Money, Work, and Marital Stability: Assessing Change in the Gendered Determinants of Divorce

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Abstract

Despite a large literature investigating how spouses' earnings and division of labor relate to their risk of divorce, findings remain mixed and conclusions elusive. Core unresolved questions are (1) whether marital stability is primarily associated with the *economic* gains to marriage or with the *gendered* lens through which spouses' earnings and employment are interpreted and (2) whether the determinants of marital stability have changed over time. Using data from the 1968 to 2013 waves of the Panel Study of Income Dynamics, I consider how spouses' division of labor, their overall financial resources, and a wife's ability to support herself in the event of divorce are associated with the risk of divorce, and how these associations have changed between couples married before and after 1975. Financial considerations—wives' economic independence and total household income—are not predictive of divorce in either cohort. Time use, however, is associated with divorce risk in both cohorts. For marriages formed after 1975, husbands' lack of full-time employment is associated with higher risk of divorce, but neither wives' full-time employment nor wives' share of household labor is associated with divorce risk. Expectations of wives' homemaking may have eroded, but the husband breadwinner norm persists.

Keywords

divorce, family, gender, earnings, working life

Profound social and economic changes have occurred in the U.S. family over the past half century. For couples marrying for the first time in the 1960s, approximately 30 percent divorced within 15 years, and divorce risks are even higher for couples in more recent marriage cohorts (Stevenson and Wolfers 2007). A core unresolved question is how trends in marital stability relate to changing family and economic circumstances. Have wives' greater earnings power and work experience increased divorce by reducing the costs of exiting bad marriages? Are strained household finances associated with heightened risk of divorce? Or do spouses' work and earnings patterns alter marital stability by conveying signals about whether each partner is fulfilling the implicit, symbolic, gendered terms of the marital contract?

Each of these questions expresses a different perspective on the link between work, money, and the risk of divorce. The *economic independence* perspective predicts that marriages will be more likely to dissolve

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when the costs of exiting the marriage are low. The *financial strain* perspective argues that limited financial resources stress marriages and increase the risk of divorce. The *gendered institution* perspective suggests that marriages will be more stable when spouses conform to the gendered expectations of husbands and wives. The financial strain and economic independence perspectives suggest that material circumstances, within married couples and in the event of divorce, respectively, shape marital stability. The gendered institution perspective, by contrast, suggests that money and work have implications for marital stability primarily because of their symbolic content.

Given dramatic changes over the second half of the twentieth century in women's employment, education, household labor time, marriage timing, divorce rates, and gender role attitudes (Bianchi et al. 2012; Fitch and Ruggles 2000; Goldin 2006; Stevenson and Wolfers 2007; Thornton and Young-DeMarco 2001), the circumstances that hold marriages together or pull them apart may have changed substantially during this period. I hypothesize that the effects of financial characteristics—economic independence and financial strain—on divorce risk are likely to remain stable across time. However, I hypothesize that the gendered expectations of spouses have changed across marital cohorts, with the result that behaviors perceived as deviant in earlier cohorts may be normalized in later cohorts. In particular, I predict that the wife homemaker norm has become less important for marital stability, while the husband breadwinner norm has remained strong. Evaluating change across marriage cohorts in the determinants of marital stability recognizes that marriage and its associated expectations for spouses are embedded in broader, evolving gender structures (Risman 2011).

Despite considerable research, empirical support for the various perspectives linking money and work to divorce has been characterized as "inconclusive" (Sayer and Bianchi 2000:910), "contradictory" (Dechter 1992:1), "mixed" (Brines and Joyner 1999:338; Oppenheimer 1997:442; South 2001:226), and "inconsistent" (Ono 1998:675; Sayer et al. 2011:1990), and conclusions regarding these associations as "elusive" (Rogers 2004:59).[1] The difficulty adjudicating among competing perspectives is in part due to the challenge of separately measuring each. Wives' economic independence is often measured with either wives' earnings or their employment, which are also measures of households' financial strain and conformity to a gender-traditional division of labor. I instead construct a measure of wives' economic independence based on the economic well-being of divorced peers, allowing me to distinguish among the competing theories of marital stability.

THEORETICAL FRAMEWORK

Conceptually, divorce occurs when at least one partner believes she will be better off divorced than remaining married; the risk of divorce depends on the gains from marriage (Becker, Landes, and Michael 1977). The *economic independence* perspective hypothesizes that divorce rates increase when partners depend less on marriage financially, allowing spouses to exit unhappy marriages (Ruggles 1997; Sayer et al. 2011; Schoen et al. 2002). Wives are likely to be more economically dependent on their husbands when they have accumulated less work experience, but economic independence also depends on other aspects of women's earnings potential, such as education and occupation, as well as factors such as child support policies or government support to low-income families. Evidence for the economic independence perspective for couples in the United States is mixed, with some scholars finding support (Dechter 1992; Heckert, Nowak, and Snyder 1998; Ruggles 1997; Sayer et al. 2011; Schoen et al. 2002; South 2001; Teachman 2010) and others not (Rogers and DeBoer 2001; Sayer and Bianchi 2000). Although it has received less attention, the economic independence perspective suggests that men's divorce decisions are likewise affected by their expected economic well-being in the event of divorce (noted in Sayer et al. 2011:1987).

A second perspective suggests that the current income of both spouses stabilizes

marriages by reducing *financial strain* (Brines and Joyner 1999; Dechter 1992), for example, by allowing couples to outsource household labor, reduce conflict, and increase leisure time. Through this pathway, wives' income may reduce divorce risk, especially when husbands' earnings are low (Ono 1998). There is some evidence that the risk of divorce is higher for low-income couples (Brines and Joyner 1999; Dechter 1992), but others find no such association (Heckert et al. 1998; Schoen et al. 2002; Tzeng and Mare 1995).

The economic independence perspective is gendered in its implications, because wives depend more on marriage for their financial well-being, on average. Yet neither it nor the financial strain perspective suggests that a gendered interpretation of spouses' earnings, housework, or employment shapes marital stability. In other words, given the economic independence of two spouses and their household income, the preceding perspectives do not suggest that the risk of divorce depends on knowing which value belongs to which spouse.

The *gendered institution* perspective, by contrast, predicts that divorce is more likely when spouses' employment and earnings violate gendered norms of behavior (Sayer et al. 2011). This is a cultural rather than purely economic perspective; it draws on the logic of "doing gender," in which time in paid and unpaid labor does not simply produce a paycheck or clean home, but is a way that individuals produce and enact gender (Berk 1985; West and Zimmerman 1987). The gendered institution perspective is fundamentally distinct from the economic independence and financial strain perspectives, because it theorizes divorce as determined by work and money not because of their financial implications, but because of the symbolic lens through which they are interpreted and, specifically, whether they conform to the gendered expectations of what it means to be a good wife or a good husband.

Of course, what work behaviors or earnings outcomes are considered gender-conforming or gender-deviant is likely to change over time (Risman 2011)—a point I discuss in

more detail in the next section. Thus, there is no single test of the gendered institution perspective, which may take multiple forms. One possibility is that wives' employment is non-normative. Some scholars have found a positive association between wives' employment and the risk of divorce in the United States (Brines and Joyner 1999; South 2001; Spitze and South 1985; Tzeng 1992), but others not (Schoen, Rogers, and Amato 2006), or only for couples in unhappy marriages (Sayer et al. 2011; Schoen et al. 2002).

Prior research on the determinants of divorce disproportionately focuses on the implications of wives' employment and earnings. But gendered expectations of men's labor affect marriages, too. Wage-earning remains highly normative for married men (Nock 1998), and men's employment, earnings, and economic potential are positively associated with marriage formation (Oppenheimer, Kalmijn, and Lim 1997; Sweeney 2002; Xie et al. 2003) and stability (Ono 1998; Ruggles 1997; Sayer et al. 2011; Schoen et al. 2002; Tzeng 1992). Beyond any effects via financial strain, the gendered institution perspective hypothesizes that husbands' unemployment strains marriages by violating the implicit terms of the marital contract (Cherlin 1979).

