



PROJECT MUSE®

---

Trends in Relative Earnings and Marital Dissolution: Are Wives Who Outearn Their Husbands Still More Likely to Divorce?

Christine R. Schwartz, Pilar Gonalons-Pons

RSF: The Russell Sage Foundation Journal of the Social Sciences,  
Volume 2, Number 4, August 2016, pp. 218-236 (Article)

Published by Russell Sage Foundation



➔ For additional information about this article

<https://muse.jhu.edu/article/630326>



This work is licensed under a Creative Commons Attribution 4.0 International License.

[98.80.143.34] Project MUSE (2024-10-15 14:43 GMT)



# Trends in Relative Earnings and Marital Dissolution: Are Wives Who Outearn Their Husbands Still More Likely to Divorce?

CHRISTINE R. SCHWARTZ AND PILAR GONALONS-PONS

*As women's labor-force participation and earnings have grown, so has the likelihood that wives outearn their husbands. A common concern is that these couples may be at heightened risk of divorce. Yet with the rise of egalitarian marriage, wives' relative earnings may be more weakly associated with divorce than in the past. We examine trends in the association between wives' relative earnings and marital dissolution using data from the 1968–2009 Panel Study of Income Dynamics. We find that wives' relative earnings were positively associated with the risk of divorce among couples married in the late 1960s and 1970s, and that this was especially true for wives who outearned their husbands, but this was no longer the case for couples married in the 1990s. Change was concentrated among middle-earning husbands and those without college degrees, a finding consistent with the economic squeeze of the middle class over this period.*

**Keywords:** divorce, earnings, gender, social change

Women have made large gains in closing the gender pay gap over the past several decades. Although full-time working women earned only 77 percent of what men did in 2012, this figure is up from 61 percent in 1968 (DeNavas-Walt, Proctor, and Smith 2013). As women's earnings have risen, so has the likelihood that wives outearn their husbands. In 2007, 22 percent of wives outearned their husbands versus only 4 percent in 1978 (Fry and Cohn 2010). Marriages in which wives outearn their husband have received special attention among academics and the press given concern that

this arrangement may threaten men's gender identity as breadwinners and thereby increase marital conflict and divorce (Tichenor 1999, 2005; Tierney 2006). These concerns have a long history, and public anxiety about women's economic success flared again recently in connection with a Pew Research Center report showing growing numbers of wives outearning their husbands (Fry and Cohn 2010; Ludden 2010; Roberts 2010). Yet, given that Americans have increasingly embraced egalitarian marriage (Cotter, Hermsen, and Vanneman 2014; Gerson 2010), we might expect that wives' earn-

**Christine R. Schwartz** is professor of sociology at the University of Wisconsin-Madison. **Pilar Gonalons-Pons** is postdoctoral fellow at Goethe University Frankfurt am Main.

This research was carried out using the facilities of the Center for Demography and Ecology at the University of Wisconsin-Madison (R24 HD047873). The collection of data used in this study was partly supported by the National Institutes of Health (R01 HD06909) and the National Science Foundation (1157698). A previous version of this paper was presented at the 2015 Population Association of America in San Diego, CA. We are grateful to Martha Bailey, Tom DiPrete, Kei Nomaguchi, Christopher McKelvey, and the participants of the Russell Sage Foundation conference "Changing Roles and the Status of Women" for helpful comments and advice. Direct correspondence to: Christine R. Schwartz at [cschwartz@ssc.wisc.edu](mailto:cschwartz@ssc.wisc.edu), Department of Sociology, University of Wisconsin-Madison, 1180 Observatory Drive, Madison, WI 53706; and Pilar Gonalons-Pons at [pgonalons@soz.uni-frankfurt.de](mailto:pgonalons@soz.uni-frankfurt.de), School of Social Sciences (FB03), Goethe University Frankfurt am Main, Theodor W. Adorno Platz 6, 60629 Frankfurt am Main, Germany.

ings advantage is more weakly associated with divorce today than in the past.

In many cases, the academic literature on divorce confirms the popular perception that wives who outearn their husbands are more likely to divorce, though the evidence is far from uniform (for a review, see Sayer and Bianchi 2000). A notable limitation of nearly all research on this topic, however, is that it has examined single cohorts of marriages from the relatively distant past or wide cross-sections of marriages. Only two studies to our knowledge have examined changes in the association between wives' economic characteristics and divorce. One focused on the changing relationship between wives' employment and divorce using data through 1993, now more than twenty years old (South 2001). The other examined how the risk of divorce varies by spouses' employment, housework, relative earnings, and other characteristics using data through 2013, but focused on changes among couples marrying before and after 1975 (Killewald, forthcoming). Given the continued changes in wives' labor-force participation and marriage since the mid-1970s, we might expect to see change among couples married in more recent decades. Indeed, previous research on the relationship between spouses' relative education and divorce found that change was relatively slow until the mid-1980s (Schwartz and Han 2014).

This paper provides a detailed description of changes in the association between spouses' relative earnings and marital dissolution across successive decades. We use data from the 1968–2009 Panel Study of Income Dynamics (PSID) to examine change among couples married between 1968 and 2004. In addition to examining change over more finely grained intervals than past research, we provide a closer look at how the risk of divorce varies across the distribution of spouses' relative earnings. For instance, Marianne Bertrand, Emir Kamenica, and Jessica Pan examine differences in whether wives outearn their husbands (2015), but this approach may obscure important variation in the risk of divorce at different points in the relative earnings distribution, as we demonstrate in the next section. In addition, we consider whether changes in the relationship between

spouses' relative earnings and divorce are concentrated among more or less advantaged couples. The subgroup analysis gives us clues about the potential mechanisms behind the changes we observe. Some studies have considered variation in these relationships by socioeconomic status (Brines and Joyner 1999; Rogers 2004), but none have examined whether changes have disproportionately occurred for particular groups. Finally, we consider the extent to which our results are robust to alternative measures of spouses' relative earnings and comment on implications for future research.

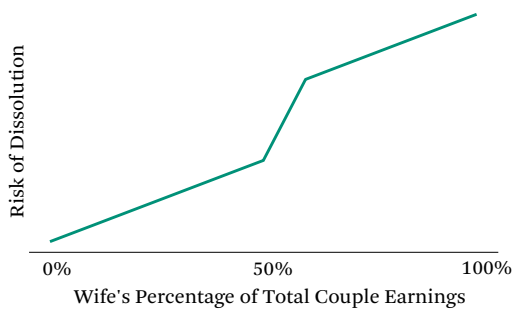
### THEORETICAL PERSPECTIVES

The literature on the relationship between wives' earnings and divorce is considerable. Much of it focuses on the *economic independence hypothesis*, which states that the gains to marriage decline as women become more economically independent, thereby increasing the risk of divorce (Becker 1981; Oppenheimer 1997). Support for the economic independence hypothesis is mixed, with some studies finding that wives' economic contributions destabilize marriage, others finding the opposite, and still others finding no effect or nonlinear effects (for reviews, see Özcan and Breen 2012; Sayer and Bianchi 2000). At least part of the discrepancies between studies are doubtlessly due to the variety of ways that the concept of economic independence has been operationalized and to differences in data sources and methods.

One of the main limitations of the economic independence hypothesis as it was originally formulated is that it is a static theory with no engine of change. For instance, the theory is silent about why an additional dollar of wives' earnings would be more or less associated with divorce today than in the past. Thus, tests of this hypothesis have often centered on whether and under what conditions women's economic independence is associated with divorce, and on distinguishing these effects from other potentially confounding factors such as men's low earnings, total family resources, and reverse causality, rather than on variation over time.

