Women's Relative Earnings and Cohabiting Couples' Union Transitions

Women's labor market participation and earnings increased dramatically in recent decades (Goldin 2006; Blau 1998). These changes have resulted in absolute gains in women's earnings as well as income relative to spouses (Goldin 2006) and potential spouses (Betrand et al. 2013). Theoretically and empirically, however, the consequences of changes in women's relative earnings for marriage behavior are unclear. Becker's (1981) specialization model suggests that the gains to marriage are reduced when both partners are similarly committed to paid work, predicting lower marriage rates as women's earnings and employment rise as the gains to trade are thereby reduced. However, empirical evidence suggests a changing relationship between women's economic potential and marriage behavior, with more highly educated women and those with higher earnings being more likely to marry (Goldstein and Kenney 2001; Sweeney 2002). Additionally, qualitative data suggests that poor unmarried mothers are averse to situations in which potential husbands earn significantly more because of concerns about a changing balance of power in relationships (Edin and Kefalas 2005). Interviews of working and lower middle class cohabiting couples suggest that the economic criteria for cohabitation are different from that of marriage (Smock, Manning, and Porter 2005). Importantly, these findings suggest that economic independence is considered not to be a deterrent to marriage for poor women, but rather a necessary condition.

Women's relative earnings may matter not only at the lower end but also at the higher end of the distribution. Bertrand et al. (2013) argue that couples are averse to marriages in which women earn more than men, demonstrating that the probability that a randomly selected woman earns more than a randomly selected man in a given marriage market is associated with lower rates of marriage. Furthermore, they show that marriage dissolution rates increase sharply as wives begin to out earn their husbands. Although these analyses are compelling, they rely on hypothetical matches rather than on characteristics of actual partners. Among cohabiting couples in particular, Brines and Joyner (1999) examine the risk of dissolution relative to remaining cohabiting, treating transitions to marriage as censored. They find that the risk of dissolution of cohabiting couples is continuously increasing as the female partners' income increased above parity, but they examine a small and non-representative sample of cohabitors and do not model the transition to marriage as a competing risk.

Other studies provide some evidence that relative earnings are not related to union transitions among cohabiting couples. However, these studies have not been able to definitively evaluate whether and how relative earnings matter because of data and methodological limitations. Smock and Manning (1997) and Sassler and McNally (2003) examined union transitions among approximately 300 cohabiting couples from two waves of NSFH data from 1987-1988 and 1992-1994. Although neither study finds a statistically significant relationship between relative earnings and union transitions among cohabitors, their small sample size, substantial attrition, and possible recall bias limit definitive conclusions. Additionally, Sassler and McNally (2003) treat relative earnings linearly using the same NSFH data, which will fail to capture an underlying association if the relationship differs across the distribution of women's relative earnings.

These findings provide conflicting empirical evidence about whether and how women's relative earnings matter in cohabiting couples' union transitions. If couples have a general aversion to situations in which women are the primary earners (Bertrand et al. 2013), and marriage contains stronger behavioral prescriptions for gendered behavior than cohabitation (Gupta 1999; Ridgeway 2011; South and Spitz 1994), we should expect for the risk of marriage to be lower among cohabiting couples in which male partners earn less than female partners. However, if poor women in particular tend to believe that low relative earnings alter the balance of power in the relationship, they may be reluctant to marry at low levels of relative earnings. Women with higher earnings potential, in contrast, may be indifferent about having very low relative earnings because their potential earnings may serve as a source of intrahousehold bargaining power (Lundberg and Pollak 1996). This in theory should lead to a negative association between relative earnings and marriage at very low levels of relative earnings for women with low earnings potential, but not for women with high earnings potential. If couples in general are averse to marital matches in which women are the primary earners, then couples should be less likely to marry if women's earnings surpass parity with those of their male partners.