In the domain of unpaid labor, the doing gender perspective suggests that the performance of housework is part of the production of gender for women, and its avoidance is associated with the production of masculinity. Wives continue to perform the majority of housework and childcare (Bianchi et al. 2012) and to perceive that ultimate responsibility for its completion falls to them (Hochschild 1989; Stone 2007). This suggests that marriages are more stable when wives spend more time in household labor and husbands less. By contrast, Cooke (2006) finds that, in the United States, a larger share of housework done by the husband is associated with increases in marital stability for all but the most nontraditional divisions of unpaid labor.

In summary, I consider three possible manifestations of the gendered institution perspective, with each behavior potentially decreasing

the risk of divorce: wife's nonemployment or less than full-time employment, husband's full-time employment, and wife's share of household labor.

Other scholars sometimes use wives' relative earnings, or whether the wife earns more than her husband, as measures of the gendered institution perspective, with some finding that marriages in which wives earn more than half the income are less stable (Bertrand, Kamenica, and Pan 2015; Heckert et al. 1998; Teachman 2010), but others not (Schoen et al. 2002). One challenge of this approach is that female-breadwinner couples include both dual-earner couples, in which she out-earns him, and couples in which the wife is employed but not the husband. These two types of couples may be very different in financial circumstances and the stability of the wife-breadwinner status. Furthermore, the marital stability of the latter group is affected both by wife-breadwinner status and husband nonemployment. For simplicity, I focus on employment status in the main analyses. Supplementary analyses, discussed following the main results, show no evidence that spouses' relative earnings are associated with the risk of divorce, net of spouses' employment statuses.

Change in Marriage Foundations over Time

Marriage is a social institution, and thus both rates of marital stability and its determinants may vary across time and place. In the United States, over the second half of the twentieth century, women's college completion rates caught and passed those of men, their labor force participation increased dramatically, and the gender earnings gap among full-time workers narrowed (Goldin 2006). At home, wives' average time in unpaid labor declined substantially (Bianchi et al. 2012). Couples married later and were more likely to divorce (Fitch and Ruggles 2000; Stevenson and Wolfers 2007), women's earnings became positively associated with marriage formation (Sweeney 2002), and gender role attitudes became more egalitarian (Thornton and Young-DeMarco 2001).

What are the likely implications of these changes for the associations between the risk of divorce and spouses' labor, income, and economic independence? I do not hypothesize any change in the importance of wives' economic independence or financial strain. Wives' greater labor supply and education among later marriage cohorts may increase their economic independence, but there is no reason to think that the *consequences* of these economic factors have changed.

However, I hypothesize that changes in the social and economic context in which marriages take place have changed the terms of the marital contract, changing the gendered lens through which spouses' labor is interpreted. Risman (2011:19–20) argues that each society's gender structure "shape[s] the social roles women and men are expected to follow, what 'doing' gender means in any given interactional encounter, and how marriage is understood and defined." What it means to "do gender" is therefore context-specific (Cooke 2006). The last half-century was a time of changing gender structures, suggesting that the ways paid and unpaid labor contributions to marriage by husbands and wives are interpreted may have changed. For contemporary U.S. couples, the husband-breadwinner/wife-homemaker household may be neither economically strategic nor preferred (Oppenheimer 1997; Sayer and Bianchi 2000; Sayer et al. 2011). As women's paid work lives come to resemble men's, wives' participation in full-time paid labor may be one way contemporary couples "undo" gender (Risman 2011). For contemporary couples, wives' full-time employment is not rare, is not expected to be inconsistent with gendered norms of marriage, and is not expected to increase the risk of divorce. For earlier marriage cohorts, when wives' employment was less common, it is expected to increase the risk of divorce.

Couples' division of unpaid labor has also changed. In 2009 to 2010, wives' average time in housework was 1.7 times that of husbands, compared to 3.9 times as much in 1975 (Bianchi et al. 2012). I expect that husbands' housework participation, like wives' employment, has become more normative in

recent marriage cohorts. For marriages formed in recent decades, I expect that wives' higher share of housework is not associated with greater marital stability. In earlier cohorts, however, I hypothesize that marriages are more stable when the wife performs a greater share of household labor.

Even in recent marriage cohorts, marriage remains a gendered institution. As Sayer and colleagues (2011) note, the male-breadwinner norm has been more durable than the female-homemaker norm. Focusing on the effects of women's behavior thus risks overlooking the ongoing symbolic value of men's employment for marital stability. Men's economic circumstances remain crucial for marriage formation (Oppenheimer et al. 1997; Sweeney 2002; Xie et al. 2003), and I hypothesize that men's employment similarly remains important for marital stability.

In summary, I expect that the male-breadwinner norm has remained, and the female-homemaker norm has eroded. For recent marriage cohorts, I expect that husbands' full-time employment remains positively associated with marital stability, but wives' full-time employment and responsibility for household labor are not determinants of divorce. For earlier marriage cohorts, I expect that a gender-traditional division of labor, with husbands spending time in paid labor but not unpaid labor, and the reverse for wives, is associated with greater marital stability.

Little research tests how the economic determinants of divorce have changed across marriage cohorts. In a sample of Dutch couples, Poortman and Kalmijn (2002) compare couples married 1943 to 1970 versus 1971 to 1997 and find that wives' employment is destabilizing only in the earlier cohort, and a more equal division of childrearing has become more important for marital stability in recent cohorts. By contrast, the positive association between husbands' employment and marital stability did not decline across cohorts. On the other hand, South (2001), using data on U.S. couples from the Panel Study of Income Dynamics (PSID), finds that wives' employment is *increasingly* positively associated with

marital instability between 1969 and 1992. Schwartz and Gonalons-Pons (forthcoming) find that wives' earnings relative to their husbands', and especially wives out-earning their husbands, are positively associated with divorce for couples marrying in the late 1960s and 1970s, but not for couples marrying in the 1990s. I revisit the question of change across marriage cohorts in the economic and time use determinants of divorce after making several improvements to the analytic approach.

An Empirical Challenge: Measuring Economic Independence

Evaluating the economic independence, financial strain, and gendered institution perspectives depends on developing measures and tests that can distinguish among them. A key obstacle is that economic independence cannot be observed directly. Individuals are more economically independent when their financial well-being depends less on marriage, which means that the gap between their financial well-being in marriage versus in the event of divorce is smaller. However, post-divorce financial well-being is observed only for couples who divorce. Therefore, every attempt to evaluate the economic independence perspective requires some decision about how to approximate the missing value for couples not observed to divorce.

The most common approximation of a wife's economic independence is her current earnings (absolute or relative to her husband's) (Heckert et al. 1998; Rogers 2004; Sayer and Bianchi 2000; Teachman 2010) or employment (Sayer et al. 2011; Schoen et al. 2002; South 2001). These proxies, however, measure within-marriage circumstances rather than the expected costs of divorce—a particularly important limitation given average increases in women's earnings and employment following divorce (Tamborini, Iams, and Reznik 2012).

Furthermore, wives' current employment and earnings *also* measure economic resources and the division of labor within the married household, requiring additional assumptions to distinguish the effects of economic independence

from those of the financial strain or gendered institution perspectives. Some scholars attempt to distinguish between perspectives based on the sign and shape of the association between wives' earnings and their risk of divorce (e.g., Rogers 2004), but there is no consensus about which functional form supports each theoretical perspective. Particular points of debate are whether wives' independence should be measured with relative or absolute earnings and whether equal earnings between spouses indicates mutual dependence or maximum independence (see the discussion in Oppenheimer 1997).

