	(0.78)	**(2.90)**	**(2.20)**	**(4.70)**	(0.62)	(1.82)	**(2.37)**	(0.54)	(1.76)	(1.69)	(1.40)
17	-0.097						0.084					
	(0.84)						(0.50)					
18	0.155	-0.024	0.092	0.117	**0.216**	0.124	-0.059	0.056	0.059	0.003	**0.202**	0.143
	(1.08)	(0.26)	(1.26)	(0.97)	**(3.40)**	(1.28)	(0.29)	(0.42)	(0.61)	(0.02)	**(2.65)**	(1.16)
19	0.107	0.189	0.094	-0.095	**0.405**	**0.311**	0.212	0.182	0.161	-0.020	**0.405**	0.244
	(0.76)	(1.60)	(0.84)	(0.59)	**(3.80)**	**(2.01)**	(1.06)	(1.06)	(1.05)	(0.09)	**(3.06)**	(1.21)
N		27343	35922		55916			27343	35922		55916	
	27343	119181					27343	119181				

Table 14
Percentage Mothers, by Education Level ("Using Mother")
All Women, by Age

Education	Age 40-44			Age 35-39			Age 30-44		
Year	1980	1990	2000	1980	1990	2000	1980	1990	2000
8	75.4	70.5	69.4	77.9	72.5	71.4	75.5	69.9	69.4
9	77.6	71	64.5	84.1	78	72.5	83.9	78.1	73.6
10	77.6	70.2	63.9	85.1	78.8	71.4	85.4	78.6	72.9
11	78.9	71.6	65.5	86.4	78	71.5	85.6	76	71.1
12	81.3	74.6	69.6	86.4	80.1	75.8	82.6	76.9	72.6
13	80.5	.	.	85.5	.	.	81.1	.	.
14	80.1	73	71.3	84.2	76.9	75.2	77.1	71	69
15	81.8	.	.	83.2	.	.	74.4	.	.
16	81.7	73.2	71.9	81.1	70.8	70.3	67.4	57.4	56.3
17	76.4	.	.	75.7	.	.	61.3	.	.
18	73.6	67	67.4	72.1	64	64.9	54.5	48.5	48
19	63.5	65	66.9	62.4	62.3	64.7	43.8	48.4	45.2

Table 14A
Percentage Mothers, by Education Level (Using "Mom")
All Women, by Age

Education	Age 40-44			Age 35-39			Age 30-44		
Year	1980	1990	2000	1980	1990	2000	1980	1990	2000
8	87.2	85.5	NA	85	84	NA	81.8	82.6	NA
9	92.2	92.1	NA	91.6	91.4	NA	90.9	89.9	NA
10	92.9	92.9	NA	92.7	91.8	NA	91.7	90.1	NA
11	94	91.1	NA	93.6	89.7	NA	92	86.4	NA
12	90.8	89	NA	89.6	86.5	NA	85.5	82.2	NA
13	90.7	.	NA	88.8	.	NA	84.1	.	NA
14	89.1	85.7	NA	86.8	81.4	NA	79.5	74.5	NA
15	89.1	.	NA	85.7	.	NA	77	.	NA
16	85.6	77.8	NA	81.5	71.7	NA	68	58.2	NA
17	80.6	.	NA	76.1	.	NA	62	.	NA
18	77.5	69.9	NA	72	63.8	NA	55	49	NA
19	69.2	70.6	NA	63.3	63.5	NA	44.7	49.8	NA

Table 15
Effect of Additional Education on Likelihood of Motherhood (Using "Mother")
(t-statistics in parentheses)
Women Age 40-44

