“Bad Jobs” for Marriage: Job Quality and the Risk of Divorce

So-jung Lim

Utah State University

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Abstract: Using National Longitudinal Survey of Youth 1979, this study examines the relationship between job quality and marital dissolution. Built upon the growing body of literature on "bad jobs" and labor market changes, I incorporate several indicators of job quality, including the provision of health and pension benefits, nonstandard work schedules, and part-time employment. Results from discrete-time hazard models show that the characteristics and quality of employment is not associated with marital instability for men once education and income are controlled for. On the contrary, non-employed women have the lower risk of divorce than employed women and if women are working in jobs without health insurance and receive health insurance coverage from husbands' employment, the likelihood of divorce significantly decreases. Combined together, these findings seem to support the hypothesis that women's lack of ability to provide themselves decreases the risk of divorce and that reliance on a husband's health insurance may signal important economic benefits from marriage, which have stabilizing effects on marriage.

U.S. divorce rates have risen dramatically since the mid-1960s. The crude divorce rate (i.e., number of divorces per 1,000 people in the population) increased 236% from 2.2 in 1960 to 5.2 in 1980 (Casper and Bianchi 2002). These rapidly increasing divorce rates peaked around 1980 and have declined slightly since then (Goldstein 1999). But the level of divorce in the United States is still high, remaining very close to the highest level among all industrialized countries. Estimates show that roughly half of first marriages will end in divorce (Schoen and Canudas-Romo 2006). Persistently high levels of divorce in the United States have long been a subject of concern for sociologists and policy makers, since divorce has negative implications for those involved, in particular for the well-being of children (McLanahan and Sandefur 1994). These demographic trends and substantive concerns have motivated a great deal of research on the causes of divorce. Sociological explanations for divorce have long emphasized the importance of economic factors, many of which are closely related to labor-market behaviors. Earlier theories based on the specialization model predict that men's economic resources from employment are conducive to their marital stability. According to this model, however, women's participation in the labor force is negatively associated with marital stability since employment both increases their economic independence and reduces their gains from marriage (e.g., Becker 1981). Later theoretical explanations argued that uncertainty in the labor market might have altered the nature of the marriage bargain (Oppenheimer 1988) and suggest that economic factors have become increasingly similar in their importance on marital stability for both men and women (Sweeney 2002; White and Rogers 2000).

Although one's economic resources and labor market status are inseparable from their employment, most previous studies have focused on education and income as a proxy for current and future economic prospects (White and Rogers 2000) and paid relatively little attention to

differentials in employment quality. This is a serious limitation since the nature and quality of an individual's job, not just the mere fact of their having one, may increase in importance for marital stability as job opportunities and employment quality have been diversifying in recent decades (e.g., Becker 1981; Oppeheimer 1988). Furthermore, if marriage becomes a signal of "attainment of a prestigious, comfortable, and stable style of life" (Cherlin 2004), the symbolic importance of a "good job" that allows its holder to satisfy the basic expected economic standards of marriage may be critical for successful marriage. Therefore, the lack of attention to employment quality and characteristics in the divorce literature means that this literature, too often, has failed to fully situate marriage within its broader social and economic context (Kalleber 2009; Smock 2004).

Recognizing this limitation, in this paper using the National Longitudinal Survey of Youth 1979 (NLSY79) and discrete-time hazard models I examine the extent to which the quality of jobs that individuals have are associated with the risk of divorce from first marriage. Specifically, I evaluate the role of various indicators of job quality on divorce including health insurance coverage and the provision of pension benefits, nonstandard work schedules, and part-time work, with a focus on gender differentials. In doing so, my research will contribute to the theoretical discussions of the causes of divorce by taking differential employment quality into account, a feature which has been largely ignored by previous studies. My research will also further bridge disconnected literatures on work and labor market and on family behaviors by providing evidence on how job quality is intertwined with marital dissolution in a changing labor market context increasingly characterized by a deteriorating and polarized job quality.

Theoretical and Empirical Background

Existing Theories and Previous Research: Gender Differences

Predominant perspectives on divorce emphasize the economic benefits and stability generated from marriage (e.g., Becker 1981; Oppenheimer 1988, 1994). Economic resources, usually measured by income and education (as a proxy for economic prospects), are posited to be conducive to marital stability for men (Becker 1981; Oppenheimer 1988, 1994). However, predictions about the relationship of women's economic resources with marital stability are inconsistent. According to the specialization model, a woman's economic independence has destabilizing effects because it reduces her expected gain from marriage (Becker 1981). On the contrary, the cooperation model suggests that wives' financial contributions will have stabilizing effect since labor market uncertainty and resultant changes in the marriage bargain have "made it difficult for husbands alone to provide financially for the family" (Oppenheimer 1988, 1994; also see Amato 2010 for literature review).