An alternative argument is that, if marital quality moderates the association between wives' earnings or employment and divorce, this supports the economic independence perspective, because under this perspective only bad marriages are at risk of dissolution due to wives' economic resources (Sayer et al. 2011; Schoen et al. 2002). But *any* determinants of divorce should matter more for low-quality marriages, which are closer to the threshold for divorce. Several studies exploit information on which spouse initiated the divorce, arguing that wives' economic independence should particularly encourage wife-initiated divorces (Rogers 2004; Sayer et al. 2011). However, wives' employment might disproportionately increase wife-initiated divorces not because it increases wives' economic independence, but for other reasons, such as because it increases conflict over household labor that disproportionately affects wives. I directly model wives' predicted post-divorce economic well-being, making it possible to distinguish economic independence from other perspectives. Dechter (1992) uses a similar strategy, but evaluates a smaller range of alternative mechanisms.

The first column of Table 1 lists the various theoretical perspectives, and the second column summarizes the claims associated with each. The key measures associated with each theory, shown in the third column, are discussed in detail in the Data section. The fourth column lists my prediction of whether a given association has changed across marriage cohorts.

DATA

I model couples' log odds of divorce using discrete-time hazard models and data from couples in the 1968 to 2013 waves of the Panel Study of Income Dynamics (PSID) (Panel Study of Income Dynamics 2015), which is frequently used to study divorce (Brines and Joyner 1999; Cooke 2006; Dechter 1992; Heckert et al. 1998; Ono 1998; South 2001). In 1968, the PSID sampled approximately 5,000 U.S. households; it has subsequently collected information on members of these households and their descendants annually or biennially. I restrict my sample to different-sex, married, head-wife pairs in the PSID, both spouses age 18 to 55, with neither spouse previously married. Details of the identification of remarried couples, marriage start and end dates, and cohabiting couples are provided in the online supplement (http://asr.sagepub.com/supplemental). I exclude cohabiting and same-sex couples because of insufficient sample size. I exclude remarriages because their stability may follow a different social process. The results of models including remarried couples are shown in the online supplement. Couples missing information on the start or end date of their marriage are dropped from the sample (227 couples, or 2 percent of the sample). The analytic sample includes 6,309 couples, of whom 1,684 are observed to divorce or permanently separate. I apply sample weights, normalized to one in each survey year, to all analyses.

The choice of a dividing line separating "early" and "late" marriage cohorts is of course subject to debate. Goldin (2006) marks the late 1970s as the beginning of "the quiet revolution," when young women began to accurately predict high labor force participation and plan for it, including investments in college education and a career identity. Thus, particularly for evaluating changing associations between wives' employment and the risk of divorce, 1975 is a reasonable dividing line. Separating marriage cohorts in this fashion reflects that change over time in the U.S. family has not happened in a smooth, linear way, but in successive stages.

Table 1. Theoretical Perspectives, Measures, and Hypotheses

Theory	Claim: Marriages Are More Stable When…	Key Independent Variables	Hypothesized Change across Cohorts
Economic independence	…spouses' predicted financial losses from divorce are larger	Difference between couple's current economic well-being and wife's predicted post-divorce economic well-being	No change
Financial strain	… couples have high economic well-being	Couple's current economic well-being	No change
Gendered institution / wife employment	…wives are not employed full-time	Dummy variable for full-time wife employment	Weaken
Gendered institution / husband employment	… husbands are employed full-time	Dummy variable for full-time husband employment	No change
Gendered institution / housework	…wives do a greater share of household labor	Proportion of couple's total housework performed by the wife	Weaken

I allow marriage cohort to moderate all independent variables in the divorce risk model, dividing marriages by whether they occurred prior to 1975. For ease of interpretation, I present separate results for each cohort and indicate whether the difference in associations between the cohorts is statistically significant. Results from models with alternative cutpoints at 1980 and 1985 are shown in the online supplement.

Divorced Women's Economic Well-Being: IPUMS Sample

I estimate ordinary least squares models of economic well-being for divorced and separated women age 18 to 55, using data from the Integrated Public Use Microdata Series (IPUMS), specifically, samples from the 1970 to 2000 decennial censuses and the 2005 to 2009, 2006 to 2010, and 2008 to 2012 five-year files of the American Community Survey (Ruggles et al. 2015). Each sample generates a unique economic well-being equation for divorced and separated women. I then apply the estimated equations to married women in my PSID sample to estimate their expected economic well-being in the next year, were they to divorce, based on their current characteristics (incrementing age of the woman and her children by one). Predicted post-divorce outcomes for PSID wives are linear interpolations of the predicted values based on the equations of the two adjacent IPUMS years.

Because divorce timing is unknown in most of the IPUMS samples, I include all currently divorced and separated women in these models, although my goal is to estimate likely outcomes immediately following divorce. This may lead to biased estimates of women's likely outcomes immediately following divorce, if the well-being of divorced women evolves in the years following divorce in ways not captured by the covariates, or if women who remain divorced rather than remarrying have different economic outcomes, net of covariates. I return to this possibility following the main results.

Post-divorce economic well-being. The outcome in the IPUMS models is the divorced or separated woman's economic well-being, defined as her annual household income from all sources, divided by the square root of the number of family members in the household. Economic well-being is top- and bottom-coded at the 99th and 1st percentiles of the year-specific distribution.

Human capital. Education and age are strongly associated with earnings. I allow both to predict divorced women's economic well-being, using interaction terms to allow different age profiles by education (Heckman, Lochner,

and Todd 2006). Education is specified in five categories: (1) less than a high school degree (less than 12 years of education); (2) a high school degree but no college (exactly 12 years of education); (3) some college but no bachelor's degree (13 to 15 years of education); (4) a bachelor's degree (16 years of education); and (5) some graduate education (more than 16 years of education). Age is included as a quadratic. A dummy variable is also included for whether the woman is currently a student, based on her labor force status.

I also include three-digit 1990 occupation and industry codes for the woman's current main job.[2] These variables are assumed to affect the risk of divorce only through their association with economic independence. If the model of divorced women's economic well-being included only variables also included in the model of the risk of divorce, the economic independence measure would be a linear combination of other covariates, making it perfectly collinear with the other predictors of divorce. As a result, I could not estimate its unique association with the risk of divorce.

Family. To adjust for the negative association between children and women's wages (Budig and England 2001), I include the woman's number of biological, step, or adopted children in the household, separated by whether they are under age 5, both top-coded at four.

Demographic traits. I include the woman's race (Hispanic, non-Hispanic African American, non-Hispanic white, and other non-Hispanic), whether she is foreign-born, region of residence, and whether she has a health condition that limits the type or amount of work she can do.[3] All variables except occupation and industry are interacted with race; even in the large IPUMS samples, some occupation and industry categories are too small for race-specific models.

Risk of Divorce: PSID Sample

Divorce. The outcome is whether a couple's marriage terminates with divorce or separation in the following year. In the biennial period, divorce is allowed in either of the next two years, and an offset in the hazard model adjusts for the difference in exposure time.

Current economic well-being. Financial well-being is defined as total family income in the prior calendar year, divided by the square root of the number of family members in the household.[4]

Predicted financial consequences of divorce. To measure economic dependence, I take the difference between the married couple's current economic well-being and the wife's predicted economic well-being in the next year, were she to divorce, based on the coefficients from the IPUMS models. If not currently employed, I use the wife's most recent occupation and industry to predict her post-divorce economic well-being.

Gendered institution / husband and wife employment. For each spouse, full-time employment (at least 1,500 hours) in the prior calendar year is measured with an indicator variable. For example, I use employment from 1985, reported in survey year 1986, to predict marital dissolution in 1987. The lag in employment measures (which also applies to the current economic well-being measure) is important given prior evidence that wives' employment and income are endogenous to unhappiness in marriage (Rogers 1999; Rogers and DeBoer 2001; Schoen et al. 2006).

