The Shifting Economic Determinants of Marriage among Cohabiting Couples in the United States: 1984–2013

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Abstract: Recent research implies distinct hypotheses about change or stability over time in the relationship between men's and women's economic resources and marriage. Scholars posit growing economic polarization, increasing symmetry in the importance of men's and women's economic characteristics, and the persistence of cultural norms of male breadwinning. However, no studies have used a consistent data source to examine long-term trends in the relationship between economic resources and marriage among cohabiting couples. We use nationally-representative longitudinal data from repeated panels of the Survey of Income and Program Participation (SIPP) to examine trends over the period 1984–2013 in the economic determinants of marriage among cohabiting couples in the United States, testing hypotheses about trends in the importance of men's and women's earnings, education, and employment in transitions to marriage. Preliminary results indicate that both men's and women's economic resources have become more important over time in predicting marriage.

Background

The growing economic divergence in family life (McLanahan 2004), the emergence of gender egalitarian cultural models of work and family life (Gerson 2011; Goldscheider et al. 2015), and the persistence of cultural norms prescribing male breadwinning (Bertrand et al. 2015; Killewald 2016) are key factors theorized to influence trends in the relationship between economic resources and marriage. Existing studies from different time periods on the economic determinants of marriage among cohabiting couples suggest that associations between cohabiting couples' economic resources and marriage may be changing. While studies using data primarily from the 1980s and early-1990s in the U.S. provide evidence that men's education, employment, and earnings may be more important than women's for marriage (Brown 2000; Lichter et al. 2006; Oppenheimer 2003; Sanchez et al. 1998; Smock and Manning 1997), research using data from 1996 to 2013 suggests high contemporary economic standards associated with marriage and greater gender symmetry in the economic determinants of marriage (Ishizuka 2018). Although these time trends from previous studies are broadly consistent with increasing gender symmetry in the economic determinants of marriage and growing economic polarization in marriage, no studies have used a consistent data source to examine long-term trends in the relationship between economic resources and marriage among cohabiting couples.

Research Question

In this study, we ask how the relationship between cohabiting men's and women's economic resources and marriage has changed over time in the United States. Using monthly longitudinal data from multiple nationally representative panels of the Survey of Income and Program Participation (SIPP) from 1984–2013, we consider how cohabiting men's and women's educational attainment, employment, and earnings are associated with the risk of marriage in the 1980s, 1990s, and 2000s. Testing hypotheses derived from theories of change and stability in gendered cultural models of work and family life and the economic polarization of marriage, we evaluate whether women's economic characteristics have become more important predictors of marriage over time, whether the economic determinants of marriage have become more symmetric by gender, and whether marriage transitions have become more divided by education, employment, and earnings.

Theory and Prior Research

Emerging Gender Egalitarian Cultural Models of Work and Family Life

Recent studies have documented changing relationships between gender, work, and family patterns that are theorized to be rooted in the gender revolution (Goldscheider et al. 2015; Esping-Andersen and Billari 2015; Cherlin 2016; Myrskylä et al. 2009). Women's and men's work and family lives have converged, with women becoming more attached to the labor market and men increasing their time in care of children (Goldin 2014; Sayer et al. 2004). Scholars have posited that partner characteristics perceived as desirable have become more gender symmetric (Esping-Andersen and Billari 2015). Whereas women's education, employment, and earnings have been negatively associated with marriage in periods or contexts characterized by traditional gender specialization (Esping-Andersen and Billari 2015), researchers have documented reversals of these relationships between women's economic resources and marriage in more recent periods and birth cohorts (Goldstein and Kenney 2001; Sweeney 2002).

Persistent Cultural Norms of Male Breadwinning

Despite more recent evidence of the emergence of gender egalitarian relationship models, other research points to the persistence of gendered cultural norms of male breadwinning and stalled progress toward gender equality. The diffusion of egalitarian attitudes has stalled in recent birth cohorts (Cotter et al. 2011), and normative expectations of male breadwinning remain powerful and slow to change (Bertrand et al. 2015; Killewald 2016; Parker and Wang 2013; Sayer et al. 2011). Although there is greater flexibility in how women "do gender" (Killewald 2016; West and Zimmerman 1987; Willer et a. 2013), full-time employment continues to be a requirement for men (Pedulla 2016; Townsend 2002). Qualitative research suggests that men's earnings and employment are seen as more important than women's in cohabiting couples' marriage transitions (Smock et al. 2005), and many previous studies find that only men's earnings and employment predict marriage (Brown 2000; Lichter et al. 2006; Oppenheimer 2003; Sanchez et al. 1998; Smock and Manning 1997).