Empirical evidence confirms that men's economic resources are beneficial to marital stability (Amato 2010; White and Rogers 2000). Men's earnings are negatively associated with the risk of divorce (Hoffman and Duncan 1995; South and Lloyd 1995) and unemployed husbands' are twice more likely than employed husbands to divorce in five years of marriage (Bumpass et al. 1991). The inverse relationship between men's educational attainment and the risk of marital dissolution is also well documented (Raley and Bumpass 2003; Tzeng and Mare 1995). By contrast, the empirical evidence for the association of women's economic resources with the risk of divorce is mixed. Several studies document no relationship or a negative relationship between women's economic resources and divorce (Greenstein 1995; Hoffman and Duncan 1995; Sayer and Bianchi 2000; South and Lloyd 1995). Interestingly, there is evidence that the observed negative relation between women's education and divorce has become weaker over time (South 2001). At the same time, some studies suggest that there might be a nonlinear

relationship: women at the lower and higher end of income distribution are less likely to divorce relative to those in the middle (Heckert, Nowak, and Snyder 1998; Ono 1998).

Such mixed evidence does reflect theoretical inconsistences on the role of women's economic resources on marital stability. One explanation put forward to explain these inconsistencies argues that the stabilizing effect from wives' financial contribution might outweigh the destabilizing independence effect or vice versa (Amato 2010; Amato, Booth, Johnson, and Rogers 2007; Greenstein 1990; Oppenheimer 1988). Some researchers also point out that women's earnings and the risk of divorce might be non-linear (Heckert, Nowak, and Snyder 1998; Ono 1998) as suggested by the literature on women's economic resources and gender division of housework (Ferree 1990, 2010). Another possibility is that women's economic resources help them to leave troubled marriages and that the observed positive relationship, if any, between women's economic independence and divorce is a reverse causality (Sayer and Bianchi 2000; Schoen et al. 2002). These mixed findings across different indicators imply that the relationships between economic resources and marital stability are complex, particularly for women, and call for the need to broaden our conceptualization of economic factors in order to better understand the role of economic resources on marital stability.

Why Does Job Quality Matter for Marital Stability?

Given the centrality of economic standing and resources in theories on divorce, changes in employment opportunities and job quality in the past decades may have a substantial impact on marital stability. In this section, I will discuss several theoretical reasons and empirical evidence which suggest that job quality might be critical for marital stability.

First of all, securing a high quality job is critical to ensure both current and future economic security. As noted, wages and salaries account for a substantial proportion of family

income, especially among low- and middle-class families (Mishel, Bernstein, and Allegretto 2005). In addition, fringe benefits, as additional economic compensation brought by employment, are also critical for family economic security. Having a job with health insurance, for instance, may become more important in light of rising health care costs and employers' increasing reluctance to provide employees with health insurance as part of their employment package. Very little research has sought to establish linkages between the availability of health insurance and marital stability but anecdotal evidence indeed suggests that health insurance may keep some people from otherwise filing for divorce as "the need for insurance may prolong unhappy marriages" (Sack 2008). The provision of health insurance might be important for marital stability since marital union tends to involve children, and the healthy development of children is undoubtedly a top priority for parents. According to one recent survey, parents remain concerned about the coverage and costs of health insurance as well as the quality of health care their children can receive even when they have private health insurance (C.S. Mott Children's hospital national poll of children's health 2009).

The provision of health insurance is probably a more important consideration for women than it is for men. Evidence shows that 115,000 women lose their private insurance after divorce each year (Lavelle and Smock 2012), losses which are largely attributable to their being dropped from insurance which had been provided by their ex-husbands' employers. Such loss of health insurance is more problematic for women who are insured as dependents on their husbands' health insurance. Women with full-time work and higher education, who are more likely to have health insurance coverage through their own employment, are less affected by divorce (Lavelle and Smock 2012). Therefore, we might assume that the provision of health insurance from a husband's employment may be an important economic benefit that women gain from marriage

which is probably beneficial to marital stability given that women are more likely than men to lose health insurance coverage upon marital break-up.

Retirement or pension benefits may be also important for economic security, especially from the long-term perspective. As is now well-documented, married people enjoy better financial well-being than their unmarried counterparts (Waite and Gallagher 2000). One underlying reason is that married couples accumulate more assets, savings, and home ownership which they plan to transmit to their children out of consideration for their children's future economic well-being (Waite 1995). Therefore, having a job that comes with a pension or retirement plan might be conducive to marital stability since they help to ensure old-age economic security and reduce the burden of care incumbent upon children or other dependents. It is not clear, however, that the extent to which such a long-term perspective can have an immediate impact on current marital stability and whether there are gender differences in its importance of pensions on marital stability.