Gendered institution / housework. I constructed the share of the couple's housework performed by the wife based on reports of typical weekly hours of housework for each spouse. Because housework hours were not asked in 1968 to 1975 or in 1982, I rely entirely on multiply imputed values for these years. The results of a model estimated only on complete cases are shown in the online supplement.

To reduce the possibility of omitted variable bias, I include a relevant set of control variables. I control for a quadratic in the duration of the marriage in years, accounting for higher marital stability later in marriage

(Brines and Joyner 1999; Heckert et al. 1998; Rogers 2004; Sayer and Bianchi 2000; Sayer et al. 2011; Schoen et al. 2002; Schoen et al. 2006; Smock, Manning, and Gupta 1999; South 2001). Given prior evidence that African American couples experience higher rates of marital disruption (Brines and Joyner 1999; Heckert et al. 1998; Ono 1998; Schoen et al. 2006; Smock et al. 1999; Tzeng and Mare 1995; Tzeng 1992), I control for the wife's race using the same categories as in the IPUMS models.[5] I also include a binary variable for whether the wife is foreign-born, which in the PSID is approximated by where she reports having grown up.

To reflect the stabilizing effect of spouses' education (Cooke 2006; Rogers 2004; Schoen et al. 2002; Schoen et al. 2006; Smock et al. 1999; South 2001; Teachman 2002, 2010; Tzeng and Mare 1995), I include controls for each spouse's educational attainment, using the same categories as in the IPUMS models. I also include a binary variable for whether the wife is currently a student, measured by her labor force status.

Premarital fertility (Teachman 2002; Tzeng and Mare 1995; Tzeng 1992), premarital cohabitation (Schoen et al. 2002; Teachman 2002, 2010), and younger age at marriage (Brines and Joyner 1999; Heckert et al. 1998; Ono 1998; Sayer and Bianchi 2000; Sayer et al. 2011; Schoen et al. 2002; Schoen et al. 2006; Smock et al. 1999; South 2001; Tzeng and Mare 1995; Tzeng 1992) are associated with increased risk of divorce. I include four indicator variables set to one: (1) if either spouse became a parent prior to marriage; (2) if either spouse was under age 21 at marriage; (3) if either spouse was under age 25 at marriage; and (4) if the couple cohabited prior to marriage. Cohabitation is not retrospectively reported, so spouses are considered to have cohabited prior to marriage if they were observed as a cohabiting pair in a survey wave before the year of their marriage. Thus, the measure disproportionately excludes short-term cohabitations and excludes all cohabiting experiences of couples married prior to 1968, when data collection began.

Shared assets, including homeownership (Cooke 2006; Ono 1998; South 2001; Spitze and South 1985) and children (Ono 1998; Schoen et al. 2002; Schoen et al. 2006; Teachman 2010; Tzeng and Mare 1995; Tzeng 1992), are associated with heightened marital stability. I measure homeownership with a dummy variable. I include two variables capturing the number of children related to either spouse in the household, separated by whether they are under age 5, each top-coded at 4.

I account for variation in divorce rates by religion (Teachman 2002, 2010) using three categories: (1) both spouses are Catholic; (2) at least one spouse reports no religion; and (3) all other. I also control for region (Northeast, North Central, South, and West). Observations from couples currently living outside the United States are dropped. For each spouse, I include an indicator variable set to one if in the present year the person has a health limitation that affects the amount or kind of work one can do. I measure the year of marriage with a series of five-year intervals, to allow a flexible, nonlinear association between marriage cohort and the risk of divorce.

As described previously, I exclude the wife's occupation and industry from the model of the risk of divorce, so that the economic independence measure is not perfectly collinear with other variables in the divorce model. However, this is inappropriate if these variables affect divorce risk through processes other than economic independence. To address one possible pathway, I include the percent of the wife's occupation and industry that are female, as a proxy for the availability of alternative partners in the workplace (McKinnish 2007). I calculate the percent female in each occupation and industry using the IPUMS data, projecting forward one year as in the measures of economic independence and linearly interpolating between IPUMS years.

All variables in the model are time-varying, except race, foreign-born status, cohabitation and birth prior to marriage, and year and age at marriage. Race and foreign-born status are

reported in multiple years, so I use the most recent available valid report and attribute this value to all observations from the individual.

To avoid understating the uncertainty in the estimated association between the predicted financial consequences of divorce and the risk of divorce, I calculate standard errors by bootstrapping the IPUMS datasets with 500 replications, generating 500 distinct models of divorced women's economic well-being, each of which is used to generate a unique model of the hazard of divorce in a panel-bootstrapped PSID sample.[6] Standard errors are clustered at the couple level.

All continuous variables are top- and bottom-coded at the 99th and 1st percentiles of the weighted year-specific distributions. Missing data rates are low for most variables, and missing data are imputed. Details of the imputation strategy, which includes multiple imputation and the use of reports from adjacent years, are provided in the online supplement, along with information on the number of observations and couples removed from the sample for various reasons (e.g., age restrictions, no marriage history data, or remarried).

RESULTS

Descriptive statistics for the IPUMS samples and results of the regression models predicting divorced and separated women's economic well-being are shown in the online supplement. Each model explains between 32 and 39 percent of the variation in divorced women's economic well-being. Occupation and industry measures—the variables excluded from the divorce models and used to facilitate statistical identification of the economic independence measure as a distinct predictor—are important contributors to these models: models that include all other predictors, but exclude these, explain only between 22 and 29 percent of the variation in divorced and separated women's economic well-being.

How well do the predicted values match what PSID women who divorce actually experience? For the 1,159 women in the PSID observed through divorce, the correlation

between predicted post-divorce economic well-being and observed economic well-being in the first full year (or, when not available, second year) following divorce is .48. For comparison, wives' own pre-divorce earnings—a common proxy for economic independence—are slightly less strongly correlated with post-divorce outcomes (.46). Thus, predicted post-divorce economic well-being is strongly associated with real variation in women's post-divorce outcomes, although it certainly does not explain all individual-level variation.

The fact that the models do not explain all the individual-level variation in post-divorce economic well-being does not automatically imply that coefficients will be biased toward zero. However, the disruptive effect of economic independence will be underestimated if economic independence is systematically underestimated for women who divorce or systematically overestimated for women who remain married. The median observed and predicted outcomes of women who divorce match fairly closely ($24,282 observed versus $23,433 predicted). Of course, I do not know whether the post-divorce outcomes of women who remain married would have been less than predicted, but previous research finds no evidence for selection bias of this kind (Dechter 1992; Smock et al. 1999).

Table 2 shows descriptive traits of the PSID sample of married couples by marriage cohort. The economic well-being of married couples is similar between cohorts (about $53,000), as is the expected post-divorce well-being of wives (around $30,000). As a result, there is little difference between cohorts in the expected decline in wives' financial well-being following divorce (around $24,000). Likewise, there has been little change in husbands' employment rates: in both cohorts about 90 percent of husbands are employed full-time.