Increasing Economic Polarization of Marriage

Marriage has become more stratified by education and income (Cherlin 2004; Goldstein and Kenney 2001; Edin and Kefalas 2005; Ellwood and Jencks 2004; McLanahan 2004; Watson and McLanahan 2011). Scholars have posited that the economic standards associated with marriage have increased, raising the importance of both men's and women's economic characteristics in marriage transitions. A recent study by Ishizuka (2018) found that increases in couples' joint wealth and earnings relative to a "marriage bar"—or standard associated with marriage—significantly increased cohabiting couples' risk of marriage. Qualitative studies likewise document high economic standards associated with marriage and suggest that low-income couples struggle to meet these standards (Edin and Kefalas 2005; Gibson-Davis et al. 2005; Smock et al. 2005). Together, these studies imply that education, earnings, and education of both male and female partners should be increasingly important in determining whether cohabiting couples marry.

Hypotheses

The preceding theoretical perspectives on change and stability over time in the economic foundations of marriage imply clear, testable hypotheses about trends in the relationship between men's and women's economic resources and marriage. If gender egalitarian relationship models have become more prevalent (Esping-Andersen and Billari 2015; Gerson 2011; Goldscheider et al. 2015), we should observe increasing gender symmetry in the importance of education, employment, and earnings for marriage in more recent periods, with women's economic characteristics increasing in importance and men's remaining stable or declining. In contrast, if gendered cultural norms continue to prioritize men's economic resources in marriage decisions and require full-time breadwinning (Bertrand et al. 2015; Killewald 2016; Smock et al. 2005), we should expect that men's employment, earnings, and education remain the key economic determinants of marriage. Finally, if the marriage bar or level of economic resources perceived as necessary for marriage has increased over time, both men's and women's education, earnings, and employment should be more important for predicting marriage in more recent periods.

Data

The SIPP offers a consistent, nationally representative data source to examine whether and how the relationship between economic resources and marriage among cohabiting couples

has changed over time. The data include new and prevailing cohabiting unions over a nearly 30-year period spanning from 1984 to 2013. Each SIPP panel follows all members of sampled households and those residing with them for between two and a half and five years, with interviews occurring once every 4 months. This high frequency of data collection is important for capturing fine-grained measures of economic status and changes in family relationships. Most cohabiting unions end quickly by either marriage or dissolution, with the median duration of cohabiting unions being less than two years (Copen et al. 2013). Given recall bias, short-duration unions may be more likely to be missed when the time between waves is longer, even when histories are collected (Hayford and Morgan 2008).

Measures

Cohabitation and Marriage: SIPP panels include a direct measure of cohabitation beginning in 1996. Prior to 1996, however, cohabitation status must be inferred based on information about persons of opposite sex sharing a household, or the POSSLQ method (Casper and Cohen 2000). We use the POSSLQ approach to identify cohabiting couples in a consistent way across SIPP panels, and we rely on the direct cohabitation measure in the 1996 and later panels to evaluate the sensitivity of our results in those years to the measurement of cohabitation. To increase statistical power in our primary analyses, we include both couples who are already cohabiting at the beginning of each SIPP panel and cohabitations that form during the panel. Because we can only measure union duration for cohabitations that begin during the panel, we include an indicator for cohabitation status at wave 1 and further evaluate the sensitivity of our findings to including only unions that form during the panel. Marriage occurs when a cohabiting couple transitions to being married over the course of the panel. Cohabiting couples are censored at the time of separation, loss from the sample, and completion of the panel.

Education: We use a measure of years of completed schooling as our primary indicator of education. However, we also consider categorical measures of educational attainment that include individuals with college degrees or more, some college, and a high school degree or less.

Employment: We construct a measure of whether each partner is currently working full-time, defined as 35 hours per week or more. We compare individuals who are working full-time to those who are either working part-time or not currently working.

Earnings: We construct a measure of log monthly earnings for each partner. We adjust earnings to 2013 dollars using the consumer price index before log transforming earnings.

Control Variables: We control for factors that may be associated with both economic resources and marriage, including age and age squared of each partner, race and ethnicity of the female partner, whether partners have a different race and ethnicity, and whether there are any children under 18 present in the household.

Methods

To evaluate our hypotheses, we conduct survival analysis using Cox proportional hazards models. The relative hazard of marriage relative to continuing to cohabit at time *t* is modeled as a function of men's and women's economic resources and a series of control variables.

$$h(t|x_i) = h_0(t)exp\left(\sum_{j=1}^{J} \beta_j X_i\right)$$

These models are flexible in making no assumptions about the functional form of the underlying hazard over time. We use the Efron method to handle ties for events occurring at the same union duration. These models allow us to evaluate how men's and women's economic resources are associated with the relative risk of marriage.

