# **Decision-Making Context and the Risk of Marital Dissolution**

Rebecca Dunning Mary Elizabeth Hughes

Department of Sociology Duke University Box 90088 Durham NC 27708 rdunning@soc.duke.edu mehughes@soc.duke.edu

March 2005

Presented at the 2005 Meetings of the Population Association of America, March 31- April 2, Philadelphia PA. This research was supported in part by a grant from the Arts and Sciences Research Council, Duke University. The authors are listed in alphabetical order, reflecting their equal contributions to this paper. Elayne Heisler, Hana Pacalova and Tracey LaPierre provided research assistance.

#### INTRODUCTION

A key aspect of the transformation of American families over the last four decades is the increased likelihood that couples will choose to dissolve a marriage. After increasing slowly but steadily from the middle of the nineteenth century to the middle of the twentieth, divorce rates increased sharply beginning in the late 1960s. While divorce rates have been stable since the 1980s, the proportions of adults and children affected by divorce are historically very high, with about one-half of all marriages expected to end in divorce.

The importance of divorce to family change, along with the well-established negative consequences of divorce for both adults and children, has led to a great deal of research on the determinants of divorce. This empirical literature emphasizes the role of individual and couple characteristics, such as income, age at marriage, presence of children and family background. In contrast to the literature on the decision to marry, relatively little research considers the ways in which the social-structural environment affects the decision to dissolve a marriage (the exception being the work of South and colleagues, e.g. South & Lloyd 1995). However, theories predicting the influence of economic context on marriage imply that these same contextual characteristics will influence the likelihood of marital dissolution. For example, personal economic stability is a prerequisite for marriage (Oppenheimer et al. 1997) and attaining this stability depends in part on available economic opportunities. Since marital stability also depends on economic well-being, (Faust and McKibben 1999) economic opportunities should also influence the risk of divorce.

In this paper, we use longitudinal data from the 1979-1997 waves of the Panel Study of Income Dynamics to examine the relationship between economic context and the risk of marital dissolution. We focus on two distinct aspects of individual's economic context: labor market

opportunities and the costs of home ownership. Since black-white disparities in marital dissolution are pronounced and poorly understood, we pay special attention to race differences.

## BACKGROUND

Empirical studies of divorce are based on rational choice (Becker et al. 1977; Becker 1981) or social exchange models (Blau 1964; Homans 1961) which emphasize the individual characteristics that influence personal decision-making. In this framework, spouses compare the benefits obtained within marriage to those obtainable outside of marriage, and make decisions based on this calculation. Included in this consideration are the constraining effects of social norms<sup>1</sup> or legal obligations<sup>2</sup> which alter the valuation of these alternatives. Previous work has found that the following individual-level variables are consistently significant predictors of divorce: income, age, employment status, hours worked by wife, educational attainment, prior cohabitation, presence of children, race, religious affiliation, home ownership and region of residence (Amato and Rogers 1997; Greenstein 1990; South and Spitze 1986; White 1991).

About one-half of all divorces occurr within the first seven years of marriage, and virtually all of the remaining divorces occur within the first 20 years (Pinsof 2002). The risk of divorce has a distinct time duration effect that may be modeled independently of covariates, with divorce rising rapidly in the early years and gradually falling thereafter. While the time duration effect is well-known (Diekmann and Mitter 1984) it is often not discussed in model specifications of divorce (e.g. South, Trent and Shen, 2001).

<sup>&</sup>lt;sup>1</sup> Because social norms are not easily quantifiable, time, typically year, is used as a trend variable to subsume all of the "unexplained" variation in divorce rates at the population level. With divorce rates increasing over the past century, Lesthaeghe (2002) and others have attributed increasing individualism to the rise, noting that as countries "Westernize," taking on the economic and cultural trappings of Western civilization, their divorce rates rise accordingly, in tandem with other shifts in family formation. However, the mechanisms to which these shifts are attributable remain largely unexplained.

<sup>&</sup>lt;sup>2</sup> Changes in legal obligations center around the perceived affect of no-fault divorce laws, adopted in the 1960s and early 1970s. Friedberg (1998) attributes 17% of the increase in divorce rates to the imposition of no-fault divorce laws between 1968 and 1988.