In addition to diminished economic resources, having a "bad job" may increase the risk of divorce through its indirect effect on marital quality and stability. Evidence suggests that economic pressures and insecurity are associated with marital instability and one mechanism is that economic insecurity tends to increase husbands' hostility and wives' depression, which in turn reduces both spouses' relationship quality and marital happiness (Conger and Elder 1994; Conger et al. 1990: Conger, Conger, and Martin 2010). The possibility that the lack of economic resources or economic insecurity might be detrimental to marital stability is also documented from the low-income family formation literature. Women often cite concerns about anticipated economic hardships after marriage due to men's inability to secure "good jobs" as one of their primary reasons for not marrying (Edin and Kefalas 2005). Therefore, a job with decent wages

and fringe benefits, also correlated with other desirable job characteristics such as job stability (Kalleberg et al. 2000), might function as a buffer against economic uncertainty and insecurity (Oppenheimer 1988; Kalmijn and Luijkx 2005). This sense of security from good employment might become more important for marital stability as actual and perceived economic risk and insecurity has increased (Kalleberg 2009). There is some evidence that subjective indicators of job characteristics (e.g., distress and depression resulting from employment) is often a stronger predictor of family outcomes relative to objective job characteristics (e.g., job stressors) (Perry-Jenkins, Repetti, and Crouter 2000).

Job quality might also have symbolic relevance for marital stability. Marriage is increasingly a "marker of prestige," which signifies one's "attainment of a prestigious, comfortable, and stable style of life" (Cherlin 2004). In this sense, a "respectable, decent, stable job" is a visible marker that couples have achieved the suitable economic standing expected for marriage (Cherlin 2004; Edin 2000; Smock, Manning, and Porter 2005). The perception of an economic bar to marriage is frequently cited as a major barrier to marriage entry among people not only from low-income but also working and middle-class backgrounds (e.g., Edin and Kefalas 2005; Smock, Manning, and Porter 2005). If such a perception of an economic bar to marriage exists, the pressure to maintain this standard might be even stronger for married couples. Inability to meet the economic standards expected for marriage might create tension and stressors for married couples. It is obvious that a failure to have a "real job" ─ which equals a job with decent income and key fringe benefits ─ falls behind the standard in couples' own as well others' eyes (Edin 20000; Kalleberg 2011). Indeed, low-income women point out that having "good jobs" signals a couple's class standing and permits them to take a visible place in their community (Edin 2000). This symbolic importance of securing a high quality job is

probably more important for men than for women if the normalized role of provider is still most frequently assigned to and assumed by men (Ferree 2010; Palkovitz 1996). However, it is also worth noting that the symbolic importance of having a "good job" is mostly discussed within the context of marriage formation and theoretical predictions are not clear about the extent to which it matters for marital stability once couples step over the "economic bar."

In sum, theoretical predictions are in general consistent about the positive relationship of job quality with men's marital stability. On the contrary, predictions about the relationships between women's job quality and marital stability are inconsistent. If the nature of marriage bargain has changed in a way that favors both spouses' economic contribution, then women's having "bad jobs" would be expected to increase the risk of marital dissolution. But we should also note that the economic independence which comes from working in a "good job" might help women escape unhappy marriages. In this scenario, having a high quality job might be positively associated with divorce (e.g., Amato 2010; Sayer and Bianchi 2000). Alternatively, it is also plausible that women's domestic responsibilities and gendered expectations about parenting make women to choose jobs which are of not-so-great quality but which are conducive to their efforts to combine work with familial responsibilities, e.g., low-wage part-time work without benefits (Hakim 1995). This scenario also leads to similar predictions: women's having bad jobs would either be negatively associated with divorce or job quality does not matter for marital instability.

Data and Methods

Data

Data come from the National Longitudinal Survey of Youth (NLSY79). I use data from 1979 to 2008 (i.e., the first wave to the most recent wave available at the time of data analysis). The

analytical sample is comprised of a total of 52,953 person-years of records for men (25,341) and women (27,612) who are in their first marriage.

In this study, I estimate discrete-time hazard models of predicting divorce from first marriage. Specifically, individuals in the first marital union enter the observation window at the baseline survey and are censored at the earliest of the following three events: divorce, loss to follow-up, or the most recent survey in 2008. Estimating discrete-time hazard models is appropriate given the outcome of interest and the nature of the data (i.e., annual survey). This method also allows me to examine how individuals' risk of divorce varies in relation to their job quality while also taking the role of marital duration (baseline hazard) into account. Based on preliminary analyses, the baseline hazard of divorce is specified using linear term of marital duration. Except for the measures that I include the indicator of missing, e.g., pension benefits (see below), missing cases are handled using list-wise deletion.

Measures

Divorce: Using information on marital status updated every survey and the date of first marriage and divorce provided for respondents who ever married, I created full marital history for all years between 1979 and 2008 so as to identify each respondent's marital status in a calendar year, i.e., never-married, unmarried (i.e., divorced), divorced between two year intervals, and staying in first-marriage. In doing so, divorce is identified when a respondent who was in their first marriage at the previous year (t-1) left marital union at year (t).[1] Since the NLSY79 switched to

[1] While I focus on divorce, many studies of marital dissolution use separation as the event of interest. One of reasons to focus on divorce, not on separation, is that a couple of key independent variables are very sensitive to the legal termination of marriage. For instance, health insurance provision through spousal employment discontinues upon divorce, not upon separation. As noted, health insurance is often cited as a reason to keep unhappy marriages (Sack 2008). Therefore, the use of separation as an outcome of marital dissolution might underestimate the association of bad job quality, e.g., health insurance provision and marital

biennial survey in 1994, 717 divorces (18.5%) out of 3,872 are lost due to the exclusion of odd years after 1994, e.g., 1995, 1997, and 2007. The exclusion of divorces that recorded in "off-years" (e.g., 1995) may introduce bias if those who divorce in years when the NLSY79 is not surveyed (e.g., 1995) substantially differ from those who divorce in years of interview (e.g., 1996). But this selection bias is very unlikely to happen unless there is a period effect that fluctuates in every other year.[2]