A productive way to move the literature forward is to view change in the relationship be-

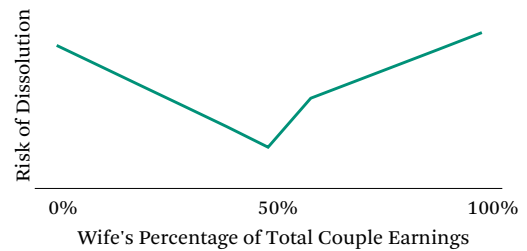
**Figure 1.** Predicted Change in Relationship Between Spouses' Relative Earnings and Marital Dissolution, Specialization with Gender Identity Threat



Source: Authors' compilation.

tween relative earnings and divorce through a *gendered institutional change* lens, which sees heterosexual marriage as an institution centrally governed by gender relations and expectations that change over time. Couples “do” gender through their actions, and gender is an accomplishment that individuals are held accountable for (West and Zimmerman 1987). Marriages in which wives outearn their husbands are hypothesized to have negative marital outcomes because of the non-normative power relations this arrangement symbolizes and the threat to men’s gender identity as breadwinners it poses (Kaukinen 2004; Tichenor 1999, 2005). These non-normative configurations could come about via a number of scenarios; for example, wives could increase their earnings above the 50 percent mark, husbands’ earnings could fall below it, or couples could enter marriage with this arrangement. Regardless of the mechanism, this perspective predicts that couples in which wives outearn their husbands should be at higher risk of divorce given that they violate the conventional marriage contract. Nevertheless, because gender is constructed in performance, individuals may attempt to compensate for non-normative arrangements in one realm by increasing their gender traditionalism in other realms, such as deferring more to their husband’s authority or doing more housework (Ridgeway 2011; Tichenor 2005). This may or may not be enough to offset the increased risk of divorce.

**Figure 2.** Predicted Change in Relationship Between Spouses' Relative Earnings and Marital Dissolution, Asymmetric Egalitarianism



Source: Authors' compilation.

As the gendered expectations associated with heterosexual marriage have changed, so may have the association between outearning one’s husband and marital dissolution. A common theme among family scholars is that the institution of marriage has shifted away from rigid gender specialization toward more flexible, egalitarian partnerships (see, for example, Cherlin 2004; Goldscheider and Waite 1991; Juhn and McCue, this issue; Nock 2001; Oppenheimer 1997). Thus, the gendered institutional change perspective predicts that when specialization dominated American family life, any increase in wives’ share of earnings should have been associated with an increased risk of divorce, and this should have been especially true if men’s gender identity as breadwinners was threatened. This hypothesis is illustrated in figure 1 and can be termed the *specialization with gender identity threat* hypothesis. But as Americans have increasingly embraced egalitarian marriage and as their mate selection preferences have become more gender symmetric (Buss et al. 2001; Gerson 2010), we would expect equality of earnings to be increasingly associated with marital stability. Nevertheless, if it remains non-normative for wives to outearn their husbands, then the risk of divorce should still be elevated under these circumstances. The pattern shown in figure 2 may be termed the *asymmetric egalitarianism* hypothesis given that it predicts that equal earnings promote marital stability, but the risk of divorce is still disproportionately high when wives outearn their husbands.

Given recent research on men’s and wom-

en's preferences for mates from speed and internet dating studies (Fisman et al. 2006; Hitsch, Hortaçsu, and Ariely 2013), it would not be surprising if divorce remains more likely for couples in which wives outearn their husbands. This research shows that young people prefer status-equal partners, but that both men and women tend to avoid pairings in which women have higher status than men. Beyond preferences about dating, experimental evidence shows that within existing romantic relationships, when men are outperformed by their female partners their self-esteem is negatively affected but the reverse is not true for women (Ratcliff and Oishi 2013). Other evidence suggests that the extent to which men are bothered by relationships in which women outearn them has declined over time (Willinger 1993) and that the risk of divorce for wives who have more education than their husbands has declined in turn (Schwartz and Han 2014). Thus, outearning one's husband may still be associated with a greater risk of divorce, but perhaps to a lesser extent than in the past. The smaller increase in the risk of divorce at the 5 percent mark shown in figure 2 compared with figure 1 illustrates this expectation.

The hypotheses outlined in figures 1 and 2 build on Brines and Joyner's (1999) influential research on the "ties that bind" couples together in cohabiting and marital unions. They argue that marriages are stabilized by gendered specialization, whereas cohabiting couples, who tend to hold more egalitarian attitudes and do not enjoy the institutional protections of marriage, are stabilized by equality. They find support for gender specialization in marriage and an asymmetric association between relative earnings and dissolution for cohabitators similar to that shown in figure 2. Extending these hypotheses to variation over time, we might expect that as marriages have become more egalitarian, the relationship between relative earnings and divorce for married couples may look increasingly like the relationship among cohabitators of the past. Given that the marriages and cohabiting unions studied by Brines and Joyner were formed in the mid-1970s to mid-1980s, there is substantial room for change in the patterns they observe. Past studies have extended Brines and Joyner's ar-

gument to other countries and to same-sex couples (Kalmijn, Loeve, and Manting 2007), but not to change over time.

It would also be possible to overlay other hypotheses onto figure 1. For example, the *mutual dependence* hypothesis predicts that couples will be less likely to divorce not only when wives are economically dependent on their husbands but also when husbands are economically dependent on their wives (Heckert, Nowak, and Snyder 1998; Nock 2011; Rogers 2004). If economic dependency reduces the risk of divorce, we would expect to see a downturn in the probability of divorce at both ends of the relative earnings spectrum.

A related hypothesis predicts that the association between spouses' relative earnings and divorce may have increased because of the growing financial need for two paychecks. As men's earnings have stagnated, inequality widened, childcare and education costs soared, and the standard of living deemed acceptable for marriage increased, families may be increasingly dependent on both spouses' earnings regardless of where they fall on the relative earnings distribution (Cherlin 2004; Oppenheimer 1997; Sweeney 2002). Thus, an *economic necessity* hypothesis would predict a downward shift in the risk of divorce by spouses' relative earnings as wives' contributions become more valuable. It also predicts that declines in the association between wives' relative earnings and divorce should be most pronounced for socioeconomic groups that have experienced larger relative economic losses across the decades. We test this idea by examining shifts in the relationship between relative earnings and divorce by husbands' earnings and wife's education. Change concentrated among couples falling behind economically relative to other couples would support the notion that changes in the gendered relations of family life are more likely when they align with economic incentives (England 2011).

We recognize that each of these mechanisms may combine to produce observed patterns. Unlike past research, which often imposes a functional form on the data to adjudicate between mechanisms, we let the data speak for themselves and begin with a flexible specification of spouses' relative earnings. This allows

us to describe observed changes in the association between relative earnings and divorce and subsequently test hypotheses about change based on the relationships we observe.

### ANTICIPATORY EFFECTS OF DIVORCE ON WIVES' EARNINGS

A persistent concern in the earnings-divorce literature is that women may increase their labor supply in anticipation of divorce (Johnson and Skinner 1986; Özcan and Breen 2012; Poortman 2005; Teachman 2010). Thus, any study that does not account for reverse causality risks conflating the effects of wives' relative earnings on divorce with the effects of the *anticipation* of divorce on wives' relative earnings. To address this issue, scholars have often advocated using spouses' economic potential rather than their current earnings (Killewald, forthcoming; Özcan and Breen 2012; Xie et al. 2003). Anticipated or potential earnings outside marriage is conceptually appropriate for testing this hypothesis because it argues that women assess their financial ability to divorce based on what they could earn if they divorced (Dechter 1992; Killewald, forthcoming; Özcan and Breen 2012).

By contrast, a "doing" gender perspective emphasizes actual earnings. The argument that wives may neutralize their gender deviant behavior if they outearn their husbands by compensating for it in other realms suggests that it is not potential earnings that matter most for divorce but actual earnings. Indeed, the evidence is compelling that wives cut back on their labor-force participation to avoid outearning their husbands (Bertrand, Kamenica, and Pan 2015). Nevertheless, it is possible that predicted earnings gets at more than just women's economic independence. For instance, men may not feel threatened by wives who currently outearn them as long as their earnings potential exceeds their wives'. But examining spouses' relative earnings potential may be more useful for assessing a selection argument—that the types of wives who are likely to outearn their husbands (have high earnings potential) are more likely to divorce regardless of their realized earnings. The gendered institutional change perspective predicts that unconventional gender behaviors destabilize

marriage and thus that spouses' relative earnings potential should only be associated with divorce to the extent that it is associated with realized earnings.

To consider these possibilities, we use three measures of spouses' relative earnings: relative earnings in the previous calendar year, relative earnings lagged by four years, and long-run relative earnings potential at the time of marriage. Following the vast majority of previous studies, we begin by using spouses' relative earnings in the calendar year prior to the year in which a marital dissolution (separation or divorce) occurred. To assess reverse causality concerns, we also examine the association using relative earnings with a four-year lag. A four-year lag is appropriate given past research showing that wives began ramping up their labor-force participation about three years prior to divorce (Johnson and Skinner 1986). Additionally, we examine spouses' relative earnings potential to assess the extent to which the relationships we observe may be due to preexisting differences in the likelihood of divorce for wives who are likely to outearn their husbands.