Wives' employment has changed more dramatically. In the earlier cohort, only 34 percent of wives were employed full-time, compared to 48 percent in the later cohort. The average proportion of a couple's housework performed by the wife declined across

Table 2. PSID Sample Means and Proportions (Standard Deviations)

	Married before 1975	Married in 1975 to 2011
Financial Strain		
Economic well-being (family income/sqrt(n)),	$52,443.39	$54,090.21
2013 dollars	($33,719.00)	($41,417.64)
Economic Independence		
Wife's predicted post-divorce well-being, 2013 dollars	$29,195.56	$32,260.01
	($12,710.79)	($15,545.25)
	$N = 24,816$	$N = 30,967$
Wife's economic dependence (current well-being –	$25,030.43	$23,060.83
predicted well-being)	($28,146.26)	($34,423.21)
	$N = 24,816$	$N = 30,967$
Gendered Institution		
Wife employed full-time	.34	.48
Husband employed full-time	.91	.90
Wife's proportion of housework	.81	.72
	(.17)	(.19)
	$N = 20,817$	$N = 32,448$
Controls		
Proportion female in wife's		
Most recent occupation	.73	.68
	(.24)	(.23)
	$N = 25,389$	$N = 31,339$
Most recent industry	.62	.61
	(.20)	(.19)
	$N = 24,865$	$N = 31,088$
Marital duration	19.13	9.91
	(8.75)	(7.45)
Religion		
Other	.67	.62
Both spouses Catholic	.23	.22
At least one is not religious	.10	.16
Race		
Non-Hispanic white	.88	.82
Non-Hispanic black	.06	.07
Hispanic	.05	.09
Other	.01	.02
Foreign-born	.03	.06
Region		
Northeast	.24	.23
North Central	.31	.28
South	.30	.29
West	.15	.21
Owns home	.83	.71
Children under age 5		
Prop. with children under 5	.18	.37
Number among those with children under 5	1.19	1.22
	(.42)	(.44)
Children age 5 to 17		
Prop. with children age 5 to 17	.62	.50
Number among those with children age 5 to 17	1.94	1.76
	(.95)	(.78)

Table 2. *(continued)*

	Married before 1975	Married in 1975 to 2011
Cohabited before marriage	.003	.10
Premarital birth	.02	.11
Married under age 21	.60	.27
Married under age 25	.93	.69
Wife's health limits work	.10	.08
Husband's health limits work	.10	.07
Wife's age	38.88	32.72
	(8.93)	(8.09)
Husband's age	41.09	34.41
	(9.00)	(8.09)
Wife currently enrolled in school	.005	.02
Wife's education		
Less than high school	.18	.10
High school	.49	.32
Some college	.17	.25
College	.12	.23
Graduate school	.05	.10
	N = 32,850	*N* = 33,361
Husband's education		
Less than high school	.20	.11
High school	.34	.32
Some college	.19	.23
College	.17	.23
Graduate school	.10	.11
		N = 33,348
Couples	1,908	4,401
Divorces	381	1,303
Observations	32,853	33,470

Note: Samples include all couples with both spouses in a first marriage, with individual variable summaries restricted to the subsample not multiply imputed on that variable. Sample size matches the number of observations given at the bottom of the table unless otherwise noted. All estimates are weighted using the PSID family weight, normalized to average one in each year.

cohorts, although relatively modestly, from 81 to 72 percent.

Members of the earlier cohort have, on average, higher marital durations, older spouses, and older children. Some of this disparity is likely due to the fact that couples married prior to 1968 are included in the earlier cohort, although they are not observed in the first year of their marriage. I retain these couples in the main analysis to increase statistical power. Because I know the marriage dates of these couples and can control for marital duration, their inclusion will introduce bias only if the proportional odds assumption

is violated—if marital duration moderates the association between the other independent variables and the risk of divorce. I return to consideration of this possibility following the main results.

Table 3 shows results from models predicting couples' log odds of divorce. Results for the pre-1975 marriage cohorts are in the first column, results for the later cohorts are in the second column; statistically significant differences between cohorts in the associations are marked with asterisks next to the variable labels. For comparison, results from a pooled model including all marriage cohorts are

shown in the third column. There is no evidence for either the financial strain or economic independence perspective in either cohort or in the pooled model: coefficients are not statistically significant, and, for financial strain, in the opposite direction from the theoretical prediction.[7] Thus, I do not find support for the gender-symmetric, money-based understandings of marital stability. There is also no evidence for change in the importance of these perspectives over time.

Turning to the gendered institution perspective, I first evaluate the association between wives' full-time employment and the risk of divorce. In the pooled model, wives' full-time employment is associated with an 18 percent increase in the odds of divorce ($e^{.166} = 1.18$), and the association is statistically significant. In the cohort-specific models, estimates are less precise and wives' full-time employment is not statistically significantly associated with the risk of divorce for either cohort. In terms of the point estimates, wives' full-time employment is associated with a 31 percent increase in the odds of divorce in the early cohort, compared to 7 percent in the later cohort. The point estimates are consistent with a decline in the association between wives' employment and divorce risk in more recent cohorts, but the cross-cohort change is not statistically significant.

Next, I evaluate whether husbands' lack of full-time employment is associated with heightened risk of divorce. In the pooled model, couples in which the husband is employed full-time have 21 percent lower odds of divorce than couples in which he is not. In the early cohort, husbands' full-time employment is associated with a 9 percent reduction in the odds of divorce, compared to a reduction of 25 percent in the later cohort. The association is statistically significant in the later but not the earlier cohort, and the change across cohorts is not statistically significant.[8] Consistent with predictions, there is no evidence that the husband employment aspect of the gendered institution perspective has become less important for more recent marriage cohorts. For both husbands and wives, the observed associations between employment and the risk of divorce are net of effects on household income. Thus, the effect of employment can be separated from its financial consequences.

In the domain of unpaid labor, for the earlier cohort, the share of housework done by the wife is negatively and statistically significantly associated with the risk of divorce. This is consistent with the housework component of the gendered institution perspective: a more traditional division of household labor is associated with greater marital stability in the earlier cohort. In the more recent cohort, however, the association is slightly positive and not statistically significant. The estimate in the pooled model is negative but not statistically significant. As predicted, the stabilizing effect of the wife's responsibility for unpaid labor has eroded in the recent cohort, and the change across cohorts is statistically significant.

Supplementary analyses show that the wife's share of housework is less stabilizing when wives are employed full-time, although the variation in the association by employment status is only statistically significant in the later cohort. This suggests that, at least for the later cohort, the effect of wives' housework burden on marital stability may depend on whether it is part of a traditional division of labor between spouses or a "second shift" (Hochschild 1989) by full-time employed wives. More flexible specifications of the division of housework suggest that, even in the later cohort, wives' greater responsibility for household labor is associated with greater marital stability at least up until the point of shared housework responsibility. However, there is suggestive evidence in the later cohort that husbands' contributions to housework at low levels may be stabilizing compared to all housework responsibility falling to wives.

In summary, the pattern of results suggests it is the division of labor, either paid or unpaid, that is associated with the risk of divorce for couples in both cohorts, not financial considerations. In the pooled model, wives' full-time employment is associated

Table 3. Logistic Regression of Marital Dissolution, by Marriage Cohort (PSID)

	1. Married in 1974 or Earlier	2. Married in 1975 or Later	3. Pooled
Financial Strain			
Economic well-being (thousands of $)	.014	.002	.003
	(.009)	(.005)	(.004)
	OR = 1.014	OR = 1.002	OR = 1.003
Economic Independence			
Wife's economic dependence (thousands of $)	−.013	−.001	−.003
	(.010)	(.005)	(.004)
	OR = .987	OR = .999	OR = .997
Gendered Institution			
Full-time employment			
Wife	.267	.069	.166*
	(.153)	(.088)	(.080)
	OR = 1.306	OR = 1.071	OR = 1.181
Husband	−.097	−.293**	−.238*
	(.208)	(.106)	(.094)
	OR = .908	OR = .746	OR = .788
Wife's proportion of housework*	−1.117*	.050	−.244
	(.463)	(.233)	(.224)
	OR = .327	OR = 1.051	OR = .783
Controls			
Marital duration***	.139***	−.044*	−.008
	(.041)	(.022)	(.018)
	OR = 1.149	OR = .957	OR = .992
Marital duration-squared**	−.004***	.000	−.001
	(.001)	(.001)	(.001)
	OR = .996	OR = 1.000	OR = .999
Religion (other omitted)			
Both spouses Catholic	−.157	−.036	−.085
	(.215)	(.124)	(.108)
	OR = .854	OR = .964	OR = .918
At least one spouse is not religious**	.812***	.257*	.395***
	(.176)	(.101)	(.091)
	OR = 2.252	OR = 1.293	OR = 1.485
Wife's race (non-Hispanic white omitted)			
Non-Hispanic black*	−.497	.152	.001
	(.291)	(.123)	(.109)
	OR = .609	OR = 1.164	OR = 1.001
Hispanic	−.666	−.177	−.243
	(.422)	(.179)	(.162)
	OR = .514	OR = .838	OR = .785
Other	−.581	.143	−.024
	(.725)	(.305)	(.266)
	OR = .559	OR = 1.154	OR = .976
Wife is foreign-born	−.275	−.703**	−.477*
	(.543)	(.249)	(.219)
	OR = .759	OR = .495	OR = .620