There are distinct racial differences in patterns of both marital formation and dissolution. Fewer blacks ever marry, those who do marry later, and more blacks cohabit than do whites (Raley 2000). For black couples, the income of both partners has been connected to probability of marriage; in contrast, for whites only the male's income is significant (Cherlin 2000). While divorce rates between blacks and whites have narrowed over the last two decades, blacks still divorce at rates double that of either whites or Hispanics (Tucker and Mitchell-Kernan 1995: 12). The reasons behind the racial difference in likelihood of divorce remains an important unanswered question in marital research. In contrast to research on racial differences in marriage formation, research on marital dissolution has tended to examine the influence of socioeconomic context (exceptions are Ruggles 1997 and South 2001). Most of the studies that incorporate contextual characteristics focus on the impact of sex ratios as an indicator of "spousal alternatives". In a series of studies South and colleagues (South 1995; South and Lloyd 1995; South, Trent and Shen. 2001; Trent and South 2003) show that imbalanced sex ratios both in a generalized area, and (to a much lesser degree) within a work profession impact the rate of divorce. In these studies sex ratios are generalized to areas or professions, and thus cannot get at the exact contexts in which people are embedded. Aberg (2003), however, had just such a dataset for a group of 37,000 Swedes in 1,500 workplaces. Using hazard models she analyzed how sex, age, and marital status of a person's coworkers affected the individual's risk of divorce when controlling for known individual-level risk factors. The results showed that the demographic characteristics of coworkers considerably influenced the risk of divorce.

## **RESEARCH QUESTION AND HYPOTHESES**

We extend research on divorce by systematically analyzing the extent to which socioeconomic context predicts marital dissolution over and above individual characteristics. We focus on two key aspects of socioeconomic context: labor market opportunities and the costs of home ownership. While our focus on labor markets is a direct extension of research on marriage, to our knowledge no study has examined the link between housing opportunities and divorce. Yet as we outline below, home ownership is marriage-specific capital that may increase marital solidarity as well as enhance economic security; all else equal, reduced opportunities (i.e. high costs) of ownership prevent couples from attaining this capital.

#### **Financial Stability and Labor Market Opportunities**

As noted above, income, employment status, and changes in these have been consistently related to the risk of divorce. Again, rational choice and exchange theories have been used to place these economic variables into a decision-making framework. Using either a trading or bargaining model of marriage, income and employment prospects become important because spouses use them when calculating the relative benefits of remaining in the marriage versus exiting the marriage. Male employment and higher income are consistently negatively related to marital dissolution (Burgess, Propper & Aassve 2003; Hoffman and Duncan 1997), as are increases in income during the marriage (Weiss and Willis 1997).

For females, however, employment status and income do not have as clear-cut effects. A group of studies supports the "independence effect" for women, where employed women and women of higher wages were more likely to divorce than women who are not employed (Ruggles 1997; South 2001). Schoen et al. (2002) shows mixed results, where female employment is more likely to disrupt unhappy marriages but to have no effect on happy marriages. Burgess et al. (2003) show that female employment and income decreases the

likelihood of divorce for women, and Greenstein (1990) shows that working women enhanced the marital stability in low-income couples because of their contributions to financial security. Positive changes during the marriage in women's labor characteristics have been shown to be destabilizing, with both increases in the wife's income (Tzeng and Mare 1995; Weiss and Willis 1997) or in number of hours worked (Tzeng and Mare 1995) resulting in greater rates of dissolution.

Most empirical studies confine estimation of income and employment effects on divorce to the individual level. Income, weeks worked, and education are used as proxies for financial stability. However, financial stability and economic opportunity are also social conditions that can support norms which act as constraints on individual behavior. Economic context operationalized through measures of local employment opportunities (either unemployment rates or measures of low-wage work) are associated with deviant behavior (Bellair & Roscigno 2000; Gould, Weinberg & Mustard 2002; Thornlindsson and Bernburg 2004). While divorce may not longer be considered deviant, marriage is considered a highly desirable state. Going beyond the proven link between individual income and marital disruption, we hypothesize that poor labor market conditions have a negative impact on marriage over and above the effects of individual income. Employment conditions are an integral part of an individual's estimation of his or her economic prospects. Thus examining the context in which economic valuations are made is an improvement over the simple income and educational attainment measures used in previous estimates of divorce risk. While individuals can certainly move to areas with better employment conditions, migration itself can destabilize marriages.

Along these lines, South, Trent and Shen (2001) use the 1968-1986 Panel Study of Income Dynamics to estimate the impact of neighborhood socioeconomic characteristics on marital

dissolution. They find no direct causal link between neighborhood status and marital instability. However, the theoretical framework utilized emphasizes the hypothesized connection between aggregate poverty/disadvantage and behavior, and less the possible connection between labor market opportunity and behavior. This latter connection has been established in research on crime and adolescent delinquency (Bellair & Roscigno 2000; Crutchfield & Pitchford 1997), but has yet to be extended to possible impacts on marital stability.

The theoretical and empirical research to date and our emphasis on connections between economic opportunity and marital stability lead to the first two hypotheses to be tested in this analysis:

(H1) High unemployment will be associated with a greater risk of dissolution.