### DATA, MEASURES, AND METHODS

Our main source of data is the 1968–2009 Panel of Income Dynamics. The PSID is a longitudinal survey of American households that began in 1968. All persons living in PSID families in 1968 were interviewed yearly through 1997 and every other year since then. The PSID also follows those born into or adopted by a PSID family even after they moved out of the original household. Those who married into PSID families were followed for as long as they lived with a member of the PSID sample. Our sample is composed of couples married in 1968 or later in which one spouse is the household head and in which wives married between sixteen and forty years of age. The PSID contains couples married before 1968 and thus it would be possible to extend the time series backward, but we do not do this to avoid left censoring marital histories. We exclude the Latino oversample because those respondents were interviewed only from 1992 to 1995 (Gouskova et al. 2008). The representativeness of the PSID is a concern given that it was representative of a cross-section of the population in 1968 and

that the population of the United States has changed substantially since then. Nevertheless, previous studies show that use of weights or controls produces estimates of marriage formation and dissolution consistent with other sources (Lillard and Panis 1998). Thus, all of our analyses are weighted using PSID family weights.

The primary goal of our study is to describe, with a special focus on wives who out-earn their husbands, how the association between spouses' relative earnings and divorce has changed across marriage cohorts. We use proportional hazard models and a flexible specification of relative earnings, beginning with a nine-category dummy variable corresponding to wives' share of couples' earnings (that is, <1 percent, 1 to 19 percent, . . . , 7 to 79 percent, 8 to 1 percent). Nonworking wives are included in our analysis and fall into the lowest relative earnings category. We examine change across marriages formed roughly by decades: 1968 to 1979, 198 to 1989, 199 to 1999, and 2 to 2. We end the time series with marriages formed in the early 2 to avoid truncation at very short marital durations.

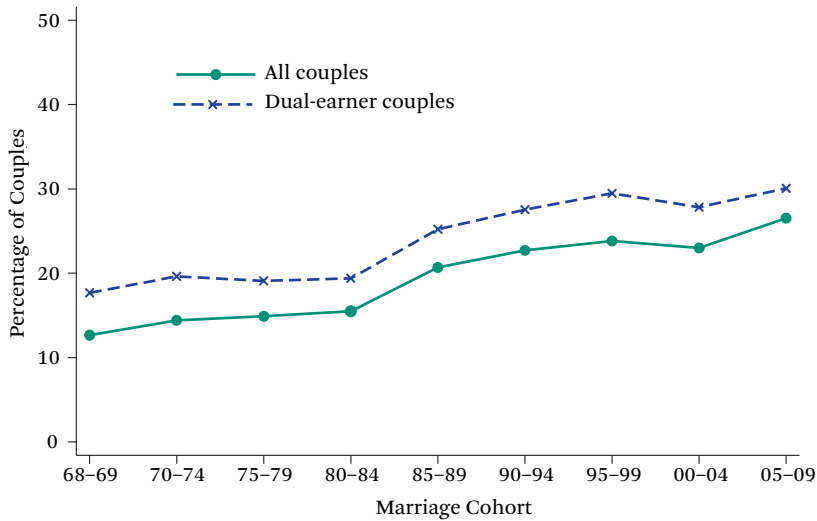
Spouses' relative earnings are defined as the percentage of total couple earnings earned by the wife in the calendar year prior to the interview. For some analyses, we use the same measure, but lagged by four years. Our measure of spouses' relative earnings potential uses long-term predictions of husbands' and wives' earnings at the time of marriage for married full-time, full-year workers (defined as those working more than thirty-four hours per week for at least fifty weeks per year). To calculate earnings potential, we use IPUMS data from the 197 to 2 U.S. decennial censuses and the 2-2 American Community Survey (ACS) (Ruggles et al. 2) to predict individuals' earnings at the time of marriage thirty years into the future or until age sixty-five. Our

method for predicting earnings roughly follows the method outlined by Yu Xie and colleagues (2). First, we predict annual earnings by sex and survey year as a linear function of age, age squared, education, race, and parental status.<sup>1</sup> We use these regressions to predict earnings for all combinations of independent variables, amounting to 8,64 cells per survey year. We linearly interpolate predicted values in years without data (1971 to 1979, 1981 to 1989, and 1991 to 1999) and set predicted earnings for 1968 and 1969 to their 197 values.

Our predicted earnings measure is the sum of full-time, full-year predicted earnings in the first year of marriage and for the subsequent thirty years or until age sixty-five for each profile (8,64 cells) and year. For instance, the long-run thirty-year earnings potential of a twenty-year-old newlywed husband in 197 is the sum of predicted earnings for men with his educational attainment and of the same race-ethnicity in 197 from age twenty to age fifty. This measure assumes that individuals predict future earnings based on the age distributions of earnings they observe in a given year (for example, 197), and that they do not consider how earnings trajectories may change in future years—the fundamental assumption of any synthetic cohort design. We merge spouses' relative earnings potential to the PSID data using the variables in the census and ACS earnings equation. Conceptually, this measure is attractive because it is estimated based on characteristics at the time of marriage and thus avoids issues of reverse causality and endogeneity between marital quality and subsequent changes in spouses' characteristics, for example, couples at higher risk of divorce may be less likely to have children, which in turn would affect contemporaneous measures of predicted earnings.

For each of our three relative earnings variables, we estimate separate Cox proportional hazard models of the risk of marital dissolu-

1. In our prediction equation, education is measured using dummy variables for the following categories: 1 = up to grade four; 2 = grades five, six, seven, or eight; 3 = grade nine; 4 = grade ten; 5 = grade eleven; 6 = grade twelve; 7 = first year of college; 8 = two or three years of college; 9 = four years of college; and 10 = five or more years of college. Race is measured with dummy variables for black and Hispanic. Parental status is measured using a dummy variable identifying individuals without children under eighteen in the household. Age is measured using age and age squared and ranges from sixteen to seventy.

**Figure 3.** Wives Outearning Husbands

Source: Authors' compilation based on 1968–2009 Panel Study of Income Dynamics.

Notes: Data are weighted using family-level weights. The sample includes couples married in 1968 or later in which one spouse is the household head and in which wives married between sixteen and forty years of age. The Latino oversample is excluded.

tion, in which time is defined as years from marriage to separation, divorce, or censoring, whichever occurred first. Censored observations occur when respondents dropped out of the survey, reached the final interview without a marital dissolution, or were widowed. We estimate change in the relationship between spouses' relative earnings and marital dissolution by including interaction terms between our measures of relative earnings and dummy variables for marriage cohort.<sup>2</sup> We include controls for total couple earnings, total couple earnings squared, wives' employment (all in the previous calendar year), husbands' and wives' age at marriage and age at marriage squared, wives' race-ethnicity, both spouses' educational attainment, their relative educational attainment, and marriage parity.<sup>3</sup> These

variables are coded as shown in table 1 and discussed in the following section.

## RESULTS

Figure 3 shows trends in the percentage of couples in which wives outearn their husbands for all couples and for those in which both the husband and wife had nonzero earnings in the previous calendar year (dual-earner couples). It shows that the share of wives who outearn their husbands has grown. Among all couples married in 1968 and 1969, just 13 percent of wives outearned their husbands, versus 27 percent among those married in 2005 through 2009, a more than 100 percent increase. For dual-earner couples, the trend is parallel but levels of outearning one's husband are somewhat higher such that by 2005 through 2009,

2. We also estimate models in which each of the control variables are interacted with dummy variables for marriage cohort. Results from these models are very similar but less precise than those shown here.

3. Control variables for the equation using spouses' relative earnings with a four-year lag are the same except total couple earnings, total couple earnings squared, and employment are measured with a four-year lag rather than in the previous calendar year. The equation that includes spouses' relative earnings potential includes total couple earnings potential and total couple earnings potential squared in addition to total couple earnings, total couple earnings squared, wives' employment (all in the previous calendar year), and demographic controls as included in other models.



31 percent of wives in dual-earner couples out-earned their husbands. Thus, wives who out-earn their husbands are still in the minority, but their ranks are not small and are growing rapidly.