(continued)

Table 3. *(continued)*

	1. Married in 1974 or Earlier	2. Married in 1975 or Later	3. Pooled
Home ownership	−.061	−.398***	−.328***
	(.172)	(.082)	(.071)
	OR = .941	OR = .672	OR = .720
Number of children			
Under age 5	.200	−.001	.004
	(.123)	(.062)	(.054)
	OR = 1.222	OR = .999	OR = 1.004
Age 5 and older	.091	.152**	.108*
	(.080)	(.053)	(.043)
	OR = 1.095	OR = 1.164	OR = 1.114
Premarital cohabitation*	1.308**	.251*	.331**
	(.413)	(.120)	(.115)
	OR = 3.700	OR = 1.285	OR = 1.392
Premarital birth	.490	.218	.417***
	(.424)	(.117)	(.114)
	OR = 1.633	OR = 1.244	OR = 1.518
At marriage, at least one spouse			
Under age 21	.628***	.297**	.434***
	(.181)	(.096)	(.085)
	OR = 1.874	OR = 1.345	OR = 1.543
Under age 25	.666	.246*	.337***
	(.462)	(.105)	(.100)
	OR = 1.947	OR = 1.279	OR = 1.400
Wife is a student	−.434	.373	.358
	(.975)	(.226)	(.214)
	OR = .648	OR = 1.453	OR = 1.431
Wife's education (high school omitted)			
Less than high school	.191	.153	.113
	(.212)	(.117)	(.104)
	OR = 1.211	OR = 1.165	OR = 1.119
Some college	.174	−.041	.041
	(.200)	(.097)	(.090)
	OR = 1.190	OR = .960	OR = 1.042
College	.091	−.345*	−.216
	(.280)	(.158)	(.143)
	OR = 1.096	OR = .708	OR = .806
Graduate school	−.242	−.514*	−.434*
	(.432)	(.216)	(.190)
	OR = .785	OR = .598	OR = .648
Husband's education (high school omitted)			
Less than high school	−.285	.032	−.093
	(.215)	(.116)	(.102)
	OR = .752	OR = 1.032	OR = .911
Some college	−.000	−.168	−.100
	(.178)	(.108)	(.094)
	OR = 1.000	OR = .845	OR = .905

(continued)

Table 3. *(continued)*

	1. Married in 1974 or Earlier	2. Married in 1975 or Later	3. Pooled
College	−.170	−.559***	−.374**
	(.218)	(.153)	(.121)
	OR = .843	OR = .572	OR = .688
Graduate school	−.100	−.536**	−.252
	(.294)	(.185)	(.154)
	OR = .905	OR = .585	OR = .777
Health limits work			
Wife	.104	.109	.091
	(.242)	(.132)	(.115)
	OR = 1.109	OR = 1.115	OR = 1.096
Husband	.177	.216	.169
	(.223)	(.127)	(.114)
	OR = 1.193	OR = 1.241	OR = 1.184
Proportion female in wife's			
Occupation*	.606	−.300	−.006
	(.328)	(.189)	(.170)
	OR = 1.832	OR = .740	OR = .994
Industry	−.477	.054	−.145
	(.333)	(.210)	(.173)
	OR = .621	OR = 1.055	OR = .865
Region (Northeast omitted)			
North Central	.183	.037	.067
	(.211)	(.126)	(.109)
	OR = 1.200	OR = 1.038	OR = 1.069
South	.531*	.279*	.324**
	(.228)	(.124)	(.111)
	OR = 1.701	OR = 1.321	OR = 1.382
West	.376	.181	.251*
	(.242)	(.133)	(.116)
	OR = 1.456	OR = 1.198	OR = 1.286
Year began first marriage (before 1955 is reference in Models 1 and 3)			
1955 to 1959	.971**		1.057***
	(.320)		(.313)
	OR = 2.641		OR = 2.879
1960 to 1965	1.208***		1.268***
	(.296)		(.292)
	OR = 3.346		OR = 3.554
1965 to 1969	1.211***		1.280***
	(.298)		(.291)
	OR = 3.358		OR = 3.597
1970 to 1974	.834**		.910**
	(.296)		(.289)
	OR = 2.302		OR = 2.484
1975 to 1979 (reference category in Model 2)			1.359***
			(.289)
			OR = 3.894

Table 3. *(continued)*

	1. Married in 1974 or Earlier	2. Married in 1975 or Later	3. Pooled
1980 to 1984		.244*	1.610***
		(.120)	(.286)
		OR = 1.277	OR = 5.003
1985 to 1989		.602***	1.965***
		(.132)	(.293)
		OR = 1.825	OR = 7.136
1990 to 1994		.291*	1.637***
		(.142)	(.308)
		OR = 1.338	OR = 5.138
1995 to 1999		.559***	1.918***
		(.147)	(.301)
		OR = 1.750	OR = 6.804
2000 to 2004		.609***	1.976***
		(.159)	(.316)
		OR = 1.839	OR = 7.213
2005 to 2011		.425*	1.831***
		(.178)	(.321)
		OR = 1.530	OR = 6.241
Constant***	−7.476***	−3.525***	−5.393***
	(.884)	(.393)	(.435)
	OR = .001	OR = .029	OR = .005
Observations	32,853	33,470	66,323

Note: Models are estimated with the PSID family weight, normalized to average one in each year. Standard errors are bootstrapped to account for uncertainty in predicted well-being from the IPUMS models. Significance of change across cohorts is marked next to the variable names.
*$p < .05$; **$p < .01$; ***$p < .001$ (two-tailed tests).

with heightened risk of divorce, and husbands' full-time employment is associated with greater marital stability. Analyses of change across cohorts are somewhat limited by low statistical power. However, the stabilizing association between wives' share of household labor and the risk of divorce has declined significantly across cohorts. By contrast, there is no evidence that the stabilizing role of husbands' full-time employment has diminished. Conclusions about changes in the disruptive effect of wives' full-time employment are more speculative; point estimates are consistent with a decline in the association between wives' full-time work and the risk of divorce, but the cross-cohort change is not statistically significant.