Analytic Strategy

We estimate a series of models to evaluate our key hypotheses about change or stability across time periods in the relationship between economic resources and marriage. First, we estimate separate models by period. This strategy allows time to interact with each of our measures of economic resources in tests of how men's and women's education, employment, and earnings are associated with the risk of marriage within a given period. Second, we estimate models that include period main effects and interactions between period and measures of economic resources. This approach enables us to formally test predictions about *within-gender change over time* in the association between economic resources and marriage by examining interactions between period and gender-specific economic resources. We assess *differential change over time by gender* in the association between economic resources and marriage by conducting F-tests that evaluate whether main effects and interactions for men and women are statistically different. In this way, we assess whether economic resources have become more important for marriage over time, and whose resources have changed.

Preliminary Results

Table 1 shows preliminary results using at least one SIPP panel from each decade: the 1980s (1984 panel), 1990s (1996 panel), and 2000s (2001, 2004, and 2008 panels). Whereas only men's full-time employment and education were positively associated with the risk of marriage in the 1980s, women's full-time employment and education are also positively associated with marriage in the 2000s, pointing to increasing gender symmetry in these characteristics. It also appears that men's earnings – but not women's – have become more important for marriage over time. Indeed, in these models, we find no statistically significant relationship between women's earnings and marriage across decades. These preliminary results provide initial evidence that both men's and women's economic resources have become more important predictors of marriage in more recent periods, although men's earnings remain more important. After we have added the full series of panels from the 1980s and 1990s, we will explore whether and why patterns for earnings may be distinct from full-time employment and education.

Next Steps

We will incorporate the remaining SIPP panels from the 1980s (1985–1989 panels) and 1990s (1990–1993 panels) into our analyses to increase our statistical power for making period comparisons and testing interactions between period and economic resources. As described above, we will also estimate models with interactions to test the statistical significance of gendered changes over time in the link between economic resources and marriage. Finally, in addition to increasing our sample and formalizing tests of our hypotheses, we will expand our analysis to further adjust for potential confounders in the relationship between economic resources and marriage over time. In particular, we will account for changes across decades in the share of cohabiting couples with joint children and step children.

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Table 1: Associations between Men's and Women's Economic Resources and Marriage by Panel Cox Proportional Hazards Models

	(1) 1984–1987	(2) 1996–2000	(3) 2001–2013
Employment			
Male Partner Works Full-Time	1.80**	1.05	1.18*
	(0.38)	(0.18)	(0.08)
Female Partner Works Full-Time	1.03	1.11	1.24**
	(0.19)	(0.15)	(0.08)
Earnings			
Male Partner's Log Earnings	1.00	1.07**	1.05***
	(0.04)	(0.03)	(0.01)
Female Partner's Log Earnings	1.00	1.01	0.99
	(0.03)	(0.02)	(0.01)
Education			
Male Partner's Years of Education	1.07*	1.07**	1.08***
	(0.03)	(0.02)	(0.01)
Female Partner's Years of Education	1.03	1.09***	1.07***
	(0.03)	(0.03)	(0.01)
Couples	1,214	2,068	7,676
Couple-Month Observations	12,386	33,753	128,195

Notes: *** p<0.001, ** p<0.01, * p<0.05 (two-tailed tests). Standard errors in parentheses. All models adjust for race and ethnicity of female partner (non-Hispanic black, Hispanic, non-Hispanic other), whether partners have a different race and ethnicity, both partners' age and age squared, and whether either partner has children under 18 in the household.

Table 2: Descriptive Statistics by SIPP Panel
Couples' First Cohabitation Observation
Mean (Standard Deviation)

	1984–1987	1996–2000	2001–2013
Educational Attainment			
Male Partner's Years of Education	12.5 (3.2)	12.7 (2.5)	12.9 (2.6)
Female Partner's Years of Education	12.5 (2.9)	12.8 (2.7)	13.2 (2.6)
Earnings (Conditional on Working)			
Male Partner's Monthly Earnings	3,437 (2,513)	3,416 (3,281)	3,702 (3,481)
Female Partner's Monthly Earnings	2,262 (1,577)	2,501 (1,981)	2,807 (2,583)
Employment			
Male Partner Works Full-Time	0.70	0.81	0.71
Female Partner Works Full-Time	0.45	0.65	0.57
Fertility			
Either Partner Has Any Children	0.33	0.44	0.44
Race and Ethnicity			
Female Partner Non-Hispanic White	0.83	0.75	0.72
Female Partner Non-Hispanic Black	0.10	0.09	0.10
Female Partner Hispanic	0.05	0.12	0.12
Female Partner Non-Hispanic Other	0.02	0.04	0.06
Male Partner Different Race/Ethnicity	0.08	0.12	0.15
Age			
Male Partner's Age	30.7 (9.6)	33.5 (10.2)	35.0 (11.1)
Female Partner's Age	29.1 (9.6)	31.4 (9.9)	32.9 (10.8)
N Couples	1,214	2,068	7,676

Notes: Earnings are conditional on working. Earnings are adjusted to 2013 dollars using the consumer price index.

Figure 1: Kaplan-Meier Survival Functions by Period