

# AMERICAN SOCIOLOGICAL REVIEW

OFFICIAL JOURNAL OF THE AMERICAN SOCIOLOGICAL ASSOCIATION

---

## ONLINE APPENDIX SUPPLEMENT to article in

AMERICAN SOCIOLOGICAL REVIEW, 2004, VOL. 69 (DECEMBER:790–811)

### Racial and Ethnic Differences in Marriage after the Birth of a Child

Kristen Harknett  
*University of Pennsylvania*

Sara S. McLanahan  
*Princeton University*

### DEFINING MARRIAGE MARKETS WITHIN LARGER GEOGRAPHIC AREAS

Prior research has varied in the geographic boundaries used for marriage market measures. Our paper defines marriage markets at the city level. Some prior research has defined marriage markets as encompassing relatively larger geographic areas. Table S1 shows that the marriage market results we present in our paper (defined within cities) are consistent with results based on marriage market measures defined within relatively larger geographic areas.

Table S1 analyzes the effects of male to female ratios defined for "urbanized areas." An urbanized area is defined by the U.S. Census as "an area consisting of a central place(s) and adjacent territory with a general population density of at least 1,000 people per square mile of land area that together have a minimum residential population of at least 50,000 people." In short, an urbanized area includes a central city and the surrounding areas. Similar to the city-level marriage market measures used in the text, the urbanized area marriage market measures used in Table S1 are defined by race or ethnic

group (African-American, White, or Hispanic) and by age (20 to 34 year olds).

Table S1 presents results that are similar to those in Table 4 in the main text. The effects of marriage markets on marriage and on racial and ethnic differences in marriage are consistent whether marriage markets are defined in terms of urban areas (as in Table S1) or defined within city limits (as in Table 4 in the text).

### MARRIAGE MARKET EFFECTS AFTER CONTROLLING FOR DEPRESSED LABOR MARKET CONDITIONS

Marriage market measures are correlated with labor market measures in a direct and indirect manner. The employed male to female ratio by definition is directly affected by labor market conditions. In addition, depressed economic conditions are likely to increase the risk of male incarceration and mortality (if men engage in illegal and risky behaviors in response to poor employment prospects), which would in turn decrease male to female ratios. Because labor markets are closely

**Table S1.** Urbanized Area Marriage Market Explanations of Racial Differences in Marriage 30 Months after a Birth

	Model 1	Model 2
White	1.86 ** (2.61)	1.33 (0.90)
Mexican-American	1.38 (0.99)	1.30 (0.88)
Other Hispanic	1.53 (1.83)	1.52 * (2.18)
Urban area M/F ratio	7.99 * (2.50)	
Urban area employed M/F ratio		8.08 ** (2.87)
Pseudo R-squared	0.073	0.074

*Note:* N = 2,162 in all models. One city (Norfolk) is excluded from this table because urban-area Census data were not available. Odds ratios from logistic regressions appear in tables. Z-statistics are in parentheses. Standard errors were adjusted to account for clustering of marriage market variables by city/race-ethnic group. Odds ratios for control and household structure variables (mother and father age, mother and father children with another partner, mother lives with other adults, and parents cohabiting at birth) are not shown in tables. M/F ratio = male to female ratio.

\*  $p < .05$ , \*\*  $p < .01$  (two-tailed tests).

**ONLINE APPENDIX SUPPLEMENT**  
to article in  
AMERICAN SOCIOLOGICAL REVIEW, 2004, VOL. 69 (DECEMBER:790-811)

**Table S2.** Marriage Market Explanations of Racial Differences in Marriage 30 months after a Birth controlling for Male Nonemployment Rates

	Baseline	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
White	2.63 ** (5.47)	2.41 ** (4.35)	1.69 * (2.17)	1.36 (0.94)	1.36 (1.00)	1.17 (0.58)	1.11 (0.34)
Mexican-American	2.59 ** (5.70)	2.33 ** (7.33)	1.28 (0.93)	1.29 (0.79)	1.74 ** (3.32)	1.12 (0.50)	1.23 (0.87)
Other Hispanic	2.34 ** (4.42)	2.31 ** (6.37)	1.51 * (2.40)	1.55 * (2.17)	1.88 ** (4.46)	1.37 * (2.39)	1.51 ** (2.79)
Overall male nonemployment rate		0.25 (1.32)	0.31 (1.55)	0.60 (0.69)			
Race-specific male nonemployment rate					0.06 ** (3.09)	0.12 ** (2.99)	0.19 (1.68)
M/F ratio			6.12 ** (3.16)			4.92 ** (3.60)	
Employed M/F ratio				5.85 * (2.13)			3.94 * (2.05)
Pseudo R-squared	0.068	0.070	0.075	0.073	0.072	0.076	0.074

*Note:* N = 2,205 in all models. Odds ratios from logistic regressions appear in tables. Z-statistics are in parentheses. Standard errors were adjusted to account for clustering of marriage market and nonemployment variables by city/race-ethnic group. Odds ratios for control and household structure variables (mother and father age, mother and father children with another partner, mother lives with other adults, and parents cohabiting at birth) are not shown in tables. M/F ratio = male to female ratio.

\*  $p < .05$ , \*\*  $p < .01$  (two-tailed tests).

linked with the concept of the supply of marriageable men, Table S2 considers whether our main marriage market measures, various male to female ratios, continue to influence marriage and racial differences in marriage after taking into account the characteristics of labor markets. Table S2 uses male nonemployment rates from the 2000 U.S. Census (defined as the number of men who are not working divided by the total number of men) as a measure of labor market conditions. We prefer to analyze nonemployment rates rather than unemployment rates, because unemployment rates omit men who are not looking for work (e.g., discouraged workers) from the numerator and denominator. Table S2 shows that the overall nonemployment rate in a city is not related to marriage (Models 2, 3, and 4). These same models also show that male to female ratios and employed male to

female ratios remain significant predictors of marriage after controlling for overall nonemployment rates in a city.