Table 1 compares the characteristics of couples married between 1968 and 1979 (the first marriage cohort in our hazard model analysis) to those married between 2000 and 2004 (the last). First, it shows trends in the extent to which wives outearn their husbands. Focusing on wives in dual-earner couples (both spouses have nonzero annual earnings in the prior calendar year), table 1 shows that wives who out-earn their husbands do not outearn them by large amounts and that this percentage has changed very little across the past four decades, declining from 64 percent of total couple earnings to 63 percent. The decline in the extent to which wives outearn their husbands among all couples is somewhat larger (72 to 68 percent of total couple earnings), which is not surprising given that men's employment declined over this period, but the decline is still not large. By contrast, the increase in wives' contribution for dual-earner couples in which wives do not outearn their husbands is somewhat larger, growing from 26 percent to 32 percent of total couple earnings. Thus, even among couples married in the early 2000s, these results suggest that most wives who earn the same or less than their husbands were not verging on becoming the main breadwinners of their families and that wives in dual-earner couples who were outearning their husbands were generally not doing so by large margins.

Table 1 also shows that, consistent with their greater earnings, wives who outearn their husbands are more advantaged than those who earn the same or less in terms of their individual educational attainment and economic status. Wives who earn more than their husbands are more likely to be college graduates and earn more than their counterparts who do not outearn their husbands. They are also more likely to have more education than their husbands, to marry somewhat older men at slightly older ages, and to be African American.

Despite their individual educational and economic advantages, wives who outearned their husbands in the earlier cohort had lower

total couple earnings than wives who earned the same or less than their husbands. This is consistent with Sanjiv Gupta's (2007) finding that families in which wives outearn their husbands tend to be more economically disadvantaged. However, this situation has reversed in more recent marriage cohorts. Rather than being more economically disadvantaged, couples married in the early 2000s in which wives out-earned their husbands had higher total couple earnings than other couples. This shift occurred because both husbands and wives in marriages in which wives outearned their husbands increased their earnings disproportionately quickly compared with husbands and wives in marriages in which wives did not out-earn their husbands. Looking at the full time series reveals that this reversal occurred beginning among couples married in the late 1990s (not shown). Thus, although Gupta's finding that wives who outearn their husbands tend to have lower total couple earnings than other couples was true for couples married before the mid-1990s, it no longer is.

Another notable finding from table 1 is that total couple earnings for wives who earn the same or less than their husbands barely budged between the 1968 to 1979 and 2000 to 2004 marriage cohorts. By contrast, total couple earnings for those in which wives outearn their husbands increased by more than 31 percent. This finding starkly illustrates the stagnating economic standing of the male breadwinner family and the growing importance of women's earnings to couples' economic well-being.

### Spouses' Earnings in the Previous Calendar Year

Figure 4 shows trends in the relative risk of divorce by spouses' relative earnings in the previous calendar year and marriage cohort estimated from Cox proportional hazard models. More specifically, it shows the hazard of marital dissolution for roughly each decile of spouses' relative earnings compared with the first decile (wives earn 0 to 9 percent of total couple earnings), which is the reference category. We omit the 2000 to 2004 marriage cohort because the pattern for it is quite variable given its smaller sample size and thus obscures the

**Table 1.** Characteristics of Couples

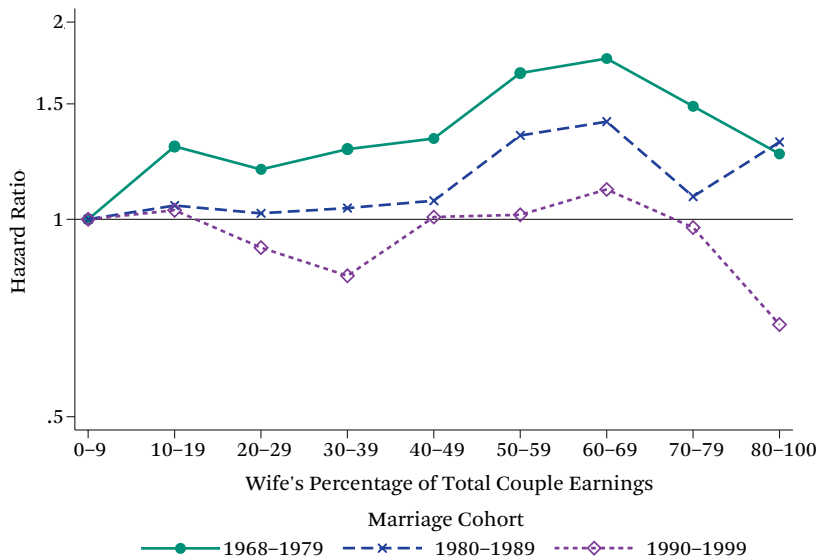
Characteristic	1968 to 1979		2000 to 2004	
	W≤H	W>H	W≤H	W>H
<b>Percentage of couple-years</b>	85.7	14.3	77.0	23.0
<b>Wife's percentage of total couple earnings</b>				
All couples	18.1 (16.9)	72.1 (19.1)	24.8 (18.0)	67.6 (16.8)
Dual-earner couples <sup>a</sup>	25.6 (14.6)	63.6 (12.7)	32.0 (13.7)	62.5 (11.5)
<b>Wife's years of schooling (%)</b>				
Less than twelve	11.5	7.5	5.6	4.0
Twelve	47.0	41.7	28.8	19.3
Thirteen through fifteen	19.5	19.1	34.1	32.0
Sixteen or more	21.9	31.7	31.5	44.6
<b>Husband's years of schooling (%)</b>				
Less than twelve	11.0	12.2	7.1	6.2
Twelve	37.6	34.0	32.0	30.6
Thirteen through fifteen	22.1	23.0	29.9	37.4
Sixteen or more	29.4	30.9	31.0	25.8
<b>Annual earnings (previous calendar year) (thousands of 2014 dollars)</b>				
Wife	17.0 (20.4)	46.2 (31.1)	24.3 (26.0)	59.4 (41.7)
Husband	68.0 (61.1)	23.8 (25.0)	63.5 (54.9)	32.6 (27.3)
Total couple	85.1 (67.7)	70.0 (50.6)	87.8 (68.6)	92.0 (62.3)
Wife had nonzero annual earnings (previous calendar year) (%)	70.8	100.0	77.5	100.0
<b>Spouse's relative education (%)<sup>b</sup></b>				
Husband > wife	29.7	21.9	20.7	12.0
Husband = wife	53.5	55.6	53.3	48.1
Husband < wife	16.8	22.5	25.9	40.0
Wife's age at marriage	22.0 (4.7)	22.8 (5.3)	26.2 (5.7)	27.6 (5.7)
Husband's age at marriage	24.4 (6.2)	25.6 (7.8)	28.4 (6.8)	29.7 (7.4)
Wife African American (%)	6.5	7.6	6.8	12.0
Remarriage (wife) (%)	17.1	16.0	20.0	16.8
Sample size (couple-years)	30,951	5,355	1,818	550

Source: Authors' compilation based on 1968–2009 Panel Study of Income Dynamics.

Notes: W=wife's earnings in previous calendar year; H=husband's earnings in previous calendar year. Data are weighted using family-level weights. The sample includes couples married in 1968 or later in which one spouse is the household head and in which wives married between sixteen and forty years of age. The Latino oversample is excluded.

<sup>a</sup>Sample size differs from the full sample. 1968 to 1979 n = 25,684; 2000 to 2004 n = 1,895.

<sup>b</sup>Based on husband's and wife's years of schooling categories (<twelve, twelve, thirteen through fifteen, sixteen or more).

**Figure 4.** Hazard Ratios of Marital Dissolution

Source: Authors' compilation based on 1968–2009 Panel Study of Income Dynamics.

Notes: Data are weighted using family-level weights. The sample includes couples married in 1968 or later in which one spouse is the household head and in which wives married between sixteen and forty years of age. The Latino oversample is excluded. Change in the association between spouses' relative earnings and marital dissolution is estimated using interaction terms between dummy variables for relative earnings and marriage cohort. Control variables are total couple earnings, total couple earnings squared, a dummy variable indicating wives' nonzero earnings (all in previous calendar year), husbands' and wives' age at marriage and age at marriage squared, wives' race-ethnicity, both spouses' educational attainment, their relative educational attainment, and marriage parity.

pattern of change evident in the first three marriage cohorts. We show results for this cohort in table 2.

