Marital Disruption during the Great Recession:

Divorce Filings in Five U.S. States

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Abstract

The arrival of an economic crisis more severe than any since the Great Depression provides a unique opportunity for assessing the resilience of marriage as an institution in the 21st century U.S. This project makes use of ideas from sociology, the economics of the family, and behavioral economics to analyze the effects of changes in local labor and housing markets immediately before and during the Great Recession of 2007 – (?) on county-level rates of filing for divorce. Rates based on divorce petitions filed with county courts from the third quarter of 2005 – the third quarter of 2011 will be analyzed for five states -- Arizona, Florida, Minnesota, Ohio, and Washington State -- to examine how recession-driven changes in the environment create new uncertainties about employment and asset values that potentially upend wives' or husbands' perceptions of "gain" from marriage. In addition, the county-court data on divorce filings in these states permit an examination of how local features of the economic downturn affect filings among couples with dependent children vs. those without children at home, providing new information about the impact of the recent recession on children in married-couple households.

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Extended Abstract

Introduction

The tumultuous events of the past several years have rekindled interest in the robustness of marriage as an institution during periods of severe economic dislocation. For many middle class families, the 2007-2008 collapse of U.S. housing and credit markets removed an increasingly key source of support for household consumption (Warren and Tyagi 2003; Treas 2010). The crisis has also precipitated an unusually deep and widespread period of job loss that now extends into most sectors of the economy and is held responsible for stubbornly-high levels of unemployment and underemployment. The consequences of this economic turbulence for married-couple families have been the subject of speculation among journalists and the public alike, ranging from coverage of the "he-cession" of job loss in traditionally-male sectors of employment and its consequences for marriage, to recent claims about the increasing prevalence of "undivorced" couples who resolve to lead separate lives but say they cannot "afford" to liquidate jointly-held assets that are now worth pennies on the dollar.¹

In the paper proposed for the 2012 PAA Annual Meeting, we will draw from perspectives in sociology, the economics of the family, and behavioral economics to analyze the effects of changes in local labor and housing markets during the Great Recession on rates of filing for divorce. Working with official records of divorce petitions filed with county courts from Quarter 3 of 2005 – Quarter 3 of 2011 for five states – Arizona, Florida, Minnesota, Ohio, and Washington State – we will examine how, at the county level, dissolution behavior responds to recession-driven changes in the environment that create new uncertainties about employment and asset values, and that more broadly disrupt wives' and husbands' expectations of gain from marriage. In addition, the data on divorce filings for these states permit us to model the effects of changes in the local economic environment on divorce action that does and does not involve the custody of minor children.

We have already obtained the divorce-filing data for all five states, and have completed an analysis of quarterly filings for Washington State counties between 2000-2010 using models that include lagged county-level indicators of the distribution of jobs by sector, sectoral wage rates, average home values, household income and poverty rates, as well as other features of the local environment that may affect divorce behavior (Brines and Serafini 2011). Through this work, we have created a unique time series of precise, contemporaneous data on divorce action and its correlates before and during the Great Recession at a lower level of aggregation than is available elsewhere. Our work with the Washington State data has also led to the creation of a county-level measure of the at-risk population that offers a more accurate estimate of the denominator for divorce rates than is used in most aggregate-level analysis. The paper based on this work is in the final stages of revision for review at one the top general journals in sociology (*Social Forces*).

Most theories of marital disruption address dynamics at the couple- or household-level. Because of lags in data collection and public release, couple-level panel data adequate to the task of testing these ideas (e.g., the Panel Study of Income Dynamics) will not be available for another few years. For this paper,

¹ See Pauline Paul, "The Undivorced." *New York Times*, July 30, 2010; Susan Pease Gadaua, "Contemplating Divorce: Whether you Should Stay or Go." *Psychology Today*, August 22, 2010; Anna Pryor, "Keeping Finances Afloat during a Divorce." *Wall Street Journal*, June 29, 2009

we intend to use county-level data from multiple, strategically-selected states to test hypotheses about the response of couple-level behavior to local signals about employment and housing markets. In this way, the paper will advance the building and preliminary testing of theory until couple-level panel data become available.

In addition to meeting these aims, the paper will provide new descriptive knowledge about divorce behavior during the Great Recession. Compared to more highly-aggregated data like those available from the CDC's National Center for Vital Statistics, the county-level data promise to expose heterogeneous trends in divorce since the crisis began. From the Washington State data, we have uncovered a handful of distinct patterns by county since 2007; such patterns, and the effects of local conditions that underlie them, are masked when divorce rates are examined using the CDC's state-level, annual data.