	Ed-1	**Three years Pooled (Ed-2)**				
	1980	1980	1990	1990 - 1980	2000	2000 - 1990
	(1)	(2)	(3)	(4)	(5)	(6)
9	**0.126**	**0.126**	0.022	**-0.104**	**-0.223**	**-0.245**
	(4.36)	**(4.36)**	(0.78)	**(2.58)**	**(8.50)**	**(6.38)**
10	0.002	0.002	-0.038	-0.040	-0.028	0.010
	(0.05)	(0.05)	(1.25)	(0.91)	(0.97)	(0.24)
11	**0.072**	**0.072**	**0.072**	-0.000	**0.073**	0.001
	(2.70)	**(2.70)**	**(2.99)**	(0.01)	**(3.26)**	(0.03)
12	**0.155**	**0.155**	**0.152**	-0.003	**0.186**	0.034
	(7.80)	**(7.80)**	**(9.89)**	(0.12)	**(14.32)**	(1.69)
13	**-0.056**					
	(2.88)					
14	-0.025	**-0.048**	**-0.084**	**-0.037**	**0.083**	**0.167**
	(1.00)	**(3.69)**	**(9.78)**	**(2.36)**	**(10.94)**	**(14.57)**
15	**0.112**					
	(3.91)					
16	-0.010	**0.069**	0.009	**-0.060**	**0.026**	0.017
	(0.35)	**(3.40)**	(0.82)	**(2.61)**	**(2.80)**	(1.21)
17	**-0.317**					
	(10.27)					
18	**-0.151**	**-0.389**	**-0.297**	**0.092**	**-0.212**	**0.084**
	(4.07)	**(15.42)**	**(20.09)**	**(3.15)**	**(15.43)**	**(4.18)**
19	**-0.470**	**-0.549**	**-0.086**	**0.463**	-0.021	0.065
	(12.28)	**(16.60)**	**(3.34)**	**(11.03)**	(0.94)	(1.92)
N		298382	451241		566050	
	298382	1315673				

Table 15A
Effect of Additional Education on Likelihood of Motherhood (Using "Mom")
(t-statistics in parentheses)
Women Age 40-44

	Ed-1	**Three years Pooled (Ed-2)**				
	1980	1980	1990	1990 - 1980	2000	2000 - 1990
	(1)	(2)	(3)	(4)	(5)	(6)
9	**0.547**	**0.547**	**0.679**	0.132	NA	NA
	(12.78)	**(12.78)**	**(15.35)**	(2.14)	NA	NA
10	**0.101**	**0.101**	**0.113**	0.012	NA	NA
	(2.06)	**(2.06)**	**(2.15)**	(0.16)	NA	NA
11	**0.179**	**0.179**	**-0.240**	**-0.419**	NA	NA
	(4.03)	**(4.03)**	**(5.84)**	**(6.92)**	NA	NA
12	**-0.456**	**-0.456**	**-0.238**	**0.219**	NA	NA
	(13.72)	**(13.72)**	**(9.95)**	**(5.34)**	NA	NA
13	-0.014				NA	NA
	(0.51)				NA	NA
14	**-0.175**	**-0.131**	**-0.303**	**-0.172**	NA	NA
	(5.38)	**(7.73)**	**(26.46)**	**(8.40)**	NA	NA
15	**-0.005**					
	(0.15)					
16	**-0.316**	**-0.379**	**-0.533**	**-0.154**	NA	NA
	(9.12)	**(16.09)**	**(43.42)**	**(5.80)**	NA	NA
17	**-0.356**					
	(10.63)					
18	**-0.187**	**-0.445**	**-0.410**	0.035	NA	NA
	(4.76)	**(16.31)**	**(26.72)**	(1.11)	NA	NA
19	**-0.430**	**-0.528**	0.033	**0.561**	NA	NA
	(10.72)	**(15.21)**	(1.22)	**(12.76)**	NA	NA
N		298382	451241		NA	
	298382	749623				

Table 16
Effect of Additional Education on Likelihood of Motherhood (Using "Mother")
Incremental Effects of Additional Year of Education from Logit Model
(t-statistics in parentheses)
All Women