Job quality: As noted, I measure job quality using several indicators. In specific, the provision of health insurance and pension plan are created using information on fringe benefits for each job that a respondent has. Both the provision of health insurance and pension benefits are dichotomous variables, coded as 1 if a respondent's employer provides health insurance or pension benefits. Nonstandard work hours are based on survey information about work hours and shifts, which include the following categories: regular day shift, regular evening shift,

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dissolution by including couples who do not officially terminate marriage for the sake of health insurance and other benefits. In addition, although most separation result in divorce, many people attempt to reconcile or reunite during the course of separation and divorce. For this legal ambiguity of separation, some respondents who are separating identify their marital status as "married" or "divorced," instead of choosing "separated" if there is uncertainty about whether they may end up in reunification or divorce.

Nevertheless, the use of divorce might result in the treatment of some separations which likely end up divorce as being in marriage. If bad job quality is associated with separation to the similar extent that it is associated with divorce, my approach might underestimate the relationship between having a "bad job" and marital instability. In light of the higher proportion of permanent separation among Blacks compared to White, little racial differences in the association between job quality and marital dissolution in my analyses is possibly related to the use of divorce as a measure of marital dissolution. In the subsequent revisions, I plan to estimate alternative models with the combined measure of divorce and separation to test whether the role of job quality on marital instability is sensitive to the choice of measures for marital dissolution.

[2] In the subsequent revisions, I will create full employment history so as to identify respondents' employment status and job characteristics for years when the NLSY79 switched to biennial survey. In addition, I will use multiple imputation for missing values, including covariates in the "off-year" (e.g., 1995) that can't be identified by information obtained at the previous year (e.g., 1993) and the following year (e.g., 1996). That may help evaluate whether and how the exclusion of "off-years" and cases with missing values biases the estimates.

regular night shift, shift rotation (changes periodically from days to evenings or nights), split shift, and irregular schedule or hours. Respondents who reported having anything other than a regular day shift were coded as 1 and those working a regular day shift were coded as 0 (e.g., Strazdins et al. 2006). Part-time employment is coded as 1 if a respondent's reported work hours total less than 35 hours per week. For nonstandard work hours and pension benefits, I include a category for missing when these questions are excluded from the survey. For example, the provision of pension benefits is only available from 1986 onward, which results in a huge reduction of person-years for the years prior to 1986 with listwise deletion.

Controls: All models also include controls that might be related to both job quality and divorce (e.g., Amato 2010; White and Rogers 2000). Specifically, I include well-established economic and human capital resources associated with marriage dissolution such as educational attainment and individual annual income (measured in year (t-1)). Considering the possibility that the association between income and divorce might be non-linear, annual income is divided into quartiles based on annual income distribution, separately by gender. Since unemployment is negatively associated with marital stability (e.g., Conger et al. 1990; White and Rogers 2000), I also include employment status to identify whether a respondent is employed or not at interview.[3]

I also control for demographic characteristics such as urban/rural residence, race, parenthood, experience of premarital cohabitation that might be associated with employment and the risk of divorce (e.g., Raley and Bumpass 2003; Bumpass, Castro Martin, and Sweet 1991; Lillard, Brien, and Watie 1995; Waite and Lillard 1991)). Since earlier family background

[3] This group consists of those unemployed and out of labor force, who were collapsed into one group due to relatively small numbers.

affects later family behaviors (Michael and Tuma 1985), I also control for mothers' educational attainment and whether the respondent was in a two-parent family at age 14. These variables are measured at the time of first interview. Except for race, gender, and family background characteristics, all controls are time-varying, measured at every survey.

In addition to these controls, I also include age at first marriage considering that age at marriage and the risk of divorce have been shown to have an inverse association (e.g., DaVanzo and Rahman 1993). Since spousal characteristics may shape the respondent's job quality and the risk of divorce, I also control for spouse's economic and human capital resources and employment characteristics (e.g., Hoffman and Duncan 1995; South and Lloyd 1995). In specific, all models include spouses' annual income (logged), that is the total sum of income from employment, business, or military work in the past calendar year. Educational attainment of spouse is a categorical variable, consisting of no high school education, high school, some college, and college/university degree. The binary variable of spouse's employment status (1 = non-employed) is also included in all models. The final measure of spouses' job characteristics is whether a respondent has health insurance via their spouse's job. Since the source of respondents' health insurance is not available for some waves, I include a category of missing to maximize sample size.