Moreover, our use of data on divorce/separation petitions filed with the courts captures one of the earliest recordable, systematic signals of a shift in levels of marital disruption in communities. This is important not only because the window of observation concerning the effects of the Great Recession is still quite limited (since Dec 2007), but because using other available indicators of marital disruption (for example, rates based on finalized divorces) constricts the window of observation even further; most jurisdictions impose waiting times after an initial filing and in many states, these can be quite significant (e.g., up to two years). From our analysis of Washington State filings data extending back to January 2000, we detect a strong positive effect of unemployment rates on divorce filings during the months of the Great Recession, little to no effect during the midyears of the decade, and another positive effect during the early 2000s (on the heels of the dot-com bust and the 2001 recession). These findings suggest that filing decisions are sensitive to near-contemporaneous changes in local employment conditions within the context of a recessionary horizon. An important question is whether these patterns hold for other regions of the country.

Empirical Trends and Background

Economic uncertainty, broadly defined, has been linked to marital disruption by several empirical studies over the past several decades. The evidence from these studies shows that marriages are disrupted during economic downturns, especially among couples on the lower end of the socio-economic distribution, because spouses are under pressure to keep their families and lifestyles afloat. Conflicts arise when partners, especially men, are less able to support their families if they are chronically unemployed or have insufficient earnings (Cherlin 1992; Conger et al. 1990; Liem and Liem 1990). Macro-level indicators of economic turbulence and uncertainty, such as men's declining labor market opportunities (Oppenheimer 1997; Ruggles 1997), rising inflation (Nunley 2009), and eroding consumer confidence (Fischer and Liefbroer 2006), also have been linked to rates of marital instability. Moreover, during periods of economic contraction, partners may avoid costly joint investments such as housing because they lack the financial resources or because the uncertainty of the environment deters large investments of this type. This has consequences for marriage and divorce because these investments strengthen interdependence and build cohesiveness in couples; when they are foregone, spouses miss an opportunity to solidify their ties to each other (Brines and Joyner 1999; Kalmijn et al., 2007).

The general trend over the last quarter-century is one of declining divorce rates in the U.S. – the number of divorces relative to the "at risk" population declined from a peak of 22.8 divorces per thousand married couples in 1979 to 16.7 in 2005 (Stevenson and Wolfers 2007). However, we know comparatively little about how recent changes in the economy have affected family stability. On the

one hand, changes in the structure of labor markets and the rise of new forms of contingent or nonstandard employment may have acclimated today's husbands and wives, especially young married people, to the idea that work is precarious (see Kalleberg 2009); hence, unemployment may be less disruptive for marriages today than it was a few decades ago. On the other hand, the rise in homeownership and in beliefs about the centrality of investing to ensure a prosperous future in an era of flat wages may have introduced a new factor (or magnified the importance of an old one) in calculations of the costs of divorce.

The sustained decline of the divorce rate through midpoint of the last decade establishes a benchmark from which one can gauge the somewhat contested effects of the Great Recession on marital disruption. Annual state-level figures released by the CDC for the years 1999-2009 show a dropoff of rates through the decade, although the rate of change appears to slow near the decade's end. Less aggregated data, along with theory, suggest that the recession may have had a localized effect on divorce behavior as a downturn in proximate labor and housing markets heightens uncertainty or otherwise reduces the "gain from marriage" (Becker 1981).

Theoretical Framework: Risk, Uncertainty, and Marital Disruption

In the midst of difficult times, marriage and family life can offer comfort and solace, as well as a refuge from harsh treatment by impersonal markets (Coontz 2007; Zelizer2005). Affection, caring, or spiritual and moral concerns certainly play an active role in binding couples together through periods of crisis. However, these underpinnings of marital solidarity coexist with the pursuit of utilitarian self-interest. By taking the latter as a starting point, one can enlist models of decision making that help specify predictions about behavior, including divorce behavior, that are falsifiable and aggregate up in ways that permit inferences based on aggregate-level data.

The use of a decision making framework to guide research immediately raises questions about the roles of risk and uncertainty in deliberations over choice. Risk and uncertainty are defined in various ways, but nearly all definitions emphasize imperfect knowledge about the consequences of different choices (Huettel and Platt 2008; Bell 1982). Where decisions rely on assessments of risk, decision makers work from a known distribution of possible outcomes that follow from one or another choice. Uncertainty describes conditions of decision making where the distribution of possible outcomes is unknown or poorly understood (Kahneman and Tversky 1979; Tversky and Fox 1995).