	30 – 34						35 – 39					
	Ed-1	**Three years Pooled (Ed-2)**					**Ed-1**	**Three years Pooled (Ed-2)**				
	1980	1980	1990	1990-1980	2000	2000-1990	1980	1980	1990	1990-1980	2000	2000-1990
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
9	**0.529**	**0.529**	**0.431**	**-0.097**	**0.206**	**-0.225**	**0.411**	**0.411**	**0.295**	**-0.116**	**0.055**	**-0.239**
	(15.91)	**(15.91)**	**(15.19)**	**(2.23)**	**(7.47)**	**(5.67)**	**(12.37)**	**(12.37)**	**(9.70)**	**(2.58)**	**(2.08)**	**(5.92)**
10	**0.111**	**0.111**	0.026	-0.085	-0.036	-0.062	**0.076**	**0.076**	0.050	-0.027	-0.055	**-0.105**
	(3.01)	**(3.01)**	(0.83)	(1.77)	(1.13)	(1.39)	**(2.10)**	**(2.10)**	(1.46)	(0.54)	(1.87)	**(2.33)**
11	0.015	0.015	**-0.148**	**-0.164**	**-0.091**	0.057	**0.100**	**0.100**	-0.047	**-0.147**	0.004	0.051
	(0.48)	(0.48)	**(6.26)**	**(4.11)**	**(3.58)**	(1.66)	**(3.19)**	**(3.19)**	(1.77)	**(3.58)**	(0.17)	(1.44)
12	**-0.223**	**-0.223**	**0.051**	**0.274**	**0.076**	0.025	0.006	0.006	**0.126**	**0.120**	**0.223**	**0.098**
	(9.83)	**(9.83)**	**(3.52)**	**(10.19)**	**(5.34)**	(1.24)	(0.24)	(0.24)	**(7.80)**	**(4.26)**	**(16.62)**	**(4.66)**
13	**-0.102**						**-0.078**					
	(6.64)						**(4.01)**					
14	**-0.243**	**-0.307**	**-0.304**	0.003	**-0.174**	**0.131**	**-0.097**	**-0.161**	**-0.191**	-0.030	**-0.034**	**0.157**
	(13.65)	**(31.77)**	**(39.15)**	(0.25)	**(20.94)**	**(11.50)**	**(4.09)**	**(12.83)**	**(21.93)**	(1.93)	**(4.24)**	**(13.23)**
15	**-0.143**						**-0.078**					
	(7.84)						**(3.04)**					
16	**-0.342**	**-0.522**	**-0.598**	**-0.075**	**-0.548**	**0.050**	**-0.144**	**-0.235**	**-0.318**	**-0.082**	**-0.245**	**0.072**
	(19.83)	**(44.01)**	**(69.09)**	**(5.14)**	**(60.98)**	**(3.99)**	**(5.80)**	**(13.67)**	**(32.48)**	**(4.15)**	**(26.37)**	**(5.35)**
17	**-0.267**						**-0.317**					
	(15.63)						**(12.91)**					
18	**-0.279**	**-0.399**	**-0.358**	**0.041**	**-0.332**	0.026	**-0.190**	**-0.406**	**-0.306**	**0.100**	**-0.250**	**0.057**
	(13.45)	**(28.74)**	**(23.84)**	**(2.00)**	**(24.60)**	(1.30)	**(6.52)**	**(20.19)**	**(21.88)**	**(4.07)**	**(17.90)**	**(2.86)**
19	**-0.428**	**-0.575**	-0.004	**0.571**	**-0.111**	**-0.107**	**-0.441**	**-0.542**	**-0.075**	**0.466**	-0.006	**0.069**
	(18.12)	**(27.40)**	(0.18)	**(17.38)**	**(4.99)**	**(3.17)**	**(14.37)**	**(20.26)**	**(3.10)**	**(12.91)**	(0.27)	**(2.10)**
N		448973	542553		496148			357751	504186		567280	
	448973	1487674					357751	1429217				

Table 16A
Effect of Additional Education on Likelihood of Motherhood (Using "Mom")
Incremental Effects of Additional Year of Education from Logit Model
(t-statistics in parentheses)
All Women