Across these three marriage cohorts, the risk of divorce appears to have become successively more weakly associated with wives' relative earnings. Within this general pattern of change are several notable features. First, the association between wives' relative earnings and marital dissolution among couples in which wives earn less than their husbands has declined. For those married between 1968 and 1979, virtually any increase in wives' economic contribution was positively associated with divorce. By contrast, for those marrying in the 1980s, the association between relative earnings and divorce for wives earning less than

half of total couple earnings had disappeared. Interestingly, for those married in the 1990s, the association between wives' relative earnings and divorce reversed for wives earning less than half of total couple earnings. The point estimates indicate that couples in which wives earned 20 to 39 percent of total couple earnings were less likely to divorce than couples in which wives earn very little compared with their husbands. These shifts are consistent with the growing expectation that women contribute economically to the household (Gerson 2011).

It is also evident that the situation differs for couples in which wives earn half or more of total couple earnings. Consistent with the notion that the 50 percent mark represents a

**Table 2.** Hazard Ratios of Marital Dissolution

Relative Earnings Measure and Contrast	Marriage Cohort				Cohort Change <sup>a</sup>
	1968–1979 (1)	1980–1989 (2)	1990–1999 (3)	2000–2004 (4)	
<b>Wife's percentage of total couple earnings (previous calendar year)</b>					
10–49 percent versus 0–9 percent	1.27* (2.17)	1.04 (0.34)	0.93 (0.45)	1.39 (1.13)	1,3 <sup>†</sup>
50–69 percent versus 0–9 percent	1.70** <sup>b</sup> (3.57)	1.36 <sup>tb</sup> (1.92)	1.04 (0.19)	1.05 (0.13)	1,3*
≥ 70 percent versus 0–9 percent	1.31 (1.46)	1.27 (1.21)	0.75 (1.17)	0.86 (0.32)	1,3 <sup>†</sup>
<b>Wife's percentage of total couple earnings (four-year lag)<sup>c</sup></b>					
10–49 percent versus 0–9 percent	0.90 (0.82)	1.03 (0.18)	0.91 (0.41)	—	
50–69 percent versus 0–9 percent	0.99 (0.05)	1.23 (0.93)	0.82 (0.60)	—	
≥ 70 percent versus 0–9 percent	1.26 (0.25)	1.04 (0.14)	0.59 (1.54)	—	1,3 <sup>†</sup>
<b>Wife's percentage of total couple earnings potential</b>					
≥ 50 percent versus < 50 percent	1.05 (0.32)	0.98 (0.12)	0.72* (2.10)	0.58 <sup>†</sup> (1.84)	1,3 <sup>†</sup> 1,4 <sup>†</sup>

Sources: Authors' compilation based on 1968–2009 Panel Study of Income Dynamics and 1970–2000 U.S. decennial census and 2001–2009 American Community Survey (Ruggles et al. 2010).

Notes: Hazard ratios are given with  $|z|$  statistics in parentheses. Data are weighted using family-level weights. The sample includes couples married in 1968 or later in which one spouse is the household head and in which wives married between sixteen and forty years of age. The Latino oversample is excluded. Change in the association between spouses' relative earnings and marital dissolution is estimated using interaction terms between dummy variables for relative earnings and marriage cohort. Control variables are total couple earnings, total couple earnings squared, a dummy variable indicating wives' nonzero earnings (all in previous calendar year), husbands' and wives' age at marriage and age at marriage squared, wives' race-ethnicity, both spouses' educational attainment, their relative educational attainment, and marriage parity. Variables are coded as shown in table 1. The equation using spouses' relative earnings with a four-year lag is the same except total couple earnings, total couple earnings squared, and wives' nonzero earnings are measured with a four-year lag. The equation that includes spouses' relative earnings potential includes total couple earnings potential and total couple earnings potential squared in addition to total couple earnings, total couple earnings squared, a dummy variable for wives' nonzero earnings (all in previous calendar year), and demographic controls as included in other models.

<sup>a</sup>Cohort pairs are shown when two-tailed z-tests for differences between cohort 1 and subsequent cohorts are significant (<sup>†</sup> $p < 0.10$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ).

<sup>b</sup>Two-tailed z-tests for the hypothesis of no difference between wives who earn between 50 and 69 percent versus 10 to 49 percent of total couple earnings are significant at  $p < 0.05$ .

<sup>c</sup>Couples married between 2000 and 2004 are not included in the four-year lagged earnings equation due to the short follow-up time for these couples using this measure.

Two-tailed z-tests where <sup>†</sup> $p < 0.10$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ .

threat point to the conventional breadwinner-homemaker marriage contract, the risk of divorce increases at 5% percent, at least for the first two marriage cohorts.<sup>4</sup> As was true for couples in which wives earn less than half of total earnings, the relative risk of divorce declines across each successive marriage cohort.

Results from figure 4 support the notion of mutual dependency. That is, the risk of divorce is lower when husbands depend economically on their wives as well as vice versa. Although the results are not uniform, the risk of divorce declines somewhat when wives contribute 7% percent or more of total earnings. These results are similar to those using earlier data (Heckert, Nowak, and Snyder 1998; Rogers 2004). It may be that disability or temporary unemployment spells are partially responsible for these patterns (Charles and Stephens 2004; Doiron and Mendolia 2012).

Table 2 tests the significance of the descriptive trends shown in figure 4. It confirms that for the early marriage cohort wives who earned between 1% and 49 percent of total couple earnings were at higher risk of divorce than those earning between 0% and 9 percent. The decline in this association between the 1968 to 1979 and 1990 to 1999 cohorts is marginally statistically significant ( $p = 0.059$ ). Turning to wives who earn between 5% and 69 percent of total couple earnings, the relative risk of divorce is very high in the earliest cohort (7% percent higher than for couples in the 0% to 9 percent range) and significantly higher than for wives who earn 1% to 49 percent of total couple earnings ( $p = 0.021$ ). The risk for this group declined across cohorts, however, and the magnitude of this change was statistically significant between 1968 to 1979 and 1990 to 1999 ( $p = 0.032$ ). Finally, the risk of divorce for couples in which wives earn 7% percent or more of total earnings is elevated among cohorts married in the late 1960s through the 1980s but is lower than the risk among those earning 5% to 69 percent (though these differences are not statistically significant). The large drop in the relative risk

of divorce for wives earning 7% percent or more of total couple earnings between the 1968 to 1979 and 1990 to 1999 marriage cohorts is marginally significant ( $p = 0.054$ ).

Thus far, our results are consistent with a shift away from the breadwinner-homemaker model of marriage to a more egalitarian form, but are these results consistent across the socioeconomic spectrum? Given that economic incentives for two paychecks have grown, we might expect to see changes concentrated among couples who have experienced especially challenging economic times. Table 3 tests this idea by showing changes in the risk of dissolution by husband's earnings tercile and wife's education. Because these analyses involve three-way interactions between spouses' relative earnings, marriage cohort, and husband's earnings tercile or wife's education, we collapse across the first two and last two marriage cohorts due to sample size constraints. The 1990s are a natural cut point for the comparison given that many of associations found in earlier cohorts had disappeared by then. Also because of small sample sizes, we do not examine relative earnings separately for wives earning 5% to 69 and 7% percent of total couple earnings, but instead collapse these into a single indicator variable for 5% percent or more.

The results shown in table 3 are consistent with the economic necessity hypothesis. First, they show that wives' relative earnings among couples in which husbands are in the bottom third of the earnings distribution are not positively associated with marital dissolution for either cohort. Thus, for couples in which wives' earnings are the most economically necessary, we see no negative association with marital stability across the entire period. These findings hold when we exclude men with zero annual earnings (not shown), which demonstrates that the results are not driven by the economic dependency of zero-earner husbands. By contrast, wives' relative earnings were strongly associated with the risk of divorce for middle-

4. We experimented with a slightly different categorization of relative earnings corresponding more closely to the notion of outearning one's husband (0 to 10 percent, 11 to 20 percent, . . . 51 to 60 percent, . . .) but the risk of divorce appears to rise at 50 percent rather than at 51 percent. This is obscured when those earning 50 percent are categorized into a 41 to 50 percent group.