Cohabiting couples' risk of union dissolution as women's relative earnings vary may operate through similar mechanisms. Bertrand et al. (2013) show that the risk of marital dissolution increases sharply as women's relative earnings exceed 0.50. But does the aversion to women as primary earners extend to cohabiting couples' risk of union dissolution? Brines and Joyner (1999) use a flexible functional form of relative earnings and show that cohabiting couples are more likely to stay together rather than dissolve if their earnings are more equal, but their analyses ignore marriage as a competing risk. Because qualitative data suggests that poor women believe that the balance of power changes significantly when male partners have high relative earnings, we should also expect that poor cohabiting women's union dissolution rates are high at low relative earnings.

These competing theoretical perspectives and conflicting empirical evidence on whether and how relative earnings matter can be addressed with better data. It is particularly important to examine cohabiting couples because cohabitation is now the modal state before marriage, and analyzing cohabitors enables us to use actual data on women's relative income rather than potential income. Using pooled longitudinal data with monthly income, household composition, and marital status information from panels of the Survey of Income and Program Participation (SIPP) over the period 1996 – 2012,[1] I test hypotheses relating to women's relative earnings and transitions from cohabitation to marriage and union dissolution using a flexible functional form of the relationship between union transitions and cohabiting women's relative earnings.

Because data are collected at the month level in interviews occurring every 4 months for between 9 and 13 waves, I model marriage and dissolution among heterosexual cohabiting couples as competing risks using multinomial discrete time event history logistic regression models. Although many cohabiting couples are censored at the end of each panel, an advantage of the SIPP is that short cohabitation spells are far more likely to be captured relative to data sets with annual or less frequent interview intervals (e.g. the PSID, CPS, NSFH, or NLSY79). The hazard of marriage or union dissolution in month *t*, relative to

[1] Although the SIPP contains panel data covering the period 1984-2012, Baughman et al. (2002) showed that indirect estimates from the SIPP overestimated the proportion of cohabiting couples relative to the direct measure that was introduced in 1996. Therefore I analyze transitions among cohabiting couples from 1996-2012.

remaining in a cohabiting union, is modeled as a function of union duration, each partner's absolute earnings, and the female partner's relative earnings. Covariates X include race, survey year, age, categorical measures of educational attainment, number of children, and the value of means-tested public transfers.

$$\log[\frac{P_{it}}{1-P_{it}}] = \beta_0 + \sum_{j=1}^{J} \beta_j UnionDuration_{it} + \sum_{k=1}^{K} \beta_k Year_{it} + \beta_1 LnMaleEarnings_{it-1}$$

$$+ \ \beta_2 LnFemaleEarnings_{it-1} + \sum_{l=1}^{L} \beta_l FemaleRelativeEarnings_{it-1}$$

$$+ \sum_{m=1}^{M} \beta_m MaleAge_{it} + \sum_{n=1}^{N} \beta_n FemaleAge_{it} + \sum_{o=1}^{O} \beta_o X_{it}$$

I test hypotheses about the association between cohabiting women's relative earnings and the risk of marriage and union dissolution, net of each partner's absolute level of earnings and several potentially confounding variables. I specify relative earnings using a series of dummy variables to test hypotheses about women's relative earnings and marriage and dissolution. In addition, I examine the association between relative earnings and union transitions among poor and non-poor women.

This modeling strategy and data set contains advantages over prior analyses of economic resources and union transitions among cohabitors, in addition to providing analyses from a more recent period. First, previous research likely misses many shorter term cohabitations because of longer recall periods (Smock and Manning 1997; Sassler and McNally 2003; Lichter et al. 2006; Brines and Joyner 1999). The SIPP conducts interviews every 4 months and for panels lasting between 36 and 52 months over the period 1996 – 2012. Prior analyses have relied on very small samples and have covered relatively short time periods in the 1970s and 1980s (Brines and Joyner 1999) or late 1980s and early 1990s (Smock and Manning 1997; Sassler and McNally 2003). The SIPP contains a large, nationally representative sample of U.S. households that can be used to analyze cohabitors' union transitions at the couple-month level over a 16-year period during which cohabitation became increasingly common and women's earnings continued to rise relative to those of men.

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