To address research questions raised in the previous sections, I estimate six models. The baseline model begins with conventional indicators of economic resources and human capital available to a respondent and his/her spouse, as well as demographic and family background, and a spouse's employment status and the provision of health insurance through a spouse's employer. The subsequent models (Model 2 to Model 5) examine the role of each hypothesized indicator of job quality (health insurance provision, pension benefits, nonstandard work hours, part-time

work) on marital instability. The final model (Model 6), which includes all of posited measures of job quality, evaluates whether the relationships between each measure of job quality and the risk of divorce observed in the previous models remain the same in the presence of other dimensions of job quality.

Results

Table 1 shows sample characteristics in terms of percentage and standard errors. Consistent with other studies, men in my analytical sample, who are in first marriage, have relatively high incomes: more than two-thirds of married men report income above the median. Roughly half of men have some college or university education and vast majority are employed. With regard to measures for job quality for men, the majority have employer-provided health and pension benefits, 77% and 66%, respectively. These statistics, again, reflect better employment quality for married men relative to their unmarried counterparts.

[Table 1 about here]

Turning now to examine women's employment characteristics, married women do not have high incomes comparable to those earned by married men. As for employment status, about one in five married women are out of the labor force while majority of men are employed. Relative to married men, married women are also less likely to have jobs with employer-sponsored health insurance and pensions, 54% and 49%, respectively. They tend to work with nonstandard schedules and in part-time jobs more frequently than do married men. Considering that gender differentials in educational attainment are very small, women's inferior job quality implies that the economic resources earned through married women's employment are probably supplementary to those of men, either due to women's domestic responsibilities or social expectations of male provider role (Ferree 2010).

[Table 2 about here]

Table 2 presents results from discrete-time hazard models to predict the likelihood of marital break-up in a given year for men. Since divorce is our outcome of interest, I used logistic regression analysis. Coefficients are presented in odds for easier interpretation. Results from the model 1 show that age at first marriage is inversely associated with divorce, consistent with prior studies (e.g., DaVanzo and Rahman 1993). The risk of divorce also decreases as marital duration goes up. As for the relationship of men's economic resources and human capital with marriage, college education significantly reduces the risk of divorce, as it is 41% less likely to occur for those with a college education than for those without a high school degree. Men's own income is not associated with the hazard of divorce but it is due to the fact that the inclusion of education takes away the negative association between high income and divorce (supplementary analysis). Results from Model 1 also show that wife's higher education and higher income decrease the risk of divorce, which appears to provide supporting evidence for the coprovider model that favors wives' economic contribution to family. But at the same time having a non-employed wife is also negatively associated with divorce, which suggests that the relationship between married women's employment and marital stability is complex, often influenced by spousal characteristics. I will discuss this in further detail below (Table 3).

Model 2 to model 5 add each various indicators of job quality in order to evaluate the role of posited job characteristics on the risk of divorce among men. I find that none of indicators of job quality (lack of health and pension benefits, nonstandard work schedules, and part-time work) is significantly associated with marital instability once the economic resources and human capital of respondents (in particular education) and their spouses are taken into account. These results might imply that, as previously noted, for men the economic bar for marriage mainly

functions upon marriage entry (e.g., Edin and Kefalas 2005) but once the bar is passed, it might not greatly affect marital stability. However, this is a speculative explanation which needs to be verified by future research.

[Table 3 about here]

Table 3 presents the results of a comparable analysis for women who are in first marriage. Results for the baseline model show that longer marital duration and later age at first marriage reduce the risk of divorce for women as do for men. Among control variables, interestingly, black women have lower odds of divorce than white women, which is probably a reflection of the fact that black women tend to separate instead of filing for divorce so that the use of legal divorce in this analysis undercounts marital disruption of black women (e.g., Martin and Bumpass 1989). It might also result from the use of list-wise deletion because it could selectively include black women who are in first marriage and likely have better employment characteristics and thus have a lower risk of divorce compared to black women in non-marital union (who are excluded from the analytical sample). I will replicate my analyses using multiple-imputed data in subsequent revisions in order to test this possibility.

Turning next to women's own economic characteristics, I find that higher education, i.e., the possession of a university degree is negatively associated with divorce, which replicated the finding for educational attainment among men. Women's income is not related to the risk of divorce, but this is due to the correlation between women's income and employment status (supplementary analysis). Results from Model 1 also show that non-employed women are much less likely to divorce than those who are in the labor force. This negative association between women's labor force participation and divorce contrasts with the null association between men's income and marital instability (Model 1 of Table 2). Combined together, these results might

imply that women's withdrawal from the labor force is conducive to marital stability due to benefits from specialization (Becker 1981) and/or women's inability to leave marriage due to economic dependence (Sayer and Bianchi 2000; Schoen et al. 2002). At the same time, the mixed results for other indicators (e.g., education and income) also imply that the relationships between women's economic resources and hazard are multi-dimensional, depending on which dimensions of economic factors are examined.