**Table 3.** Hazard Ratios of Marital Dissolution by Husband's Earnings and Wife's Education

Wife's Percentage of Total Couple Earnings Contrast (Previous Calendar Year)	Marriage Cohort		Cohort Change <sup>a</sup>
	1968–1989	1990–2004	
<b>By husband's earnings tercile</b>			
Bottom third			
10–49 percent versus 0–9 percent	0.77 <sup>†</sup> (1.87)	0.85 (0.77)	
≥ 50 versus 0–9 percent	1.06 <sup>b</sup> (0.43)	0.67 <sup>†</sup> (1.83)	*
Middle third			
10–49 percent versus 0–9 percent	1.39* (2.43)	1.02 (0.08)	
≥ 50 versus 0–9 percent	1.82** (3.07)	0.73 (1.02)	**
Top third			
10–49 percent versus 0–9 percent	1.28 <sup>†</sup> (1.83)	1.04 (0.13)	
≥ 50 versus 0–9 percent	1.05 (0.14)	1.39 (0.69)	
<b>By wife's education</b>			
High school or less			
10–49 percent versus 0–9 percent	1.08 (0.72)	1.00 (0.00)	
≥ 50 versus 0–9 percent	1.43** <sup>b</sup> (2.85)	0.96 (0.20)	†
Some college			
10–49 percent versus 0–9 percent	1.29 (1.55)	0.94 (0.28)	
≥ 50 versus 0–9 percent	1.39 (1.64)	0.78 (0.88)	†
College or more			
10–49 percent versus 0–9 percent	1.39 (1.33)	1.67 (1.15)	
≥ 50 versus 0–9 percent	1.73* (2.13)	1.75 (1.19)	

Source: Authors' compilation based on 1968–2009 Panel Study of Income Dynamics.

Notes: Hazard ratios are given with |z| statistics in parentheses. Data are weighted using family-level weights. The sample includes couples married in 1968 or later in which one spouse is the household head and in which wives married between sixteen and forty years of age. The Latino oversample is excluded. Changes in the association between spouses' relative earnings and marital dissolution by husband's earnings tercile and wife's education are estimated using three-way interaction terms between dummy variables for relative earnings, marriage cohort, and husband's earnings tercile or wife's education. Control variables are total couple earnings, total couple earnings squared, a dummy variable indicating wives' nonzero earnings (all in previous calendar year), husbands' and wives' age at marriage and age at marriage squared, wives' race-ethnicity, both spouses' educational attainment, their relative educational attainment, and marriage parity. Variables are coded as shown in table 1.

<sup>a</sup>Cohort pairs are shown when two-tailed z-tests for differences between cohort 1 and subsequent cohorts are significant († $p < 0.10$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ).

<sup>b</sup>Two-tailed z-tests for the hypothesis of no difference between wives who earn between 50 and 69 percent versus 10 to 49 percent of total couple earnings are significant at  $p < 0.05$ .

Two-tailed z-tests where † $p < 0.10$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ .

earning husbands in the early marriage cohort, but not for couples married more recently. Evidence of change is weaker for couples in which husbands are in the top third of the earnings distribution, especially for wives who outearn their husbands. Thus, much of the change in the association between relative earnings and divorce shown in the full sample is the result of change among couples with middle-earning husbands.

The results by wife's education are similar. They show that changes in the association between spouses' relative earnings and divorce were concentrated among wives with some college or less education and appear to be more persistent for wives with a college degree. Patterns by husbands' education are very similar to those by wives' education (not shown). Thus, change in these relationships was concentrated among those without college degrees, who have increasingly fallen behind on indicators of economic well-being since the 1970s (Autor 2014).<sup>5</sup>

### Lagged Spouses' Relative Earnings

One way of addressing the concern that wives increase their earnings in anticipation of divorce is to examine trends using a four-year lagged measure of spouses' relative earnings. We do not include the most recent marriage cohort in these models given the short follow-up when implementing the four-year lag. Table 2 shows that the relationship between relative earnings and divorce is much weaker using the four-year lagged measure than when using earnings in the previous calendar year, a pattern consistent with research focusing on the association between wives' employment and divorce (Killewald, forthcoming). The increased risk of divorce for those earning from 1% to 49 and from 5% to 69 percent of total couple earn-

ings evident in the previous results is wiped out. The only hint of a relationship that remains is an elevated risk of divorce for couples in which wives earn 7% or more of total couple earnings for the earliest cohort, but even this is not statistically significant.<sup>6</sup>

What implications do these findings have for our estimates using earnings in the previous calendar year? The first interpretation of the four-year lagged results is that the associations using earnings from the previous year are the result of the anticipatory effects of divorce on women's labor-force participation. For this to explain the declining association between relative earnings and divorce across marriage cohorts, it would also need to be the case that the extent to which women increase their labor-force participation in anticipation of divorce has declined across cohorts. This scenario is not implausible given that wives work more today than in the past and thus perhaps do not need to increase their labor-force participation in anticipation of divorce as much as they once did (Sen 2000). It is less plausible that reverse causality explains the uptick in the risk of divorce at the 5% percent mark shown in figure 4. For reverse causality to explain this increase, one would need to believe that women specifically target earning more than their husbands before they are willing to separate, or that women who are likely to outearn their husbands disproportionately increase their labor-force participation prior to divorce. This is not something that scholars of the anticipatory effects of divorce have generally assumed. Instead, scholars have operationalized the anticipation hypothesis as occurring uniformly across the income spectrum (Johnson and Skinner 1986; Poortman 2005).

Second, it is possible that outearning one's husband has mainly short-term impacts. Given

5. Comparable results by race show that the association between wives' relative earnings and divorce was similar for black and white wives married between 1968 and 1989, but that declines in the association have been concentrated among white wives. It is unclear whether an increased economic need for two paychecks among white couples can explain this difference because, if anything, median incomes among black households lagged behind white households over this period (DeNavas-Walt and Proctor 2014). Explanations for differences in trends by race deserve further exploration, but this is outside the scope of this article.

6. Results using a two-year lag are similar to those using earnings in the previous year and show evidence of a decline in the association between spouses' relative earnings and divorce across cohorts, but like the four-year lag, the associations between wives' relative earnings and divorce are generally weaker.

that outearning one's husband is often transitory (Winkler, McBride, and Andrews 2005), a wife may outearn her husband in one year, but her doing so may not matter for divorce four years later if she is no longer outearning him. Even if a wife's higher earnings are permanent, that she outearns her husband may only matter in the short term if husbands and wives either split up or are able to renegotiate the marital contract in a year or two after the earnings shift. Future studies should use exogenous variation in men's or women's earnings to examine the extent to which spouses' relative earnings have short-term, long-term, or no effects on marital dissolution. The bottom line for the current study is that the four-year lagged measures of earnings show no evidence of an association between relative earnings and divorce for any of the marriage cohorts we examine. Nevertheless, there are also good reasons to believe that this measure may not be ideal for capturing the effects of spouses' relative earnings on divorce.

### Spouses' Relative Earnings Potential at Marriage

Table 2 also shows cohort trends in the association between spouses' relative earnings potential measured at the time of marriage. The main purpose of this analysis is to estimate the extent to which a particular kind of selection may explain our results—that is, wives who are likely to outearn their husbands could be more divorce prone going into marriage. It may be that the correlation between their earnings potential and their realized earnings explains the associations we observe using earnings in the previous year. To test this, we estimate a model for spouses' relative earnings potential similar to previous models but add the previous year earnings measures (dummy variables for deciles of spouses' relative earnings, total couple earnings, total couple earnings squared, and wives' nonzero earnings) as control variables. Because few wives' full-time, full-year earnings potential exceeds their husbands' and because few wives' full-time, full-year earnings potential is only a small fraction of their husbands' (2 to 20 percent), we present the results with less detail here than for the other measures, showing only the contrast between wives earn-

ing half or more of total couple earnings potential and those earning less than half.

For the earliest cohorts, as table 2 shows, the positive association between spouses' relative earnings and divorce evident using the previous year relative earnings variable has disappeared. Interestingly, we do see some evidence that wives with the same or higher earnings potential than their husbands are increasingly stable compared with those whose earnings potential is lower. This shift is consistent with the growing economic advantage of couples in which wives outearn their husbands. Although in this model we control for total couple earnings, total couple earnings squared, and both couples' educational attainment (in addition to other factors), it is possible that these couples are also becoming more advantaged in ways we have not captured. Regardless, these results are inconsistent with a selection story in which women who are the most likely to outearn their husbands at the outset of their marriages are more divorce prone (see also Weiss and Willis 1997). If anything, these women are becoming less divorce prone in recent marriage cohorts.