In the twenty cities in the Fragile Families study, nonemployment rates tend to be highest for African-American men, lowest for White men, and in between for Hispanic men. Model 5 shows that male nonemployment rates when defined within race and ethnic groups are significantly related to marriage. Higher male nonemployment rates (within city and race/ethnic group) are associated with lower marriage rates (Model 5). Model 5 also shows that taking into account race- and city-specific male nonemployment rates explains a large portion of racial/ethnic differences in marriage. Nevertheless, Models 6 and 7 show that ratios of males to females continue to be significantly related to marriage after holding

**ONLINE APPENDIX SUPPLEMENT**  
to article in  
AMERICAN SOCIOLOGICAL REVIEW, 2004, VOL. 69 (DECEMBER:790-811)

**Table S3.** Marriage Market Explanations of Racial Differences in Marriage 30 months after a Birth including Men in the Armed Forces in the Pool of Marriageable Men

	Baseline	Model 2	Model 3
White	2.63 ** (5.47)	1.34 (1.01)	1.20 (0.71)
Mexican-American	2.59 ** (5.70)	1.27 (0.88)	1.21 (0.90)
Other Hispanic	2.34 ** (4.42)	1.51 * (2.48)	1.47 ** (3.10)
Employed M/F ratio		6.67 ** (3.02)	
Employed or in armed forces M/F ratio			8.09 ** (4.53)
Pseudo R-squared	0.068	0.073	0.076

*Note:* N = 2, 205 in all models. Odds ratios from logistic regressions appear in tables. Z-statistics are in parentheses.

Standard errors were adjusted to account for clustering of marriage market variables by city/race-ethnic group.

Odds ratios for control and household structure variables (mother and father age, mother and father children with another partner, mother lives with other adults, and parents cohabiting at birth) are not shown in tables. M/F ratio = male to female ratio.

\*  $p < .05$ , \*\*  $p < .01$  (two-tailed tests).

constant male nonemployment rates within city and race/ethnic group. Models 6 and 7 also show that male to female ratios explain an additional portion of the race/ethnic differences in marriage after taking into account these male nonemployment rates. Further, Model 7 shows that the effect of the employed male to female ratio dominates when both this ratio and the male nonemployment rate are included in the same model.

Table S2 shows that our marriage market measures continue to be related to marriage and to race/ethnic differences after taking nonemployment rates into account. The results suggest that labor market conditions are an important component of marriage markets, but marriage market measures that take into account male employment and sex ratio imbalances have more explanatory power than labor market conditions alone.

### **EMPLOYED MALE TO FEMALE RATIOS THAT INCLUDE MEN IN THE ARMED FORCES**

The employed male to female ratios we use in our paper do not count men who are in the armed forces among employed males. Table S3 shows that counting men in the armed forces along with civilian employed men does not change our pattern of results. The results in Table S3 show that the effects of marriage markets on marriage and race/ethnic differences in marriage become stronger when men in the armed forces are included in the pool of potential male partners. Model 2 repeats results from Table 4, and Model 3 shows the results when men in the armed forces are counted along with the civilian employed.

**ONLINE APPENDIX SUPPLEMENT**  
to article in  
AMERICAN SOCIOLOGICAL REVIEW, 2004, VOL. 69 (DECEMBER:790-811)

**ANALYZING ALL UNMARRIED  
PARENTS INCLUDING THOSE WHO  
HAD BROKEN UP BEFORE THE BIRTH**

Our paper analyzes parents who were romantically involved at the time of their baby's birth because these are the parents at risk of marrying after a birth.

As reported in the text, Mexican-American and other Hispanic unmarried parents were

more likely to be romantically involved at the time of their baby's birth than White or African-American parents were. Table S4 shows that analyzing all new, unmarried parents (that is, those in our analysis sample plus those who had broken up by the time of the birth) does not change the pattern of results.

**Table S4.** Marriage Market Explanations of Racial Differences in Marriage 30 months after a Birth for All Parents who were Unmarried at Birth

	Baseline	Model 2	Model 3	Model 4
White	2.34 ** (4.97)	1.66 (2.45)	1.60 * (2.16)	1.25 (0.82)
Mexican-American	2.58 ** (5.76)	1.46 (1.63)	1.40 (1.35)	1.33 (1.10)
Other Hispanic	2.29 ** (4.34)	1.53 ** (2.65)	1.48 * (2.28)	1.53 ** (2.74)
M/F ratio		5.25 ** (3.53)		
Non-incarcerated M/F ratio			5.38 ** (3.43)	
Employed M/F ratio				5.82 ** (3.08)
Pseudo R-squared	0.085	0.090	0.090	0.089

*Note:* N = 2,563 in all models. All parents who were unmarried at birth are included, whether or not they were romantically involved at birth. Odds ratios from logistic regressions appear in tables. Z-statistics are in parentheses.

Standard errors were adjusted to account for clustering of marriage market variables by city/race-ethnic group.

Odds ratios for control and household structure variables (mother and father age, mother and father children with another partner, mother lives with other adults, and parents cohabiting at birth) are not shown in tables. M/F ratio = male to female ratio.

\*  $p < .05$ , \*\*  $p < .01$  (two-tailed tests).