The results from the subsequent models (Model 2 to Model 5) show that, among the various indicators of job quality, the lack of health insurance from their own employment decreases a woman's risk of divorce by 22% compared to her counterpart with a job providing health insurance. Also, if a woman's employment does not provide her with health insurance but she is insured through her husband's employment, her risk of divorce significantly decreases ($p<0.05$, results not shown). These results are consistent with the expectation that health insurance might be a key consideration for women's decision to stay in marriage if she cannot secure high quality employment that covers health insurance (Lavelle and Smock 2012; Sack 2008). Given that the loss of health insurance persists for a couple of years after divorce and contributes to financial hardship for divorced women (Lavelle and Smock 2012), reliance on a husband's health insurance may signal important economic benefits from marriage, independent of income and other economic indicators. The provision of pension benefits from women's employment, however, is not related to the hazard of divorce (Model 3). According to supplementary analysis, divorce risks also decline ($p < 0.05$) if a wife receives health insurance from her husband *and* her job does not provide pensions. In addition, results from the full-model show that there is a weak evidence that women's nonstandard work schedules are negatively associated with marital stability ($p<0.1$) in the presence of other job characteristics. However,

the relationships between posited indicators of job quality and the risk of divorce observed in the previous models change little in the final model.

Conclusions and Discussion

In this paper, using National Longitudinal Survey of Youth (NLSY79), I examined the extent to which various measures of job quality are associated with marital instability while paying particular attention to gender differences in these associations. Prior research generally documents positive relationships between men's economic resources (mostly measured by income and education) and marital stability (Becker 1981; Oppenheimer 1988). This evidence implies that inferior job quality might increase men's risk of divorce since such job characteristics as the lack of fringe benefits are directly related to economic rewards from employment (Kalleberg 2011). Job quality might also matter for marital stability since the symbolic importance of good employment for marriage, as literature on union formation suggests, may create tension and conflict when couples cannot satisfy the basic economic standards expected for married couples (Edin and Kefalas 2005). Failure to secure a "good job" might be harmful for men's marital stability more than for women's, particularly if it compromises men's ability to function as in the expected "provider" role (Ferree 2010). In contrast, there are competing hypotheses about the relationships between women's job characteristics and the risk of divorce. More specifically, the coprovider model suggests that women's having "good jobs" is conducive to marital stability through their economic contribution from employment. Women's high quality job, however, might increase the risk of divorce if it enhances women's economic independence (Becker 1992) or helps women escape from bad marriages (Amato 2010; Sayer and Bianchi 2000).

In sum, my results from discrete-time hazard models do not provide strong evidence for the hypothesized positive relationship between men's having "good jobs" and marital stability. None of the several measures of job quality is significantly associated with marital instability for men (Table 2). This null association of men's job quality with divorce reflects that the economic and symbolic relevance of job quality remains small once education and income, which are correlated with job quality, are controlled for. These findings also raise the possibility that the symbolic relevance of a "good job" for men to satisfy economic standards for marriage disappears once couples make the transition to marriage.

Interestingly, my results show that women's withdrawal from the labor force decreases the risk of divorce even after women's own income and education and the characteristics of husbands and family are taken into account. This finding appears to be consistent with the economic independence hypothesis (Becker 1981) but it is also probable that non-employed women stay in marriage due to their inability to provide themselves (Sayer and Bianchi 2000; Schoen et al. 2002). Study finding that the provision of health insurance is significantly associated with women' marital stability adds supporting evidence for this possibility: if women are working in jobs without health insurance and receive health insurance coverage from husbands' employment, then the likelihood of divorce significantly decreases. Combined together, these findings may imply that women's lack of ability to provide themselves (through high quality jobs that provide health insurance) decreases the risk of divorce by increasing women's gains from marriage.

My result is consistent with the importance of marital status for women in terms of health insurance coverage (Lavelle and Smock 2012) and the potential role of health insurance for women to stay in marriage (e.g., Sack 2008). As far as I know, my study is one of the very few

studies to examine the role of health insurance for marital stability as one of the economic benefits associated with marriage. My study shows that the significant association between the availability of health insurance and women's divorce is independent of women and husbands' education, income, and employment status. This finding thus suggests that the economic resources considered by people who choose to stay in or away from marriage are multi-dimensional and that more broad measures are needed to fully understand such complex relationships (Amato 2000; Conger, Conger, and Martin 2010; Smock 2004). More importantly, considering job quality might help understand gender differentials in the role of economic resources on marital stability (which previous research have not reached a consensus) since expectations and responsibilities as a provider and caregiver might be very different depending on gender.

Lastly, I would like to discuss some limitations of the current research and offer a few suggestions for future research. First, more research is needed to identify mechanisms linking job quality and marital stability. Employment quality, for example, could impact marital stability via the indirect effects of economic hardship and insecurity (Conger and Elder 1994; Conger et al. 1990: Conger, Conger, and Martin 2010). It is possible that poor job quality might increase stress, which in turn affects couple's relationships and ultimately can contribute to marital break-up. Unfortunately, NLSY79 provides relationship quality only for women and information on psychological or mental stress is also only available to middle-aged respondents (ages over 40). Research using data from other sources is needed to identify pathways through which employment quality and characteristics might directly or indirectly contribute to other factors affecting marital instability.