	30 – 34						**35 – 39**					
	Ed-1	**Three years Pooled (Ed-2)**					**Ed-1**	**Three years Pooled (Ed-2)**				
	1980	1980	1990	1990-1980	2000	2000-1990	1980	1980	1990	1990-1980	2000	2000-1990
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
9	**0.800**	**0.800**	**0.630**	**-0.170**	NA	NA	**0.656**	**0.656**	**0.705**	0.050	NA	NA
	(19.43)	**(19.43)**	**(16.76)**	**(3.04)**	NA	NA	**(15.44)**	**(15.44)**	**(16.42)**	(0.82)	NA	NA
10	**0.098**	**0.098**	0.021	-0.076	NA	NA	**0.141**	**0.141**	0.053	-0.088	NA	NA
	(2.06)	**(2.06)**	(0.51)	(1.20)	NA	NA	**(2.91)**	**(2.91)**	(1.05)	(1.26)	NA	NA
11	0.035	0.035	**-0.358**	**-0.393**	NA	NA	**0.140**	**0.140**	**-0.257**	**-0.398**	NA	NA
	(0.85)	(0.85)	**(11.32)**	**(7.57)**	NA	NA	**(3.24)**	**(3.24)**	**(6.69)**	**(6.87)**	NA	NA
12	**-0.661**	**-0.661**	**-0.321**	**0.340**	NA	NA	**-0.519**	**-0.519**	**-0.302**	**0.217**	NA	NA
	(22.76)	**(22.76)**	**(18.20)**	**(10.00)**	NA	NA	**(16.37)**	**(16.37)**	**(14.08)**	**(5.66)**	NA	NA
13	**-0.112**				NA	NA	**-0.086**				NA	NA
	(6.85)				NA	NA	**(3.96)**				NA	NA
14	**-0.307**	**-0.366**	**-0.455**	**-0.089**	NA	NA	**-0.187**	**-0.236**	**-0.386**	**-0.150**	NA	NA
	(16.29)	**(35.71)**	**(54.53)**	**(6.71)**	NA	NA	**(7.18)**	**(17.08)**	**(39.22)**	**(8.82)**	NA	NA
15	**-0.147**						**-0.096**					
	(7.75)						**(3.50)**					
16	**-0.454**	**-0.655**	**-0.742**	**-0.087**	NA	NA	**-0.302**	**-0.435**	**-0.546**	**-0.112**	NA	NA
	(25.62)	**(53.97)**	**(84.35)**	**(5.83)**	NA	NA	**(11.59)**	**(24.34)**	**(53.87)**	**(5.44)**	NA	NA
17	**-0.265**						**-0.325**					
	(15.42)						**(13.15)**					
18	**-0.290**	**-0.402**	**-0.372**	0.030	NA	NA	**-0.214**	**-0.426**	**-0.361**	**0.065**	NA	NA
	(13.91)	**(28.83)**	**(24.74)**	(1.46)	NA	NA	**(7.33)**	**(21.05)**	**(25.74)**	**(2.64)**	NA	NA
19	**-0.413**	**-0.566**	0.031	**0.597**	NA	NA	**-0.401**	**-0.514**	-0.013	**0.501**	NA	NA
	(17.50)	**(26.97)**	(1.22)	**(18.18)**	NA	NA	**(13.05)**	**(19.15)**	(0.54)	**(13.81)**	NA	NA
N		448973	542553		NA			357751	504186		NA	
	448973	991526					357751	861937				

Table 17
Percent of Marriages by Type:

Hypogamous (Husband's Education < Wife's Education)
Same (Husband's Education = Wife's Education)
Hypergamous (Husband's Education > Wife's Education)

	Wives Age 40-44		
	1980	**1990**	**2000**
Hypogamous	26	25	27
Same	36	39	42
Hypergamous	38	36	31
	Husbands Age 40-44		
Hypogamous	24	23	28
Same	36	39	42
Hypergamous	38	37	30

Appendix I
Details of Data Transformations

Table AI-1
Measuring Education Using U.S. Census Data

1980 Code (Highest year of school completed)	1990 Code: (Educational attainment)	2000 Code: (Educational attainment)	Edu1	Edu2
Never attended school Nursery school Kindergarten First grade Second grade Third grade Fourth grade Fifth grade Sixth grade Seventh grade Eighth grade	No school completed, Nursery school, Kindergarten, 1st, 2nd, 3rd, or 4th grade, 5th, 6th, 7th, or 8th grade	No school completed Nursery school to 4th grade 5th grade or 6th grade 7th grade or 8th grade	8	8
Ninth grade	Ninth grade	Ninth grade	9	9
Tenth grade	Tenth grade	Tenth grade	10	10
Eleventh grade	Eleventh grade Twelfth grade, no diploma	Eleventh grade, Twelfth grade, no diploma	11	11
Twelfth grade	High School graduate: diploma or GED	High School graduate: diploma or GED	12	12
First year of college			13	14
Second year of college	Some college, but no degree, Associate degree in college (occupational or academic program)	Some college, but less than 1 year One or more years of college, no degree Associate degree	14	14
Third year of college			15	14
Fourth year college	Bachelor's degree	Bachelor's degree	16	16
Fifth year of college			17	16
Sixth year of college	Master's degree	Master's degree	18	18
Seventh year of college Eighth year of college	Professional degree Doctorate	Professional degree Doctorate	19	19