(H2) Low mean wage rates will be associated with a greater risk of dissolution.

## Homeownership as a Marital Specific Asset

Based on several theoretical foundations, we expect that homeownership will influence marital stability. From a *rational choice* perspective, joint homeownership is a martial specific asset, where the utility derived from joint ownership is arguably greater than the utility derived if the asset were split (Becker and Landes 1977). From an *exchange* perspective, joint ownership creates binding ties between individuals. A related *social-psychological* perspective characterizes these binding ties in terms of identity, where ties create a "we" narrative that becomes part of the identity of each individual partner (Sternberg 1998). From a *social integration* perspective, homeownership is a valuable marker of a successful marriage, enveloping homeowners in a select community. Recent empirical research on the importance of homeownership to marriage has come both from quantitative and qualitative studies that have looked at the transition to marriage from a single or cohabiting status. Individuals often note the need to reach a certain material standard—including the ability to own a home—before they can

marry (Clarkberg 1999; Gibson et al. 2003; Smock et al. 1999), and the cost of owning a home appears to decrease the likelihood of marriage, even with controls for income and employment (Hughes 2004; 2003).

Homeownership has been relatively neglected in studies of divorce. An exception is South and Spitze (1986), who find a significant negative relationship between homeownership and divorce. However, an association between investment in homeownership and divorce rates could be due to a selection effect. Individuals who have inherently stronger marriages may be more likely to buy homes, while those with weaker marriages may hesitate to do so. Thus any association shown in empirical models could be due to this endogneity and the results would be spurious. Bruederl and Kalter (2001) were able to control for this effect by using a dataset that specifically determined the onset of marital instability. Holding this instability constant the effect of homeownership decreased the risk of divorce by 39%.

This type of dataset is not available in the American case. We propose that an alternative specification is to use the cost of owner occupied housing as a variable that is related to the ability to purchase a home, but is not related to quality of the marriage. Thus, if we show that housing costs are related to the risk of divorce, this would indicate that individuals do not own homes because of high housing costs rather than because of doubts about the prospects of their marriage. By controlling for individual-level characteristics (employment, income, age, presence of children, etc.) we can ascertain both the effect of homeownership on the likelihood of divorce, as well as the effect of local housing costs on divorce via homeownership, while at the same time lessening the possibility of a selection effect. This leads to the third hypothesis to be tested: (H3) Higher local housing costs will be associated with a greater risk of dissolution.

#### **DATA AND MEASURES**

#### Data

To test these hypotheses, we use data from the Panel Study of Income Dynamics (PSID). The PSID is a longitudinal study of a representative sample of U.S. individuals and the family units in which they reside. The study began in 1968 with 18,224 individuals living in 4,802 families (PSID 2004). The sample was drawn using a split sample methodology in which lower income families were over-represented (Hill 1992). The initial response rate for the PSID was 76 percent. Since 1969 reinterview rates have ranged from 97% to 100% (Hill 1992; Panel Study of Income Dynamics 1998). Sample families were reinterviewed each year through 1997 after which they were interviewed every two years.

One of the unique features of the PSID design is that a child born to a sample member becomes a sample member. In addition, sample members are interviewed even when they leave sample families. For example, a child born in 1969 to a sample family, who then moved out of her parents' household in 1989 at age 20 is a sample member, interviewed first as a part of her parents' household and then in her own independent household. These rules were designed to mimic the populations' family building activity and produce a representative sample of families across time and at a point in time. For our purposes, they mean that we can examine the links between economic context and divorce over nearly twenty years, years differing widely in family behavior, economic context and housing conditions.

Our analytic sample includes respondents who married between 1979 and 1996. We examine first marriages only, because the dynamics of second marriages are different than first marriages and it is unlikely that a sufficient number of cases would be present to make

conclusions for remarriages. We restrict the age ranges to 18 to 50. Most individuals buy a home, get married (and divorced), and have children in this age range.

## **Dependent Variable**

We assess the dependent variable *marital duration* by the measure of whether a married respondent became separated or divorced between interviews. We use estimates of dissolution, rather than divorce, because individuals often separate years before divorcing, and the use of separation instead of divorce only minimally overestimates marital dissolution because of the low possibility of reconciliation (Wineberg 1996).

## **Contextual Measures**

*Housing context*. We include the median value of owner-occupied housing in the county where the respondent lived at a particular interview. This was possible using the PSID restricted files, which provide geographic codes for the respondents' addresses at each interview. We drew the housing cost data from the 1980-2000 Decennial Census Summary Tape Files. Intercensal housing value data for all U.S. counties over the long period we are looking at is simply not available. We therefore used linear interpolation to estimate housing costs for the intercensal years (Hughes 2004). All housing values are in 1979 dollars.