The centrality of uncertainty and risk in decisions to terminate or remain in a marriage first appears in the classic paper by Becker, Landis, and Michael (1977). The dilemma for a wife or husband considering divorce is whether or not s/he will be better off leaving or staying, and weighing either prospect involves projections of well-being under the two scenarios. Most discussions of how uncertainty affects the divorce decision focus on sudden or unanticipated changes in household circumstances, like the loss of the primary income-earner's job (Weiss and Willis 1997). Less common are studies that examine the consequences of secular change that unsettle a person's previously-held assessments of how risky it is to remain married or get divorced. If the outcomes of divorce – almost always more uncertain than those associated with staying married to the current spouse – become even more opaque during an unprecedented economic downturn, then one would expect fewer people to file for marital dissolution. To the extent that marriage is, among other things, a form of social insurance, couples will remain together, at least until better information surfaces about the potentially-altered structure of alternatives to the current marriage.

Hypotheses

A basic premise of the proposed paper is that the recent recession, via its effects on local employment and housing markets, has altered perceptions about the relative advantages of staying married vs. getting a divorce. Below we discuss several hypotheses about county-level patterns in divorce filings that follow from changing signals about the prospective gain from marriage. We will focus on two sources of uncertainty: change in the "production complementarities" between husbands and wives that rest in part on gender differences in employment opportunities and wage rates (Becker 1981; Stevenson and Wolfers 2007), and change in returns from wealth-building investments, like a home, that presume a long term joint commitment (Bracher et al. 1993; Chaulk et al, 2003; Ranier and Smith, 2009; South and Spitze 1986). We first discuss predictions that are restricted to divorce filing rates during the months of the Great Recession. Next, we turn to hypotheses about differences between the pre-recessionary (2005-2007) and recessionary (2008-2011) periods. Finally, we offer some predictions about how these effects might differ for filing rates that involve couples with children vs. filings for couples who have no dependents.

Unemployment and Wage Rates

Where job loss and wage erosion is concentrated in the manufacturing sector, this undermines a traditional source of advantage in men's wage rates and reduces the gain from marriage arising from men's and women's "production complementarities," increasing the likelihood of divorce. Where job loss and wage erosion is concentrated in the service and government sectors of employment, sectors of traditional strength in women's wage rates, I expect a drop in filings, especially those involving couples with dependent children as the opportunity costs for women of staying home and their prospects for supporting self and children in the event of divorce both diminish. Where county-level declines in employment and wage rates are distributed proportionally across sectors, then heightened uncertainty about future employment and income streams is generalized and spouses have an incentive to pool risks and remain married, leading again to a predicted drop in the filing rate.

Home Values and Foreclosures

We expect declining home values and rising foreclosure rates to likewise lead married couples to pool risks and remain married. Joint ownership of a home with an "underwater" mortgage transforms an investment into a liability, potentially increasing the costs of divorce as neither spouse wants to be saddled with the outstanding debt. We therefore expect that for counties with declining housing values, filing rates will also decline as couples who might have otherwise divorced attempt to ride out the housing downturn to recover value on such a large joint investment. For similar reasons, we expect county foreclosure rates to have a negative effect on divorce filings. We expect both effects to be conditional on the proportion of housing units in a county that are owner-occupied, and to arise after 2007 in response to the slump in property values that persists throughout most of the country.

Temporal Comparisons

Unemployment and Wage Rates

In the early part of the decade, decisions about divorce may have incorporated information about the local job market as a signal about cyclical phenomena. However, evidence is beginning to surface that over the course of the last decade, unemployment rates came to signal an underlying structural transformation in employment and wage earning (Spence and Hlatshwayo 2011). What are the

implications for married couple households? In the early 2000s, elevated unemployment rates arguably conveyed information about the risks of a temporary set-back until self or spouse found a new job, whereas by the end of the decade, unemployment rates foretold risks of chronic unemployment or underemployment that could permanently affect a family's access to resources. Although the decoupling of economic recovery from job growth and productivity from worker compensation began a few decades ago, the process has accelerated since 2000 (Spence and Hlatshwayo 2011). Moreover, the mid-decade collapse of consumer credit that could have been be used to help "patch" household budgets exposed households in a different way to the risks of unemployment and wage stagnation, and has in turn made these hazards more salient for husbands and wives (Warren and Tyagi 2003). If the widely-reported disproportionate impact of the Great Recession on male employment is a concentrated phase of a longer- term structural shift, and is perceived as such by wives who are re-evaluating the "gain from marriage," then the positive effect of unemployment on divorce filings should be stronger during the 2008-2011 period. This is in fact what we find with the Washington State data. We will run additional tests to see if strongest positive effects of recession-era unemployment emerge where job loss is concentrated in the male dominated goods-producing sector, and in local labor markets where average wage growth in this sector is, compared to other sectors, weak or even negative.