Table AI-2
Measuring Motherhood Using U.S. Census Data

	1980	1990	2000
If individual was head and household contained:			
Child of Head	Maybe[a]	Mother[b]	Mother[b,d]
Grandchild of Head	Maybe[a]	Maybe[c]	Maybe[c]
Child-in-Law of Head	Maybe[a]	Maybe[c]	Maybe[c]
Step-Child of Head	NA	Step	Step
If individual was spouse of head and household contained:			
Child of Head	Maybe[a]	Maybe	Maybe
Grandchild of Head	Maybe[a]	Maybe	Maybe
Child-in-Law of Head	Maybe[a]	Maybe	Maybe
Step-Child of Head	NA	Mother	Mother
If individual was a Mother in Mother/Child Subfamily[e]	Maybe	Maybe	Maybe
If individual was Mother, Grandmother, or Mother-in-Law[f] of Head	Maybe	Maybe	Maybe

If individual had different relationships with respect to different children in household, he or she was assigned to a category pursuant to the following ranking:

Mother $\succ$ Maybe $\succ$ Step $\succ$ Not Mother

"Mother-1" includes Mother and Maybe. "Mother-2" was used in the analysis, and includes Mother, Maybe and Step. This measures less accurate for the last two years, but comparable over all years.

[a] "Child" and associated variables do not distinguish step- vs. biological relationships with respect to head in 1980.

[b] Biological and step-children are distinguished in 1990 and 2000.

[d] 2000 Census data distinguish biological and adopted children; both are treated as children in here.

[c] Cannot distinguish grandchildren from step-grandchildren, and children-in-law from step children-in-law in 1990 and 2000.

[e] Biological and step-relationships are not distinguished for subfamilies in any year.

[f] Biological and step-relationships are not distinguished for parents, grandparents, and parents-in-law of head for any year.

Appendix II
Results for Cohabitors

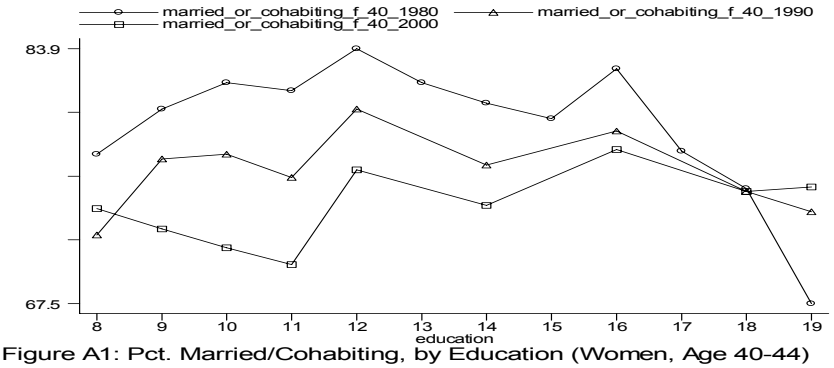

Figure A1: Pct. Married/Cohabiting, by Education (Women, Age 40-44)

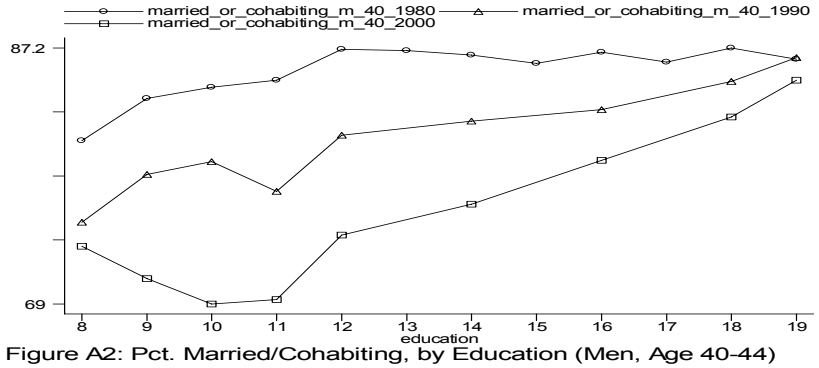

Figure A2: Pct. Married/Cohabiting, by Education (Men, Age 40-44)

Table A.II-1
Percentage Currently Married or Cohabiting, by Education Level
Individuals Age 40-44

Education	All Women (Figure A-1)			All Men (Figure A-2)		
Year	1980	1990	2000	1980	1990	2000
8	77.1	71.9	73.6	80.6	74.8	73.1
9	80	76.8	72.3	83.6	78.1	70.8
10	81.7	77	71.1	84.4	79.1	69
11	81.2	75.5	70	85	76.9	69.3
12	83.9	80	76.1	87.1	81	73.9
13	81.7	.	.	87.1	.	.
14	80.4	76.3	73.8	86.7	82	76.1
15	79.4	.	.	86.1	.	.
16	82.6	78.6	77.4	86.9	82.8	79.2
17	77.3	.	.	86.3	.	.
18	74.9	74.7	74.7	87.2	84.8	82.3
19	67.5	73.3	75	86.4	86.5	84.9