*Labor market conditions.* We use annual unemployment and mean wage rates (deflated to 1979 dollars) calculated from the Current Population Survey's Merged Outgoing Rotation Groups data set. We use these data rather than the March CPS because the outgoing rotation groups contain approximately three times as many observations as the March CPS. Utilizing this data, we calculate mean wage rates be sex, race (black/white) and education level (less than high school, high school, and college) for individuals working at least 35 hours per weak. Disaggregating by race and sex is important because of the difference between wages and

unemployment rates for blacks and whites, and for males and females, with the same level of education. At this level of aggregation, it was not possible to differentiate employment and wages by a geographic area smaller than the state level. However, sufficient observations were available to estimate an aggregate measure for (1) rural areas and (2) metro areas within each state.

Unemployment rates are calculated for those in the labor market, and we provide two measures: one a simple measure of overall unemployment, the second a measure of unemployment/underemployment, drawing on information collected from respondents as to whether the part-time employment in which they are engaged is a substitute for preferred fulltime employment. In general, rates of underemployment in the sample are about one-third larger than those of unemployment, and unemployment rates for blacks are about twice as high as those for whites.

## **Control Variables**

*Lgincome* is the log of the couple's total taxable income (deflated to 1979 dollars). *Propfem* is the proportion of the wife's labor income compared to the couple's labor income. *Age at Marriage* is the marital age of the respondent. Higher age at marriage has been connected to greater marital stability (White 1991; Burgess 2003).

*Birth in interval* determines if there was a birth within the year. While the effect of number and age of children on marital stability is equivocal (Waite and Lillard 1992; Chan and Halpin 2002; Bruderl and Kanter 2001), a birth has a consistent negative impact on the probability of divorce (White 1991).

*College* is a dummy variable indicating some college or a college degree. Higher education has been associated with lower divorce rates.

*Regional controls* correspond to Census regional categorizations. *West, Midwest,* and *Northeast* are compared to South.

Table 1 contains descriptive statistics for the combined sample, as well as for blacks and whites separately.

## **ANALYTIC STRATEGY**

We use an event history model to estimate the risk of marital separation. The dependent variable in the model measures the duration of time that individuals spend in a state before experiencing an event: in this case, separation or divorce. Individuals enter the risk set at marriage and leave the set upon divorce/separation or the terminal year (1997 in this case).

Because the risk of divorce has a distinct time duration effect that can be modeled independent of covariates, we utilize a log-logistic parametric specification, which yields similar results as those in sickle parametric models of divorce (Diekmann and Schmidheiny 2002: Diekmann & Mitter 1984). Survival estimation with parametric models cannot be recommended unless there is adequate theoretical and empirical for the shape of the duration dependency. In the case of divorce, the distinct bell-shaped curve, where risk of divorce peaks in the sixth or seventh year of marriage and then declines monotonically thereafter, lends itself well to a parametric specification (Blossfeld, Hamerle and Mayer 1989). By specifying the shape of the duration dependence, the scale parameter estimated to describe this time dependence utilizes fewer degrees of freedom than in the more commonly used discrete-time framework. A more parsimonious specification increases the explanatory power of covariates for the testing of the hypotheses.

We correct for clustering due to multiple observations on the same individual, and for the possibility of unobserved heterogeneity (using the *frailty* command within STATA 8.0). We model first using individual-level variables, and then progressively add contextual variables.

## **RESULTS AND DISCUSSION**

Results are contained in Table 2. Model one uses individual-level predictors. Note that in the parametric specification of survival models, the duration is estimated, rather than the risk of failure. Thus a positively signed coefficient implies that the expected duration increases for increase in the value of a covariate while a negatively signed coefficient implies that the expected duration decreases for an increase in the value of the covariate.

The individual-level coefficients are significant and in the expected direction, with greater age at marriage, higher income, greater education and birth during the year associated with positive duration of the marriage. Being black, having a premarital birth, and wives' greater proportion of labor earnings create instability. The negative value on the *black\*premarital* interaction, however, offsets the main effect, making the risk of a premarital birth unimportant in reducing the duration probability for blacks.

Model 2 adds regional controls. Results indicate that divorce rates in the Northeast are distinct from those in the South. The effect of this regionality could be social cohesion promoted by religious homogeneity, or the positive impact of higher income or education in that region compared to the South. While the interpretation of regional effects is beyond the scope of this analysis, we maintain these controls for all models.