Another limitation of using the NLSY79 is that I could not fully consider spouses' employment characteristics. Considering the finding that relationship between job quality and the risk of divorce differs by gender, studies using data with more detailed information on employment characteristic for both spouses will be helpful to fully understand the relationships between couples' employment dynamics and union dissolution.

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Table 1. Sample Characteristics

Variables	**Men**	**Women**
Divrce	2.0	2.1
Demographic Characteristics		
Age at first marriage	23.7 (3.9)	22.4 (3.9)
Marital duration	7.8 (6.0)	8.1 (6.1)
Race		
White	64.6	65
Black	17.7	17.3
Hispanic	17.8	17.7
Premarital cohabitation	23.3	23.3
Parenthood	73.2	74
Rural residence[a]	25.6	22.9
Family background		
Mother's education		
Less than high school	36.2	39.6
High school	44.4	42.4
Some college/University	19.4	18
Two-parent family at age 14[a]	76.7	76
Spouse Characterisitcs		
Education	11.2	12.7
Less than high school	42.5	41.4
High school	23.4	21.3
Some college	23	24.7
University or more		
Spouse income (logged)	6.7 (4.4)	9.0 (3.2)
Spouse is not employed[a]	25.1	4.2
Spouse provides respondent's health insurance	19.6	59.4
Missing**	19.4	23.4
Respondent's Characterisitcs		
Income		
First quartile	11.3	21.4
Second quartile	19.9	24.9
Third quartile	29.4	25.6
Fourth quartile	39.4	28.2
Education		
Less than High school	12.5	8.4
High school	42.3	41.4
Some college	20.1	25.1
University or more	25.1	25.1
Employment status		
Not-employed[a]	2.2	18.3
Job Characteristics		
No health insurance*[a]	23.5	46.1
No pension benefits*	33.9	51.4
Missing**	23.1	27.7
Nonstandard work hours*	21.2	15.8
Missing**	9.0	7.9
Part-time job*[a]	4.7	21.9
N	25,341	27,612

* Percentage among employed respondents

** Missing indicates survey years when information is not avaiable

[a] Dichotomous variable

Table 2. Odds-Ratios of Divorce Estimated from Discrete-Time Hazard Models for Men

Variables	**Model 1**	**Model2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
Marital duration	0.97**	0.97**	0.97*	0.97**	0.97**	0.97*
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Age at first marriage	0.94**	0.94**	0.95**	0.94**	0.94**	0.95**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Premarital cohabitation	1.15	1.15	1.16	1.15	1.15	1.16
	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
Two-parent family at age 14[a]	0.79*	0.79*	0.79*	0.79*	0.79*	0.79*
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Mother's education						
Less than high school	0.97	0.97	0.97	0.97	0.97	0.97
	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)
High school (omitted)						
Some college/University	1.08	1.08	1.08	1.08	1.07	1.07
	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)
Race						
Hispanic	0.86	0.86	0.86	0.86	0.86	0.87
	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)
White (omitted)						
Black	1.10	1.10	1.10	1.10	1.10	1.10
	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
Rural residence[a]	1.10	1.10	1.11	1.11	1.10	1.10
	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)
Parenthood[a]	0.71**	0.71**	0.72**	0.71**	0.71**	0.73**
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Education						
Less than high school	0.89	0.89	0.88	0.89	0.89	0.89
	(0.12)	(0.12)	(0.12)	(0.13)	(0.12)	(0.13)
High school (omitted)						
Some college	0.95	0.95	0.95	0.95	0.94	0.94
University or more	0.59**	0.59**	0.59**	0.60**	0.59**	0.60**
	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
Income						
First quartile (omitted)						
Second quartile	1.06	1.06	1.05	1.06	1.07	1.05
	(0.17)	(0.17)	(0.17)	(0.17)	(0.17)	(0.17)
Third quartile	1.10	1.11	1.08	1.10	1.12	1.09
	(0.17)	(0.18)	(0.17)	(0.17)	(0.18)	(0.18)
Fourth quartile	1.02	1.03	0.99	1.01	1.04	0.99
	(0.16)	(0.16)	(0.16)	(0.16)	(0.17)	(0.17)
Spouse Education						
Less than high school (omitted)						
High school	0.80	0.80	0.80	0.80	0.80	0.80
	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)
Some college	0.97	0.98	0.97	0.97	0.98	0.98
	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)
University or more	0.67+	0.67+	0.67+	0.67+	0.67+	0.68+
	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
Spouse income (logged)	0.95**	0.95**	0.95**	0.95**	0.95**	0.95**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Spouse is not employed[a]	0.63**	0.63**	0.64**	0.63**	0.63**	0.64**
	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
Spouse provides respondent's health insurance	1.33*	1.32*	1.24+	1.34*	1.32*	1.24+
	(0.15)	(0.15)	(0.16)	(0.16)	(0.16)	(0.16)
Mssing (Spouse provides health insurance)	1.08	1.08	1.08	1.09	1.08	1.08
	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)
Employment status						
Not-employed[a]	1.23	1.22	1.22	1.24	1.23	1.19
	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)
Job Characteristics						
No health insurance[a]		1.03				1.00
		(0.12)				(0.13)
No pension benefits			1.01			1.01
			(0.13)			(0.14)
Missing (No pension benefits)			1.19			1.26
						(0.23)
Nonstandard work hours				1.13		1.11
				(0.13)		(0.12)
Missing (Nonstandard work hours)				0.99		0.89
				(0.15)		(0.15)
Part-time job[a]					1.20	1.16
					(0.21)	(0.21)
N	25,341	25,341	25,341	25,341	25,341	25,341
Log-likelihood	-2443.83	-2443.80	-2443.09	-2443.22	-2443.34	-2441.83