To provide context for the magnitude of these associations, Figure 1 shows the predicted probabilities of divorce, separately for each cohort, by the employment status of each spouse and whether the wife performs 50 or 75 percent of the couple's housework (the distribution of household labor is so skewed that an equal division of housework is the 10th percentile of the wife's proportion of housework). The bars show the predicted probabilities holding all other covariates at their cohort-specific sample means. The differences between cohorts capture both pure cohort effects and the changing composition of married couples across cohorts, including the fact that the earlier cohort disproportionately includes couples of higher marital
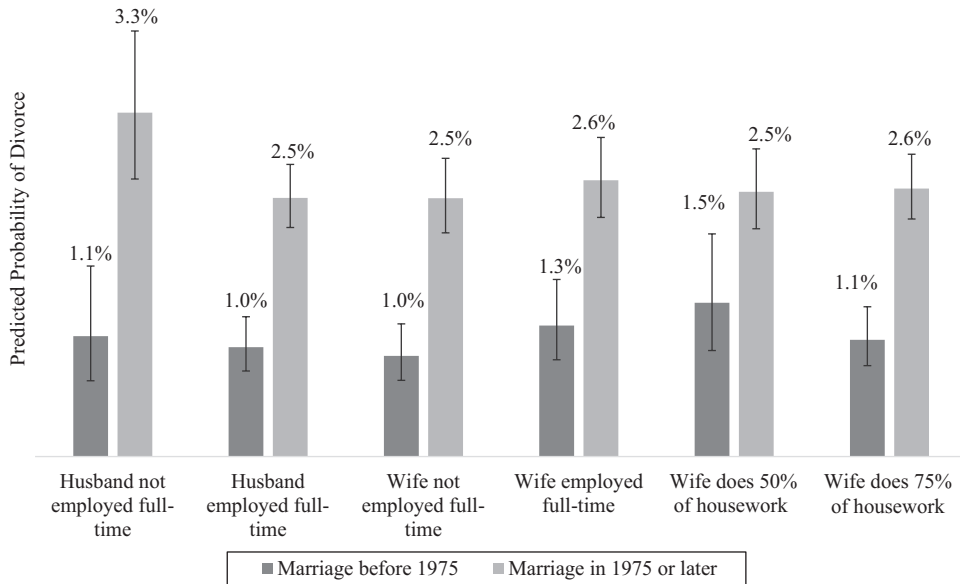
Figure 1. Predicted Probabilities of Divorce in the Next Year
Note: Probabilities are predicted based on the logistic regression coefficients in Table 3 for a respondent with all other covariates set to the cohort-specific means. Error bars are 95% confidence intervals, estimated by calculating the bounds of the confidence interval for the predicted log odds (non-bootstrapped) and then transforming those bounds to predicted probabilities.

durations. The probability of divorce in a given year is systematically higher for the later cohort, regardless of employment status or housework time.

In the early cohort, for an otherwise typical couple with a wife employed full-time, the predicted probability of divorce in the next year is 1.3 percent, compared to 1.0 percent if she is not employed full-time. When wives do only 50 percent of the housework in the early cohort, the predicted probability of divorce in the next year is 1.5 percent, compared to 1.1 percent if she does 75 percent. By contrast, the predicted probability of divorce changes little with the husband's employment status and is 1.0 percent if he is employed full-time and 1.1 percent if he is not.

In the later cohort, an otherwise typical couple with a husband not employed full-time has a 3.3 percent predicted probability of divorce the following year, compared to 2.5 percent if he is employed full-time. Across wife's employment and housework categories, the predicted probability of divorce varies little for this cohort, ranging from 2.5 to 2.6 percent.

The results for control variables are largely as expected. For both cohorts, at least one spouse not identifying with a religion, early marriage, premarital cohabitation, and living in the South are all associated with higher odds of divorce. However, for both non-religious identification and premarital cohabitation, the association has declined statistically significantly across cohorts. For the most recent marriage cohorts, the heightened divorce risk associated with cohabitation may have disappeared entirely (Manning and Cohen 2012), but the cohort range defined here—marriages after 1974—is likely too broad to detect this change.

LIMITATIONS AND ROBUSTNESS OF RESULTS

How Robust Is the Lack of Support for Economic Independence and Financial Strain?

I considered the possibility that the lack of support for the economic independence and financial strain perspectives was due to

specification error or low statistical power. I experimented with more flexible specifications of couples' economic well-being and the wife's economic independence and alternative measures of these concepts. I allowed financial strain to interact with economic independence, considering that wives' economic independence may have different effects depending on household resources (Ono 1998; Sayer and Bianchi 2000). To reduce collinearity, I also re-estimated the models excluding all of the time use and financial variables except the economic independence measure, and then excluding all except the financial strain measure. The models provide no support for the economic independence or financial strain perspective in either cohort, with one exception: in the early cohort, wives' predicted post-divorce economic well-being (rather than the difference between current and predicted post-divorce well-being) was positively and statistically significantly associated with the risk of divorce. (Results for all alternative specifications described in this section are in the online supplement.) I also find that the wife's economic dependence is negatively and statistically significantly associated with the risk of divorce in an early cohort sample restricted to couples married between 1968 and 1974. Because of the large number of models estimated, it is expected that some associations will be statistically significant just by chance. However, it is possible that, in earlier marriage cohorts, wives' ability to support themselves post-divorce facilitated exit from unhappy marriages.

I also considered the possibility that long-term economic prospects, including for remarriage, rather than likely economic outcomes immediately following divorce, may influence divorce decisions. The Census did not collect information on individuals' number of marriages between 1980 and 2008. However, I performed a supplementary analysis using the 1970, 1980, and 2008 to 2012 IPUMS samples to estimate wives' long-term post-divorce economic prospects, including the possibility of remarriage. As in the main models, the economic independence measure is not statistically

significantly associated with risk of divorce, and the coefficient is close to zero.

In addition to the economic independence and financial strain hypotheses, I considered the possibility that spouses' earnings, rather than their employment, might shape the risk of divorce for symbolic reasons, as an additional manifestation of the gendered institution perspective. I found no evidence that husbands' earnings stabilize marriages, net of employment, and no evidence that spouses' relative earnings are associated with the risk of divorce.

It is possible that unmeasured characteristics associated with both the risk of divorce and women's post-divorce economic outcomes have suppressed the association between economic independence and the risk of divorce, but prior research finds little evidence for bias of this kind (Dechter 1992; Smock et al. 1999). An additional limitation, as previously discussed, is that the IPUMS sample includes women who have been divorced for more than one year, whose financial circumstances may not reflect immediate post-divorce outcomes.

In summary, the additional analyses show little support for the economic independence or financial strain perspectives, although it is of course possible that omitted variable bias or measurement error may have artificially suppressed the associations.

How Robust Are the Time Use Findings?

As previously noted, spouses may adjust work behaviors in anticipation of divorce, raising concerns of reverse causality. Anticipatory effects of this kind are less likely to explain the association between husbands' lack of full-time employment and the risk of divorce: there is no reason to expect that husbands anticipating divorce preemptively quit their jobs. However, wives anticipating divorce may increase their paid work hours or decrease household labor. In both cohorts, average paid labor hours for wives not employed full-time are no more than 10 hours per week, leaving substantial room for anticipatory increases.

To reduce the possibility for spurious associations due to anticipation of divorce, I repeated the analysis lagging measures of the key independent variables by an additional two years. For example, in the main models, earnings and employment in 1985 are used to predict divorce in 1987. In the supplemental models, earnings and employment in 1985 are used to predict divorce in 1989. The associations are weaker and not statistically significant in these models. One interpretation is that, in the early cohort, wives' employment and low responsibility for household labor were responses to anticipation of divorce. An alternative explanation is that it does not take three to four years for gender-deviant behaviors to lead to divorce. Using the same example, if a wife became employed full-time in 1985 and the couple divorced in 1987, this couple would contribute to the association between wives' employment and the risk of divorce in the main models, but not in the lagged models: the couple would already have divorced and be censored by the time the outcome is measured in 1989.

I considered that the results for the early cohorts may have been biased by including couples married prior to 1968. As described previously, because marriage dates are known, the inclusion of these couples does not bias results if the proportional odds assumption holds, but it may bias results if the association between the key independent variables and the risk of divorce varies by marital duration, because the early cohort is disproportionately composed of couples of longer marital duration. I performed a supplemental analysis restricting the early cohort sample to couples whose marriages began in 1968 to 1974. As expected, standard errors increase, due to the smaller sample size. The association between wives' full-time employment and the risk of divorce is larger in magnitude than in the model that includes couples married before 1968, but, as in the main sample, it is not statistically significant. For the wife's proportion of housework, the standard error is larger and the coefficient goes in the opposite direction. The instability of the

housework coefficient is likely related to the fact that, as mentioned previously, housework was not reported in the early years of the PSID.