Model 3 adds housing value to the individual-level covariates. County housing cost as specified here is not a significant predictor of marital duration. While the same specification has proven robust in predicting transitions from single to cohabitating and marital statuses (Hughes

2003), we suspect that any effect on marital duration may be obscured by correlation between the price of housing and individual income. This is suggested by the loss of significance of both *Couple's Taxable Income* and *> HS education* when county housing costs are included. Individuals with high incomes disproportionately live in counties with high incomes, so that the positive effect of individual income on marital duration (and associated higher income in the county) may overpower any negative impact of higher housing costs. Future work should include a control variable for county-level mean income, as well as a possible respecification to labor market areas, to further test the relationship.

Models 4 and 5 consider the possible impact of higher unemployment rates, or, alternatively, higher underemployment. In both cases, we do not find these to be significant predictors of marital stability. While individual unemployment status is predictive of marital instability, the contextual effect may be more consequential in preventing the transition to marriage, rather than increasing the probability of divorce, simply because conditions of high unemployment prevent marriages from ever occurring (Oppenheimer 2003).

Model 6 adds the sex/gender/education-specific mean wage. The effect is significant, with higher mean wages appearing to contribute a protective effect on marital stability over and above the effect of individual income. The coefficient can be interpreted as a follows: a \$1.00 increase in the hourly mean wage for individuals living in the area associated with that wage increases the likelihood that marriage endures an additional year by about 4.7%. Generalizing to the average wages across the sample, a \$1.00 increase constitutes approximately a 10% increase in the mean wage.

Model 7 includes an interaction between *black* and *mean wage*. The value is negative and significant. While leaving the coefficient values and significance of the individual-level and

regional values relatively untouched, the significance of *black* is lost when this interaction is included. This suggests several interpretations, discussed in the concluding section of this paper.

In analyses not reported here, interactions between *meanwage*, *black\*meanwage*, and the region variables were insignificant and did not appreciably change the values or significance of the other covariates. The same was true when urban and rural status were included, measured by residence within an MSA. This indicates that it is not regional or urban/rural differences in wages that accounts for the Model 7 results. We also doubt that the attenuation of the black effect when *black\*meanwage* is included is due to correlation between individual wages and mean wages, as these correlate at approximately 0.30 for both whites and blacks in the sample.

An interaction between historical time and *meanwage* was also not significant, indicating that the impact has not changed appreciably over the last two decades. In keeping with prior work on the relative consistency in individual-level predictors of martial instability over the past two decades (Teachman 2002), we do not find that the impact of these predictors has changed significantly across the sample years.

#### DISCUSSION

In this paper we establish the relationship between labor market opportunity, measured by mean wage rates, and marital stability. Our work contributes to the growing literature examining the effects of labor market opportunities on a wide range of individual outcomes. Contrary to expectations, we did not see a significant effect of the cost of housing on marital stability, nor any impact of unemployment or underemployment. What we did find was a racially distinct impact of mean wage levels on the likelihood that marriages would endure. White individuals who live in areas associated with higher mean wage rates are less likely to divorce compared to those in areas with lower mean wage rates. This effect is net of both

individual-level controls, and regional effects that could systematically impact mean wage levels. This lends support to the importance of the broader socioeconomic environment in conditioning prospects for marital stability.

For blacks, however, our measure of labor market opportunity has no impact on marital stability. This result suggests multiple interpretations, and adjudicating between these provides grounds for future research. One interpretation is that black marriages do not respond to economic opportunities in the same way that whites do. While at the individual level black couples with higher incomes have greater marital stability than black couples with lower income, based on our analysis the broader economic context represented by wage levels simply has no impact, suggesting a fundamental difference in the connection between economic circumstances and marital dissolution for blacks. A second possibility is that the effect of mean wage is non-linear, where the force of wages on marital stability is significant only at higher levels. As a result, the concentration of blacks at the lower end of the wage curve (Stratton 1993) means we see no effect of mean wages *within* this social grouping. Future work should assess the extent to which the non-effect of wage levels on black marital stability is due to a possible concentration of blacks on the lower end of the wage curve, and if this concentration is due to spatial concentration within generally poor labor market contexts.