Table A.II-2
Effect of Additional Education on Likelihood of Current Marriage or Cohabiting
Incremental Effects of Additional Year of Education from Logit Model
(t-statistics in parentheses)

	All Women						All Men					
	Ed-1	**Three years Pooled (Ed-2)**					**Ed-1**	**Three years Pooled (Ed-2)**				
	1980	1980	1990	1990-1980	2000	2000-1990	1980	1980	1990	1990-1980	2000	2000-1990
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
9	**0.171**	**0.171**	**0.258**	**0.087**	**-0.068**	**-0.327**	**0.205**	**0.205**	**0.185**	-0.020	**-0.113**	**-0.298**
	(5.71)	**(5.71)**	**(8.71)**	**(2.08)**	**(2.45)**	**(8.03)**	**(6.44)**	**(6.44)**	**(6.10)**	(0.45)	**(4.46)**	**(7.54)**
10	**0.113**	**0.113**	0.010	**-0.103**	-0.057	-0.067	0.060	0.060	0.056	-0.004	**-0.087**	**-0.143**
	(3.44)	**(3.44)**	(0.31)	**(2.21)**	(1.83)	(1.48)	(1.65)	(1.65)	(1.61)	(0.08)	**(3.11)**	**(3.19)**
11	-0.036	-0.036	**-0.081**	-0.045	**-0.053**	0.028	0.043	0.043	**-0.125**	**-0.168**	0.016	**0.141**
	(1.29)	(1.29)	**(3.16)**	(1.17)	**(2.25)**	(0.81)	(1.27)	(1.27)	**(4.42)**	**(3.79)**	(0.75)	**(3.99)**
12	**0.190**	**0.190**	**0.261**	**0.070**	**0.307**	**0.046**	**0.179**	**0.179**	**0.244**	**0.065**	**0.226**	-0.018
	(9.17)	**(9.17)**	**(16.10)**	**(2.66)**	**(22.64)**	**(2.17)**	**(6.80)**	**(6.80)**	**(13.48)**	**(2.04)**	**(18.22)**	(0.83)
13	**-0.156**						-0.004					
	(7.74)						(0.16)					
14	**-0.084**	**-0.225**	**-0.217**	0.008	**-0.119**	**0.097**	-0.030	**-0.038**	**0.064**	**0.101**	**0.115**	**0.051**
	(3.37)	**(17.09)**	**(23.57)**	(0.51)	**(15.00)**	**(8.00)**	(0.95)	**(2.35)**	**(6.00)**	**(5.27)**	**(13.60)**	**(3.78)**
15	**-0.062**						-0.050					
	(2.21)						(1.55)					
16	**0.207**	**0.131**	**0.130**	-0.001	**0.192**	**0.062**	**0.062**	0.016	**0.060**	0.044	**0.182**	**0.122**
	(7.28)	**(6.35)**	**(11.23)**	(0.04)	**(19.38)**	**(4.09)**	**(1.98)**	(0.74)	**(5.00)**	(1.77)	**(16.68)**	**(7.52)**
17	**-0.335**						-0.050					
	(10.66)						(1.55)					
18	**-0.130**	**-0.396**	**-0.220**	**0.176**	**-0.146**	**0.074**	**0.082**	-0.011	**0.145**	**0.156**	**0.201**	**0.055**
	(3.47)	**(15.43)**	**(13.77)**	**(5.83)**	**(9.85)**	**(3.39)**	**(2.05)**	(0.41)	**(8.25)**	**(4.91)**	**(11.57)**	**(2.24)**
19	**-0.363**	**-0.432**	**-0.069**	**0.363**	0.018	**0.087**	**-0.073**	-0.031	**0.140**	**0.171**	**0.184**	0.045
	(9.30)	**(12.77)**	**(2.49)**	**(8.27)**	(0.74)	**(2.37)**	**(2.02)**	(1.05)	**(5.55)**	**(4.40)**	**(7.39)**	(1.27)
N		298382	451241		566050			285184	433806		549878	
	298382	1315673					285184	1268868				