### DISCUSSION

Our results show that if there ever was a positive association between outearning one's husband and marital dissolution, it has diminished across cohorts and is now small and statistically insignificant. Among couples married in the late 1960s and 1970s, virtually any increase in wives' relative earnings was associated with an increased risk of divorce, especially among wives who outearned their husbands. But the association between spouses' relative earnings and divorce has declined markedly. Among couples married in the 1990s, increases in wives' relative earnings were no longer associated with an increased risk of divorce and the risk of divorce for wives who outearned their husbands was not significantly different from that of other wives. These findings are consistent with changes in marriage as a gendered institution. When the breadwinner-homemaker model of marriage dominated American family life, deviations from this ideal were associated with a heightened risk of divorce, especially for wives who outearned their



husbands. As Americans have increasingly embraced egalitarian marriage and as flexibility about the breadwinner role has grown, these associations have weakened and become statistically insignificant.

But change has not been uniform across all groups. The biggest changes have occurred among middle-earning husbands and those without baccalaureates, coinciding with the economic squeeze of the middle and working classes over this period. Beginning in the late 1970s, inequality in the United States grew sharply. College graduates and top-earners fared substantially better than the rest of the nation. Middle- and working-class men's stagnating incomes combined with rising education, childcare, and housing costs have substantially increased the economic incentive for two paychecks (Sweeney 2002). Thus, the economic squeeze of the middle and working classes over this period may have been an incentive to renegotiate the marital bargain toward greater flexibility about the breadwinner role. Also consistent with the argument that changes in gendered relationships are most pronounced when they align with economic incentives (England 2010) is the relative lack of change among more advantaged couples. Although our estimates for these couples are less precise, we find little evidence of a decline in the negative association between outearning one's husband and marital stability among college graduates and those with high-earning husbands. Future research should test whether these patterns hold using data from other sources.

One explanation for our subgroup findings is that wives' relative earnings are more threatening to the male breadwinner identity when their employment is seen as more of a choice than a necessity (Usdansky 2011). Another explanation points to the structural constraints of professional versus working-class occupations. Outearning one's husband may be more disruptive of marital life among professionals because of the time pressures it creates. Many professional occupations require long hours, and workers in these jobs are not easy substitutes for one another (Goldin 2014). When professional husbands work long hours, it is likely that their wives must also work long hours to

outearn them. From a household perspective, the expansion of paid work hours for both partners squeezes the time for domestic pursuits ever smaller, resulting in a time bind that is especially pronounced for those with the most prestigious occupations (Jacobs and Gerson 2001). Indeed, when husbands hold jobs with long inflexible hours, their wives are more likely to drop out of the labor force, thus converting formerly dual-earner households to breadwinner-homemaker ones (Cha 2010). By contrast, working-class families are more likely to be employed in jobs with nonstandard schedules or hold part-time jobs, which allow them to alternate shifts, sharing both the economic provider and childcare roles (Deutsch 1999; Shows and Gerstel 2009).

Variation in beliefs about parenthood may also reinforce class differences in work-family life. Highly educated mothers are under significant pressure to conform to an "intensive mothering" ideal, which requires constant availability and huge energy investments in the management of children's daily lives (Hays 1998). By contrast, working-class parents are more likely to subscribe to a philosophy of "natural growth," in which children's leisure activities are more informal and less adult-directed (Lareau 2003). Thus, differences in the economic incentives, employment conditions, and cultural ideals surrounding parenthood may make it especially difficult for the wives of professional men to hold full-time jobs, jobs that would increase their likelihood of outearning their husbands (Cha 2010; Usdansky 2011).

Although our results are consistent with the idea that spouses' relative earnings are less consequential for marriage outcomes today than in the past (albeit more so for some than others), it is possible that they reflect changes in how women adjust their earnings in anticipation of divorce rather than changes in the effects of relative earnings on divorce. To address this issue, we include additional measures of spouses' relative earnings: lagged spouses' relative earnings and spouses' relative earnings potential. These sensitivity tests suggest that our findings could be the result of changes in the extent to which women anticipate divorce by increasing their earnings but could also indicate that the effects of outearn-

ing one's husband are short lived and that couples either split up or satisfactorily renegotiate the marriage contract relatively quickly. Future research should investigate these possibilities by using exogenous variation to identify causal effects or by examining the extent to which the effects of changes in spouses' relative earnings on divorce are concentrated in the short term.

Even if our findings are entirely due to a reduction in wives' anticipation of divorce with increased labor force participation, our results still point to a major shift away from the breadwinner-homemaker model of marriage and the growing prevalence of a relatively new form of marriage—the dual-earner couple (Ruggles 2014; Stanfors and Goldscheider 2015). Change has not been uniform across social groups and more work should be done to investigate the reasons behind these differences. Overall, though, our results point to substantial shifts away from rigid gender specialization to increased egalitarianism and flexibility about husbands' and wives' economic roles in marriage.

## REFERENCES

- Autor, David H. 2014. "Skills, Education, and the Rise of Earnings Inequality Among the 'Other 99 Percent.'" *Science* 344(6186): 843–51.
- Becker, Gary S. 1981. *A Treatise on the Family*. Cambridge, Mass.: Harvard University Press.
- Bertrand, Marianne, Emir Kamenica, and Jessica Pan. 2015. "Gender Identity and Relative Income within Households." *Quarterly Journal of Economics* 130(2): 571–614.
- Brines, Julie, and Kara Joyner. 1999. "The Ties That Bind: Principles of Cohesion in Cohabitation and Marriage." *American Sociological Review* 64(3): 333–55.
- Buss, David M., Todd K. Shackelford, Lee A. Kirkpatrick, and Randy J. Larsen. 2001. "A Half Century of Mate Preferences: The Cultural Evolution of Values." *Journal of Marriage and Family* 63(2): 491–503.
- Cha, Youngjoo. 2010. "Reinforcing Separate Spheres: The Effect of Spousal Overwork on Men's and Women's Employment in Dual-Earner Households." *American Sociological Review* 75(2): 303–29.
- Charles, Kerwin Kofi, and Melvin Stephens. 2004. "Disability, Job Displacement, and Divorce." *Journal of Labor Economics* 22(2): 489–522.
- Cherlin, Andrew J. 2004. "The Deinstitutionalization of American Marriage." *Journal of Marriage and Family* 66(4): 848–61.
- Cotter, David A., Joan M. Hermsen, and Reeve Vanneman. 2014. "Back on Track? The Stall and Rebound in Support for Women's New Roles in Work and Politics, 1977–2012." New York: Council on Contemporary Families.
- Dechter, Aimée R. 1992. "The Effect of Women's Economic Independence on Union Dissolution." *CDE* working paper no. 92–28. Madison: University of Wisconsin–Madison.
- DeNavas-Walt, Carmen, and Bernadette D. Proctor. 2014. "Income and Poverty in the United States: 2013." *Current Population Reports*, series P60, no. 249. Washington: U.S. Government Printing Office for U.S. Census Bureau.
- DeNavas-Walt, Carmen, Bernadette D. Proctor, and Jessica C. Smith. 2013. "Income, Poverty, and Health Insurance Coverage in the United States: 2012." *Current Population Reports*, series P60, no. 245. Washington: U.S. Government Printing Office for U.S. Census Bureau.
- Deutsch, Francine. 1999. *Halving It All: How Equally Shared Parenting Works*. Cambridge, Mass.: Harvard University Press.
- Doiron, Denise, and Silvia Mendolia. 2012. "The Impact of Job Loss on Family Dissolution." *Journal of Population Economics* 25(1): 367–98.
- England, Paula. 2010. "The Gender Revolution: Uneven and Stalled." *Gender & Society* 24(2): 149–66.
- Fisman, Raymond, Sheena S. Iyengar, Emir Kamenica, and Itamar Simonson. 2006. "Gender Differences in Mate Selection: Evidence from a Speed Dating Experiment." *Quarterly Journal of Economics* 121(2): 673–97.
- Fry, Richard, and D'Vera Cohn. 2010. "Women, Men, and the New Economics of Marriage." Washington, D.C.: Pew Research Center. Accessed April 6, 2016. <http://www.pewsocialtrends.org/files/2010/11/new-economics-of-marriage.pdf>.
- Gerson, Kathleen. 2010. *The Unfinished Revolution: How a New Generation Is Reshaping Family, Work, and Gender in America*. Oxford: Oxford University Press.
- Goldin, Claudia. 2014. "A Grand Gender Convergence: Its Last Chapter." *American Economic Review* 104(4): 1091–119.