#### References

- Aberg, Yvonne. 2003. "Is Divorce Contagious? The Marital Status of Coworkers and the Risk of Divorce." Oxford University and Stockholm University.
- Amato, P.R., and Rogers S.J. 1997. "A Longitudinal Study of Marital Problems and Subsequent Divorce." *Journal of Marriage and the Family* 59:612-624.
- Becker, Gary S. 1981. A Treatise on the Family. Cambridge, MA: Harvard University Press.
- Becker, Gary S., Elisabeth M. Landes, and Robert T. Michael. 1977. "An Economic Analysis of Marital Instability." *Journal of Political Economy* 85:1151-1187.
- Bellair, Paul E., and Vincent J. Roscigno. 2000. "Local Labor-Market Opportunity and Adolescent Delinquency. *Social Forces*. 78(4): 1509-1538.
- Blau, Peter M. 1964. Exchange and Power in Social Life. New York: Wiley.
- Blossfeld, Hans-Peter, Alfred Hamerle, Karl Ulrich Mayer. 1989. Event History Analysis: Statistical Theory and Application in the Social Sciences. Hillsdale, NJ: Lawrence Erlbaum.
- Bruderl, J. and F. Kalter. 2001. "The Dissolution of Marriages: The Role of Information and Marital-Specific Capital." *Journal of Mathematical Sociology* 25:403-421.
- Burgess, S., C. Propper, and A. Aassve. 2003. "The Role of Income in Marriage and Divorce Transitions among Young Americans." *Journal of Population Economics* 16:455-475.
- Chan, Tak Wing; Halpin, Brendan. 2001. "Divorce in the UK." in *Sociology Working Papers*. Oxford.

Diekmann, A. and P. Mitter (1984). A Comparison of the "Sickle Function" with alternative Stochastic Models of Divorce Rates. <u>Stochastic Models of Social Processes</u>. P. Mitter. Orlando, FL, Academic Press: 123-153.

Cherlin, Andrew J., P.L. Chase-Landsdale, C. McRae. 1998. "Effects of Parental Divorce on Mental Health Throughout the Life Course." *American Sociological Review* 63:239-249.

- Clarkberg, Marin. 1999. "The Price of Partnering: The Role of Economic Well-Being in Young Adult's First Union Experiences." *Social Forces* 77:945-968.
- Crutchfield, Robert D., and Susan R. Pitchford. 1997. "Work and Crime: The Effects of Labor Market Stratification." *Social Forces* 76:93-118.
- Diekmann, Andreas, and Kurt Schmidheiny. 2002. "The Intergenerational Transmission of Divorce: an International Comparison with Fertiliy-and-Family Survey." in *Divorce in*

*Cross-National Perspective: A European Research Network.* European University Institute, Florence, Italy.

Diekmann, Andreas, and P. Mitter. 1984. "A Comparison of the 'Sickle Function' with Alternative Models of Divorce Rates." <u>Stochastic Models of Social Processes</u>. Orlando: Academic Press.

- Faust K. and J. McKibben. 1999. "Marital Dissolution : Divorce, Separation, Annulment, and Widowhood." Pp. 475-499 in *Handbook of Marriage and the Family*. 2nc ed., edited by M. Sussman, S. Steinmetz, and G. Peterson. New York: Plenum.
- Friedberg, Leora. 1998. "Did Unilateral Divorce Raise Divorce Rates: Evidence from Panel Data." *American Economic Review* 88:608-27.
- Gibson, Christina, Kathryn Edin, and Sara McLanahan. 2003. "High Hopes But Even Higher Expectations: The Retreat from Marriage Among Low-Income Couples." Princeton, University. Center for Research on Child Wellbeing Working Paper.
- Goldstein, Joshua R. 1999. "The Leveling of Divorce in the United States." *Demography* 36:409-414.

Gould, Eric D., Bruce A. Weinberg, and David B. Mustard. 2002. "Crime Rates and Local Labor Market Opportunities in the United States: 1979-1997. *The Review of Economics and Statistics*. 84(1): 45-61.

- Greenstein, T.N. 1990. "Marital Disruption and the Employment of Married Women." *Journal of Marriage and the Family* 52:657-676.
- Hill, Martha. 1992. *The Panel Study of Income Dynamics: A User's Guide*. Newbury Park, CA: Sage.
- Hoffman, S. and Duncan G. 1997. "The Effect of Incomes, Wages, and AFDC Benefits on Marital Disruption." *Journal of Human Resources* 30:19-41.

Homans, George C. 1961. Social Behaivior: Its Elementary Forms. New York: Harcourt Brace.

- Hughes, M.E. 2004. "What Money Can Buy: The Relationship Between Marriage and Home Onwership in the United States." in *Annual Meeting of the Population Association of America*. Boston, M.A.
- Hughes, Mary Elizabeth. 2003. "Home Economics: Metropolitan Labor and Housing Markets and Domestic Arrangements in Young Adulthood." *Social Forces* 81:1399-1429.
- Lesthaeghe, Ron, and Guy Moors. 2002. "Life Course Transitions and Value Orientations: Selection and Adaptation." in *Meaning and Choice: Value Orientations and Life Course Decisions*, edited by R. Lesthaeghe. Brussels: The Hague.

- Oppenheimer, V. K. 1997. "Women's Employment and the Gain to Marriage: The Specialization and Trading Model." *Annual Review of Sociology* 23:431-453.
- Oppenheimer, V. K. 2003. "Cohabiting and Marriage During Young Men's Career-Development Process." *Demography* 40:127-149.