[a] Dichotomous variable

+ P<0.1, * P<0.05, ** P<0.01

Standard Errors in Parentheses

Table 3. Odds-Ratios of Divorce Estimated from Discrete-Time Hazard Models for Women

Variables	**Model 1**	**Model2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
Marital duration	0.96**	0.96**	0.98+	0.96**	0.96**	0.98+
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Age at first marriage	0.92**	0.92**	0.94**	0.92**	0.92**	0.94**
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)
Premarital cohabitation	1.33**	1.33**	1.36**	1.33**	1.33**	1.35**
	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
Two-parent family at age 14[a]	0.83+	0.82+	0.82*	0.83+	0.82+	0.82*
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Mother's education						
Less than high school	0.83+	0.83+	0.83+	0.83+	0.82+	0.82+
	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.08)
High school (omitted)						
Some college/University	0.98	0.98	0.98	0.97	0.98	0.98
	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
Race						
Hispanic	0.77+	0.77+	0.78+	0.78+	0.77+	0.78+
	(0.10)	(0.10)	(0.11)	(0.11)	(0.10)	(0.11)
White (omitted)						
Black	0.72*	0.71*	0.72*	0.72*	0.72*	0.70*
	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
Rural residence[a]	1.20+	1.21+	1.20+	1.20+	1.21+	1.21+
	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
Parenthood[a]	0.67**	0.68**	0.67**	0.66**	0.67**	0.69**
Education	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
Less than high school	1.14	1.15	1.14	1.14	1.14	1.15
High school (omitted)	(0.17)	(0.18)	(0.18)	(0.17)	(0.17)	(0.18)
Some college	0.82+	0.82	0.82+	0.82+	0.82	0.82+
	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
University or more	0.65**	0.65**	0.65**	0.65**	0.65**	0.65**
Income	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
First quartile (omitted)						
Second quartile	0.94	0.93	0.93	0.92	0.97	0.92
	(0.14)	(0.13)	(0.13)	(0.13)	(0.14)	(0.14)
Third quartile	1.05	0.95	0.98	1.04	1.05	0.91
	(0.16)	(0.15)	(0.15)	(0.16)	(0.16)	(0.15)
Fourth quartile	1.18	1.03	1.08	1.19	1.17	0.97
Spouse Education	(0.19)	(0.18)	(0.18)	(0.19)	(0.19)	(0.17)
Less than high school (omitted)						
High school	1.13	1.14	1.12	1.13	1.14	1.13
	(0.16)	(0.16)	(0.15)	(0.15)	(0.16)	(0.16)
Some college	1.02	1.03	1.01	1.01	1.02	1.02
	(0.17)	(0.17)	(0.16)	(0.16)	(0.17)	(0.17)
University or more	0.92	0.94	0.92	0.92	0.93	0.94
	(0.17)	(0.18)	(0.17)	(0.17)	(0.17)	(0.18)
Spouse income (logged)	0.96**	0.96**	0.96**	0.96**	0.96**	0.96**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Spouse is not employed[a]	0.84	0.85	0.86	0.84	0.84	0.86
	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
Spouse provides respondent's health insurance	1.14	1.21	1.00	1.09	1.15	1.03
	(0.16)	(0.17)	(0.16)	(0.15)	(0.16)	(0.16)
Mssing (Spouse provides health insurance)	0.78	0.83	0.83	0.77	0.79	0.85
Employment status	(0.13)	(0.14)	(0.15)	(0.13)	(0.14)	(0.15)
Not-employed[a]	0.74*	0.80+	0.74*	0.79+	0.73**	0.81
Job Characteristics	(0.09)	(0.10)	(0.09)	(0.10)	(0.09)	(0.11)
No health insurance[a]		0.76*				0.78+
		(0.09)				(0.10)
No pension benefits			0.80			0.89
			(0.11)			(0.13)
Missing (No pension benefits)			1.36+			1.45*
			(0.23)			(0.27)
Nonstandard work hours				1.18		1.23+
				(0.14)		(0.15)
Missing (Nonstandard work hours)				1.27+		1.08
				(0.18)		(0.16)
Part-time job[a]					0.88	0.90
					(0.10)	(0.11)
N	27,612	27,612	27,612	27,612	27,612	27,612
Log-likelihood	-2605.56	-2602.69	-2599.23	-2603.69	-2605.01	-2595.54

[a] Dichotomous variable

+ P<0.1, * P<0.05, ** P<0.01

Standard Errors in Parentheses