- Goldscheider, Frances K., and Linda J. Waite. 1991. *New Families, No Families? The Transformation of the American Home*. Berkeley: University of California Press.
- Gouskova, Elena, Steven G. Herringa, Katherine McGonagle, and Robert F. Schoeni. 2008. "Panel Study of Income Dynamics, Revised Longitudinal Weights, 1993–2005." Ann Arbor: University of Michigan.
- Gupta, Sanjiv. 2007. "Autonomy, Dependence, or Display? The Relationship Between Married Women's Earnings and Housework." *Journal of Marriage and the Family* 69(2): 399–417.
- Hays, Sharon. 1998. *The Cultural Contradictions of Motherhood*. New Haven, Conn.: Yale University Press.
- Heckert, D. Alex, Thomas C. Nowak, and Kay A. Snyder. 1998. "The Impact of Husbands' and Wives' Relative Earnings on Marital Disruption." *Journal of Marriage and the Family* 60(3): 690–703.
- Hitsch, Günter J., Ali Hortaçsu, and Dan Ariely. 2010. "Matching and Sorting in Online Dating." *American Economic Review* 100(1): 130–63.
- Jacobs, Jerry A., and Kathleen Gerson. 2001. "Overworked Individuals or Overworked Families? Explaining Trends in Work, Leisure, and Family Time." *Work and Occupations* 28(1): 40–63.
- Johnson, William R. and Jonathan Skinner. 1986. "Labor Supply and Marital Separation." *American Economic Review* 76(3): 455–69.
- Juhn, Chinhui, and Kristin McCue. 2016. "Selection and Specialization in the Evolution of Marriage Earnings Gaps." *RSF* 2(4). doi: 10.7758/RSF.2016.2.4.09.
- Kalmijn, Matthijs, Anneke Loeve, and Dorien Manting. 2007. "Income Dynamics in Couples and the Dissolution of Marriage and Cohabitation." *Demography* 44(1): 159–79.
- Kaukinen, Catherine. 2004. "Status Compatibility, Physical Violence, and Emotional Abuse in Intimate Relationships." *Journal of Marriage and Family* 66(2): 452–71.
- Killewald, Alexandra. Forthcoming. "Money, Work, and Marital Stability: Assessing Change in the Determinants of Divorce." *American Sociological Review*.
- Lareau, Annette. 2003. *Unequal Childhoods: Class, Race, and Family Life*. Berkeley: University of California Press.
- Lillard, Lee A., and Constantijn W. A. Panis. 1998. "Panel Attrition from the Panel Study of Income Dynamics: Household Income, Marital Status, and Mortality." *Journal of Human Resources* 33(2): 437–57.
- Ludden, Jennifer. 2010. "Modern Marriages: The Rise of the Sugar Mama." *National Public Radio: Morning Edition*, January 19. Accessed April 6, 2016. <http://www.npr.org/templates/story/story.php?storyId=122612096>.
- Nock, Steven L. 2001. "The Marriages of Equally Dependent Spouses." *Journal of Family Issues* 22(6): 755–75.
- Oppenheimer, Valerie Kincade. 1997. "Women's Employment and the Gain to Marriage: The Specialization and Trading Model." *Annual Review of Sociology* 23: 431–53.
- Özcan, Berkay, and Richard Breen. 2012. "Marital Instability and Female Labor Supply." *Annual Review of Sociology* 38: 463–81.
- Panel Study of Income Dynamics, public use dataset. 2012. Produced and distributed by the Survey Research Center, Institute for Social Research, University of Michigan. Ann Arbor.
- Poortman, Anne-Rigt. 2005. "Women's Work and Divorce: A Matter of Anticipation? A Research Note." *European Sociological Review* 21(3): 301–9.
- Ratliff, Kate A., and Shigehiro Oishi. 2013. "Gender Differences in Implicit Self-Esteem Following a Romantic Partner's Success or Failure." *Journal of Personality and Social Psychology* 105(4): 688–702.
- Ridgeway, Cecilia L. 2011. *Framed by Gender: How Gender Inequality Persists in the Modern World*. New York: Oxford University Press.
- Roberts, Sam. 2010. "More Men Marrying Wealthier Women." *New York Times*, January 19.
- Rogers, Stacey J. 2004. "Dollars, Dependency, and Divorce: Four Perspectives on the Role of Wives' Income." *Journal of Marriage and Family* 66(1): 59–74.
- Ruggles, Steven. 2014. "Marriage, Family Systems, and Economic Opportunity in the United States Since 1850." *Minnesota Population Center* working paper no. 2014–11. Minneapolis: University of Minnesota. Accessed April 6, 2016. [http://www.hist.umn.edu/~ruggles/Articles/Ruggles\\_Marriage\\_2014.pdf](http://www.hist.umn.edu/~ruggles/Articles/Ruggles_Marriage_2014.pdf).
- Ruggles, Steven, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. 2010. Integrated Public Use Micro-

- data Series: Version 5.0. [Machine-readable database]. Minneapolis: University of Minnesota.
- Sayer, Liana C., and Suzanne M. Bianchi. 2000. "Women's Economic Independence and the Probability of Divorce: A Review and Reexamination." *Journal of Family Issues* 21(7): 906-43.
- Schwartz, Christine R., and Hongyun Han. 2014. "The Reversal of the Gender Gap in Education and Trends in Marital Dissolution." *American Sociological Review* 79(4): 605-29.
- Sen, Bisakha. 2000. "How Important Is Anticipation of Divorce in Married Women's Labor Supply Decisions? An Intercohort Comparison Using NLS Data." *Economics Letters* 67(2): 209-16.
- Shows, Carla, and Naomi Gerstel. 2009. "Fathering, Class, and Gender: A Comparison of Physicians and Emergency Medical Technicians." *Gender & Society* 23(2): 161-87.
- South, Scott J. 2001. "Time-Dependent Effects of Wives' Employment on Marital Dissolution." *American Sociological Review* 66(2): 226-45.
- Stanfors, Maria A., and Frances K. Goldscheider. 2015. "The Forest and the Trees: Industrialization, Demographic Change, and the Ongoing Gender Revolution in the United States and Sweden, 1870-2010." Stockholm Research Reports in Demography 2015: 18. Stockholm: Stockholm University.
- Sweeney, Megan M. 2002. "Two Decades of Family Change: The Shifting Economic Foundations of Marriage." *American Sociological Review* 67(1): 132-47.
- Teachman, Jay D. 2010. "Wives' Economic Resources and Risk of Divorce." *Journal of Family Issues* 31(10): 1305-23.
- Tichenor, Veronica Jaris. 1999. "Status and Income as Gendered Resources: The Case of Marital Power." *Journal of Marriage and the Family* 61(3): 638-50.
- . 2005. "Maintaining Men's Dominance: Negotiating Identity and Power When She Earns More." *Sex Roles* 53(3-4): 191-205.
- Tierney, John. 2006. "Male Pride and Female Prejudice." *New York Times*, January 3. Accessed April 26, 2016. <http://query.nytimes.com/gst/fullpage.html?res=9902EFDF1130F930A35752C0A9609C8B63>.
- Usdansky, Margaret L. 2011. "The Gender-Equality Paradox: Class and Incongruity Between Work-Family Attitudes and Behaviors." *Journal of Family Theory & Review* 3(3): 163-78.
- Weiss, Yoram, and Robert J. Willis. 1997. "Match Quality, New Information, and Marital Dissolution." *Journal of Labor Economics* 15(1): S293-329.
- West, Candace, and Don H. Zimmerman. 1987. "Doing Gender." *Gender & Society* 1(2): 125-51.
- Willinger, Beth. 1993. "Resistance and Change: College Men's Attitudes Toward Family and Work in the 1980s." In *Men, Work, and Family*, edited by Jane C. Hood. Newbury Park, Calif.: Sage Publications.
- Winkler, Anne E., Timothy D. McBride, and Courtney Andrews. 2005. "Wives Who Outearn Their Husbands: A Transitory or Persistent Phenomenon for Couples?" *Demography* 42(3): 523-35.
- Xie, Yu, James M. Raymo, Kimberly Goyette, and Arland Thornton. 2003. "Economic Potential and Entry into Marriage and Cohabitation." *Demography* 40(2): 351-67.