Panel Study of Income Dynamics. 2004. (http://www.psidonline.isr.umich.edu).

- Pinsof, W. M. 2002. "The death of "Till Death Us Do Part": The Transformation of Pair-Bonding in the 20th Century." *Family Process* 41:135-157.
- Raley, 2000. "Recent Trends and Differentials in Marriage and Cohabitation: The United States." Pp. 19-39 in *The Ties that Bind: Perspectives on marriage and Cohabitation*, edited by L. J. Waite. New York: Aldine de Gruyter.
- Bellair, Paul E. and Vincent J. Roscigno. 2000. "Local Labor-Market Opportunity and Adolescent Delinquency." *Social Forces*. 78(4):1509-1538.
- Ruggles, Steven. 1997. "The Rise of Divorce and Separation in the United States, 1880-1990." *Demography* 34:455-66.
- Schoen, R., N. M. Astone, K. Rothert, N. J. Standish, and Y. J. Kim. 2002. "Women's Employment, Marital Happiness, and Divorce." *Social Forces* 81:643-662.
- Smock, Pamela J., Wendy D. Manning, and Sanjiv Gupta. 1999. "The Effect of Marriage and Divorce on Women's Economic Well-Being." *American Sociological Review* 64:794-812.
- South, S. J. 1995. "Do You Need to Shop around Age at Marriage, Spousal Alternatives, and Marital Dissolution." *Journal of Family Issues* 16:432-449.
- South, Scott J., Katherine Trent, Yang Shen. 2001. "The Geographic Context of Divorce: do Neighborhoods Matter?" *Journal of Marriage and the Family* 63:755-767.
- South, Scott J. 2001a. "Time-Dependent Effects of Wives' Employment on Marital Dissolution." *American Sociological Review* 66:226-45.
- South, Scott J. 2001b. "The Geographic Context of Divorce: Do Neighborhoods Matter?" *Journal of Marriage and Family.* 63:755-766.
- South, S.J., and K.M. Lloyd. 1995. "Spousal Alternatives and Marital Dissolution." *American Sociological Review* 60:21-35.
- South, Scott J., Katherine Trent, and Yang Shen. 2001. "Changing Partners: Toward a Macrostructural-Opportunity Theory of Marital Dissolution." *Journal of Marriage and the Family* 63:743.

- South, Scott J., and Glenna Spitze. 1986. "Determinants of Divorce over the Marital Life Course." *American Sociological Review* 51:583-590.
- South, Scott J., and Kim M. Lloyd. 1992. "Marriage Opportunities and Family Formation: Further Implications of Imbalanced Sex Ratios." *Journal of Marriage and Family* 54:440-51.
- Sternberg, R.J. 1998. Love is a Story: A New Theory of Relationships. New York: Oxford University Press.
- Stratton, Leslie S. 1993. "Racial Differences in Men's Unemployment." *Industrial and Labor Relations Review.* Vol 46. No3. 451-463.
- Thornlindsson, Thorolfur and Jon Gunnar Bernberg. 2004. "Durkhiem's Theory of Social Order and Devianca: A Multi-level Test." *European Sociological Review* 20: 271-285.
- Trent, Katherine, and Scott J. South. 2003. "Spousal Alternatives and Marital Relations." *Journal* of Family Issues 24:787-810.
- Tzeng, J. M. and R. D. Mare. 1995. "Labor-Market and Socioeconomic Effects on Marital Stability." Social Science Research 24:329-351.

Tucker, M. Belinda and Claudia Mitchell-Kernan, eds. 1995 *The Decline in Marriage Among African Americans: Causes, Consequences, and Policy Implications*. New York: Russell Sage Foundation.

- Waite, Linda J. and Lee A. Lillard. 1991. "Children and Marital Disruption." *American Journal* of Sociology 96:930-953.
- Weiss, W.Y., and R.J. Willis. 1997. "Match Quality, New Information, and Marital Dissolution." *Journal of Labor Economics* 15:S293-S329.
- White, Lynn K. 1991. "Determinants of Divorce: A Review of Research in the Eighties." *Journal* of Marriage and the Family 52:904-12.
- Wineberg, Howard. 1994. "Marital Reconciliation in the United States: Which Couples Are Successful?" *Journal of Marriage and Family* 56:80-88.