I also tested the robustness of results by experimenting with dividing cohorts at 1980 or 1985 instead of 1975. As expected, the higher risk of divorce for couples with full-time employed wives is muted when the dividing line is set later. The patterns for housework and husband's employment are similar to the main specification. Thus, the late 1970s may have been a particularly important time for changes in perceptions of women's employment, consistent with Goldin's (2006) argument. However, given the sample size, especially of the earlier cohort, it is not possible to determine the exact shape of the trends across cohorts in the determinants of divorce, and the PSID is not well-suited to evaluating changes across earlier marriage cohorts, such as those of the 1960s versus early 1970s. In general, future research is needed to continue to evaluate the possibility of change across cohorts in the determinants of divorce.

Of course, omitted variable bias may be responsible for the observed associations between spouses' paid and unpaid labor and the risk of divorce, or for changes in the associations across cohorts. For example, a positive association between wives' employment and the risk of divorce may be due to a joint association with liberal gender ideology (Sayer and Bianchi 2000), or other unobserved characteristics associated with their risk of divorce.

In summary, it is challenging to assess whether wives' employment caused higher risk of divorce in even the earlier marriage cohorts, because the association may be due to anticipatory effects and the estimates are imprecise. By contrast, the findings in the later cohort, that wives' employment and housework are not associated with the risk of divorce, but divorce is more likely when husbands are not employed full-time, are not threatened by these concerns: the later cohort is not affected by left-censoring, the results are robust across

different choices of cohort cutpoints, and anticipatory effects should, if anything, overstate the destabilizing effect of wives' full-time employment and stabilizing effect of wives' household labor responsibility.

CONCLUSIONS

Previous research on the associations between money, work, and marital stability has attempted to determine whether marital stability is affected by wives' ability to support themselves in the event of divorce, couples' financial resources, the gendered interpretation of spouses' work and earnings, or some combination of all three. By constructing a measure of economic independence distinct from wives' current earnings or employment, my analytic approach allows a more rigorous test of the pathways by which spouses' earnings and employment are associated with their risks of divorce, distinguishing among the economic independence, financial strain, and gendered institution perspectives. At the same time, no single analysis can provide a definitive assessment of the association between spouses' work, economic circumstances, and the risk of divorce. One of the goals of this article is to articulate the considerable analytic challenges to distinguishing among perspectives and ascertaining causal order. By making clear the assumptions required to distinguish among perspectives and to evaluate change across cohorts, I hope to motivate future research that will evaluate these same associations with alternative samples or assumptions.

Using a sample of married couples in the United States observed between 1968 and 2013, I do not find support for the economic independence or financial strain perspectives. These findings suggest that material circumstances, within marriage or outside of it, are not key determinants of marital stability. As a consequence, the results cast doubt on the claim that increases in divorce rates in the mid-twentieth century were due to women's rising economic independence.

However, I find support for the gendered institution perspective. Although prior research on the economic determinants of divorce disproportionately focuses on women's characteristics, the strongest evidence for the gendered institution perspective is that, for marriages begun in 1975 or later, divorce is more likely when husbands are not employed full-time. Consistent with my hypotheses, there is no evidence that this association is weaker for later than earlier marriage cohorts. Just as male breadwinning has remained important for marriage formation (Sweeney 2002), the results here demonstrate its enduring importance for marital stability. The results are consistent with claims that breadwinning remains a central component of the marital contract for husbands (Nock 1998).

It is possible that husbands' less than full-time employment is associated with marital disruption more strongly than wives', not because of gendered interpretations of lack of full-time employment, but because husbands' part-time employment or nonemployment is more likely to be involuntary. Involuntary nonemployment may negatively affect marriages more strongly than voluntary nonemployment, by affecting outcomes like partners' mental health. It is not possible to evaluate this perspective with the current data, because voluntary specialization by men in unpaid labor is rare: in 2012, only about one-fifth of stay-at-home fathers were home primarily to care for the family (Livingston 2014). Future research is needed to explore the experiences of deliberately nontraditional households, although their rarity illustrates the consistency of the male-breadwinner norm.

Assessing the association between wives' employment and the risk of divorce and how this association may have changed across marriage cohorts is challenging. When all marriage cohorts are pooled, wives' full-time employment is positively and statistically significantly associated with the risk of divorce. The magnitude of the association is smaller in more recent cohorts, but the change across cohorts is not statistically significant, nor is the association in either of the cohort-specific models. Furthermore, I cannot rule out the possibility that the positive association

between wives' employment and the risk of divorce is driven by anticipatory effects. The results are consistent with change across cohorts in the gender structure shaping expectations for wives' employment (Risman 2011), but conclusions about cross-cohort change must remain speculative.

For unpaid labor, however, I find that the association between wives' share of housework and the risk of divorce has changed across cohorts; for marriages founded since 1975, wives' household labor responsibility is not linearly associated with greater marital stability. Supplemental models revealed that, at least in the more recent cohort, the association between wives' household labor and the risk of divorce is nonlinear and depends on a wife's employment status. This suggests that, for more recent marriage cohorts, at least some egalitarianism in the division of housework may increase marital stability. More research is needed to investigate the precise shape of the relationship between housework contributions and marital stability for different marriage cohorts.

The determinants of marital stability for modern marriages are thus neither post-gender nor entirely parallel to those of earlier marriages. In both cohorts, marriage remains a gendered institution, embedded in the larger gender structure (Risman 2011), with the division of labor, not financial resources, the primary lens through which this gendered nature is reflected. The differing results by marital cohort suggest that the determinants of marital stability are likely to continue to change in tandem with changes in the broader gender structure. The fact that, in recent cohorts, wives' employment is not associated with the risk of divorce, while husbands' lack of full-time employment remains associated with marital instability, suggests that changes in the gender structure may not have proceeded evenly for men and women; fulfillment of the male-breadwinner role appears to be equally or more strongly associated with marital stability in more recent marriage cohorts. Thus, the results highlight the importance of incorporating men fully into study of the effects of gender norms on family life.

Notes

1. Throughout, I focus on evidence of the determinants of divorce for U.S. couples, when possible, because these determinants may vary across countries, especially when it comes to the gendered interpretation of spouses' paid and unpaid labor time and earnings (Cooke 2006).
2. IPUMS harmonizes occupation and industry codes to the classification system used in the 1990 Census. The PSID classifies jobs according to the 1970 Census classification system in 1968 to 2001 and according to the 2000 Census classification system in 2003 to 2011. To harmonize the occupation codes, I use a crosswalk provided by IPUMS to convert all codes to 1990 codes (https://usa.ipums.org/usa/volii/occ_ind.shtml). No such crosswalk exists for industry codes, so I downloaded IPUMS data from the 1970 and 2000 censuses, both of which also give the 1990 industry codes. I then identified the 1970 and 2000 codes that corresponded to each 1990 category and created a crosswalk to replicate the mapping used in the IPUMS datasets.
3. Health limitation is not measured in the ACS samples and is therefore excluded from the models specific to those years.
4. The PSID has collected wealth information in too few years to evaluate whether net worth is associated with the risk of divorce.
5. The determinants of marital stability may vary by race (Teachman 2010) and parental status (Dechter 1992). I found no statistically significant variation in the association between the key independent variables and the risk of divorce between childless couples and parents or between African Americans and whites, for either cohort.
6. Because bootstrapped and non-bootstrapped standard errors were similar, robustness checks and other supplemental models do not use bootstrapped standard errors.
7. A model that examined husbands' economic independence instead of or in addition to wives' also found no statistically significant associations.

8. I tested whether husbands' lack of full-time employment was particularly disruptive if the wife was not employed full-time when the husband was last employed full-time. I also tested whether wives' full-time employment was less disruptive when the husband was not employed full-time. Results were consistent with these perspectives, but not statistically significant for either cohort.

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