Housing Values and Foreclosures

A recent paper using British housing data shows that negative shocks in median home prices increase the risk of divorce, suggesting that declining asset values reduce expected gains for married homeowners and increase the propensity to end the marriage (Rainer and Smith 2010). However, this analysis is based on data from 1991-2004, a time when, aside from year-to-year fluctuations, British housing prices were steadily increasing and decisions to dissolve a marriage might have been based on expectations of gain from investments like a home among married men and women forecasting good alternatives. Since the housing market collapse of 2007-08, declines in house prices in both Britain and the U.S. have been precipitous and behavior is arguably now backward-looking and focused on averting loss (Barberis et al. 2001; Edwards 1996). Moreover, by the time of the collapse, homeowning couples may have become particularly loss-averse since by the middle of the decade, the dominant form of most married couples' wealth had become their home. We therefore expect negative shocks in home prices and rising foreclosure rates to reduce divorce filing rates after 2007, whereas these effects might well operate in a different direction before the 2007-08 collapse. These effects should be stronger in counties with high rates of home ownership.

Effects on Divorce Filings Involving Children

The five states included in this study record divorce filings that involve couples with dependent children separately from those filed by couples without dependents. The effects of disrupted employment and housing markets should differ for these two types of filings because the payoffs from a specialized division of labor and from investments in a home differ for couples depending on whether or not children are present (Becker 1981; Chaulk et al., 2003).

Earlier, we hypothesized that in counties where job loss and wage erosion in the aftermath of the recession is pronounced in the traditionally female strongholds of service-sector or government employment, filing rates for couples with dependent children would drop. In addition, we expect the effects of home prices and foreclosure activity to differ for the two types of filings. For couples with children, a home is not merely a financial asset. In fact, its primary value might arise from how it anchors the family in a community and thereby confers access or rights to public goods like schools, parks, and other forms of community infrastructure that enhance family "quality of life." Recession-linked declines in county property values affect the local tax base for schools and herald declining revenues for public

goods that support parenting. We expect this to be destabilizing for families and to increase filings for divorce involving children, but we also expect considerable lags in this effect as the diminished provision of these community goods takes time to unspool and to be perceived by the public. We also suspect that these effects might differ by the income level of a county – in more affluent counties, parents might be better able to compensate for declining public goods by providing substitutes (such as private schooling) for their children.

Design of the Paper

The proposed paper includes comparable data from several states that nonetheless differ on key dimensions. The five states and their characteristics are listed in Table 1 below.

Table 1. Profile of Proposed States for County-level Analysis of Divorce Filings.						
State	Unemployment Rate ^a		Foreclosure	# Divorces Granted ^c		Divorce Law/Filing
	Dec '07	Dec '09	Rate, Q3 2009 ^b	Dec '07	Dec '09	Residency Requirements ^d
Arizona	4.7	9.2	1/53	1,952	1,916	No-fault/90 days
				(3.9)	(3.5)	
Florida	5.0	11.7	1/56	6,016	6,055	No-fault/60 days
				(4.6)	(4.2)	
Minnesota	4.7	7.4	1/217	NA	NA	No-fault/180 days
Ohio	5.8	10.8	1/171	2,776	2,312	No fault or fault/180 days
				(3.4)	(3.3)	
Washington	4.6	9.2	1/264	2,225	2,187	No fault/current resident
				(4.0)	(3.9)	

^aBureau of Labor Statistics, seasonally adjusted rates; ^bRealtyTrac, ^cCDC, National Center for Vital Statistics, ^dState laws

In addition to introducing regional variation, our primary purpose in selecting these states was to build in more variation in unemployment rates and housing shocks observed during the recessionary period --Washington State's labor and housing markets have been somewhat sheltered from the worst of the downturn. We will limit our focus to states whose divorce laws and filing procedures are relatively wellmatched. The selection was also limited by practical concerns regarding the quality of divorce filing data; states vary widely in the centralization of their county-level recordkeeping. After careful investigation into states' data collection systems, Arizona, Florida, Minnesota and Ohio counties were identified as the best candidates for this project.

In the next few months, we will merge these data with county-level unemployment, housing and demographic indicators and use the resulting file to model the effects of the Great Recession on marital stability in different regions of the U.S. The demographic indicators will be used primarily as control variables, and include measures of net migration, racial and ethnic composition, and population density. We will a fixed-effects modeling approach to eliminate potential sources of bias due to county-invariant, unobserved heterogeneity that might be correlated with divorce filings. In addition, we plan to use a moving-average strategy to correct for seasonality in divorce filings (something we observed in the Washington State data).

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