Table 1. Definitions and Descriptive Statistics for Variables Used in Event-History Models of Marital Dissolution: PSID 1979 to 1997

Variable	Definition	races con mean	bined SD	<b>w h</b> i mean	te S D	<b>blac</b> mean	s D
Marital dissolution	W hether couple divorced or permanently separated	32.43%		25.02%		45.34%	
Person-years	person-years contributed to sample	12,815		8,753		4,082	
Premarital birth	wife experienced premarital birth	14.71%		7.84%		26.71%	
Log of annual couple income	gross annual taxable income for the couple, logged	9.8	0.79	96.6	0.70	9.47	0.86
Proportional income of wife	labor income of wife as proportion of couples' labor income	30%	0.24	30%	0.24	33%	0.26
Meanwage less than HS HS some college or college	mean wage in state, calculated by state/rural and state/urban (urban measured as an MSA)	\$6.81 \$9.25 \$12.34	1.70 2.20 3.40	\$6.78 \$9.81 \$12.30	1.53 2.24 4.03	\$6.83 \$8.27 \$10.20	1.80 1.80 2.52
Unemployment less than HS HS some college or college	mean unemployment rate in state, calculated by state/ rural and state/urban (urban measured as an MSA)	19.40% 8.60% 8.50%	10.50% 4.80% 4.90%	12.80% 6.70% 6.10%	4.80% 2.10% 2.10%	23.00% 13.00% 13.30%	11.00% 5.00% 5.30%
Underemployment less than HS HS some college or college	m ean underem ploym ent rate in state, calculated by state/ rural and state/urban (urban m easured as an MSA)	26.50% 12.10% 11.80%	12 .90% 6 .40% 6 .30%	18.30% 9.00% 8.80%	7.80% 3.40% 3.30%	32.00% 17.50% 17.70%	12.80% 6.70% 6.80%
Age at m arriage	respondents age at first marriage	24	5.60	24	4.60	24	4.70
Experienced birth in interval	personyears with birth between times t and t+1	14%		15%		14%	
Education: degree obtained < HS HS College	degree held in survey year < 12 years education holds highschool degree has som e college or college degree	6.90% 45.22% 47.88%		3.65% 41.50% 54.85%		12.58% 51.71% 35.71%	
County hom e value	mean value of owner-occupied housing	\$51,383	\$29,781	\$54,075	\$30,602	\$45,619	\$27,058
Region South W est M idwest N ortheat	percentage of sample in each census region	42% 15% 19%		27 29% 25%		72% 13% 7%	
Num ber of respondents	total repsondents in subsam ple = individuals who marry hetween years of 1979 and 1996	1,767		1,123		644	

Covariate	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Age at marriage	0.040 ***	0.037 ***	0.037 ***	0.033 ***	0.033 ***	0.033 **	0.033 **
Black	-0.633 ***	-0.586 ***	-0.586 ***	-0.480 ***	-0.480 ***	-0.535 ***	0.139
Couple's Taxable Income (logged)	0.301 ***	0.295 ***	0.291 **	0.261 **	0.261 **	0.271 ***	0.276 ***
Birth within survey year	0.549 ***	0.545 ***	0.544 ***	0.521 ***	0.521 ***	0.544 ***	0.539 ***
Premarital birth	-0.617 ***	-0.661 ***	-0.659 ***	-0.664 ***	-0.664 ***	-0.638 ***	-0.619 ***
Black * Premarital	0.701 ***	0.737 ***	0.735 ***	0.790 ***	0.796 ***	0.728 ***	0.672 ***
Wives' proportion of couples labor income	-0.004 ***	-0.004 ***	-0.004 ***	-0.003 ***	-0.003 ***	-0.003 **	-0.003 **
> HS education	0.285 ***	0.283 ***	0.282 ***	0.263 ***	0.255 ***	0.211 **	0.209 **
West		-0.129	-0.147	-0.058	-0.063	-0.183	-0.158
Midwest		0.088	0.095	0.113	0.108	0.068	0.090
Northeast		0.331 ***	0.326 ***	0.351 ***	0.346 ***	0.267 **	0.279 **
County Housing Costs (\$1000s)			0.001				
Mean Unemployment Rate 👭				-1.080			
Mean Underemployment Rate^∧					0.872		
Mean Wage^						0.031 ***	0.056 ***
Black * Mean Wage							-0.073 **
log likelihood	-1377	-1373	-1370	-1417	-1417	-1367	-1365
Chi-sq	308	313	308	176	174	326	319
df	6	12	13	13	13	13	14
BIC (comparison to Model 1)		-4.279	-2.372	-96.372	-96.372	3.628	3.536

Table 2. Coefficients from Loglogistic Parametric Models of Marital Duration, Panel Study of Income Dynamics 1979-1997^

\* p <= .10 \*\* p <= .05 \*\*\*p <= .01

<sup>A</sup> The parametric model predicts the duration of marriage, not the risk of divorce.
<sup>AA</sup> State mean wages and unemployment rates are caclculated separately for urban and rural areas and are gender, race and education specific

 $\mathfrak{c}$