Cross-National Comparisons of Union Stability in Cohabiting and Married Families With Children

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Abstract

Increases in cohabitation, nonmarital childbearing, and partnership dissolution have reshaped the family landscape in most Western countries. The United States shares many features of family change common elsewhere, although it is exceptional in its high degree of union instability. In this study, we use the Harmonized Histories to provide a rich, descriptive account of union instability among couples who have had a child together in the United States and several European countries. First, we compare within-country differences between cohabiting and married parents in education, prior family experiences, and age at first birth. Second, we estimate differences in the stability of cohabiting and married parents, paying attention to transitions into marriage among those cohabiting at birth. Finally, we explore the implications of differences in parents' characteristics for union instability and the magnitude of social class differences in union instability across countries. Although similar factors are associated with union instability across countries, some (prior childbearing, early childbearing) are by far more common in the United States, accounting in part for higher shares separating. The factors associated with union instability—lower education, prior childbearing, early childbearing—also tend to be more tightly packaged in the United States than elsewhere, suggesting greater inequality in resources for children.

Keywords

Nonmarital childbearing; Cohabitation; Union instability; Diverging destinies; Second demographic transition

Introduction

Increases in cohabitation, nonmarital childbearing, and partnership dissolution—components of what is commonly termed the "second demographic transition" (van de Kaa 1987)—have reshaped the family landscape over the past half-century. In most Western countries, much of family life now unfolds outside the bounds of marriage. Important variation in family

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patterns nonetheless remain (Cherlin 2005, 2009; Kiernan 2000; Perelli-Harris and Gassen 2012), with potential implications for well-being. Changes in family life have generated concern, especially in the United States, about resources for children (Cherlin 2005, 2009; McLanahan 2004), which may in part reflect differences in how key features of family change have played out in this context. In particular, the United States is exceptional in its high degree of union instability among both married and cohabiting couples (Andersson and Philipov 2002; Andersson et al. 2017; Cherlin 2005, 2009; Dronkers 2015).

This article provides a rich, descriptive account of union instability in the United States compared with seven European countries: Norway, Sweden, the United Kingdom, Austria, France, Italy, and Spain. We focus on the stability of couples who have had a child together, who arguably have the most at stake in staying together (e.g., Gibson-Davis et al. 2005; Tavares and Aassve 2013; Waller 2001). These couples are of greater policy relevance than those without children because parental instability directly affects children's living arrangements and often the resources available to them (Fomby and Cherlin 2007; Fomby and Sennott 2013; Tach and Eads 2015; Tach et al. 2010). Cohabiting parents are of further concern from a policy perspective given that they tend to be relatively disadvantaged (Musick and Michelmore 2015; Perelli-Harris et al. 2010b).

We have three main aims: (1) compare within-country differences in the characteristics of married and cohabiting couples who have had a child together; (2) estimate differences in the stability of cohabiting and married parents, paying attention to transitions to marriage among those cohabiting at birth; and (3) explore the implications of differences in parents' characteristics for union instability and the magnitude of social class differences in union instability across countries. This work contributes to the extant literature on comparative family change in several ways. First, we provide a richer descriptive account of differences between cohabiting and married families than much prior cross-national work on instability, examining in particular three indicators of parental resources: parents' education, prior family experiences, and age at first birth (McLanahan 2004). Second, our attention to transitions into marriage following a cohabiting birth recognizes the dynamic nature of cohabitation and accounts for variation associated with subsequent stability (Kiernan 2004; Musick and Michelmore 2015). Third, we focus on couples who have had a child together, whereas recent cross-national assessments of union stability have looked at those both with and without children (Dronkers 2015; Liefbroer and Dourleijn 2006). Finally, our work extends accounts of "diverging destinies" in the United States and Europe, underscoring greater social class disparities in parental separation in the United States—and potentially, in turn, greater disparities in resources for U.S. children.

Background

Stability of Married and Cohabiting Parents

Cohabiting parents tend to have higher rates of union dissolution than married parents (Kiernan 2004; Manning et al. 2004; Musick and Michelmore 2015; Raley and Wildsmith 2004; Tach and Edin 2013; Wu and Musick 2008). This instability stems in part from the relatively disadvantaged position of cohabiting parents, who are less-educated, have more prior union and childbearing experiences, and are younger on average than their married

counterparts (Musick and Michelmore 2015; Perelli-Harris et al. 2010b; Thomson et al. 2014). Yet, as childbearing within cohabitation has increased, some evidence has suggested that these couples have become more stable in the United States and Europe (Musick and Michelmore 2015; Perelli-Harris et al. 2012:Table 3).

Conceptual models of family change provide contrasting views on how we might expect the role of cohabitation—and thus the stability of cohabiting families—to vary across country. The second demographic transition theory predicts greater family diversity driven by powerful ideational shifts toward individual needs, nonconformity, and gender equality (van de Kaa 1987). Drawing on this theory, Kiernan (2000) posited a series of stages in which cohabitation emerges as a marginalized behavior and gradually becomes an accepted family form. Along the way, distinctions between cohabitation and marriage fade, and cohabitation transitions from a short-term and largely childless state to a much more stable arrangement in which having and raising children is commonplace. Cherlin's (2004) institutionalization hypothesis also predicts fading distinctions between cohabitation and marriage as social norms and legal structures develop to accommodate growing numbers of cohabitors. These models suggest that the childbearing behavior and relationship stability of marriage and cohabitation will be more similar in settings where cohabitation has a long tradition and is widespread.

An alternative view points to persistent differences in the experiences of marriage and cohabitation, despite high levels of cohabitation. This view draws on U.S. accounts of the symbolic significance of marriage as a marker of prestige (Cherlin 2009; Furstenberg 1996) and findings that men and women of all education levels place a high value on marriage but perceive substantial economic prerequisites (Carlson et al. 2004; Edin and Kefalas 2005; Gibson-Davis 2009; Gibson-Davis et al. 2005; Smock et al. 2005). In a recent assessment, Ishizuka (2018) found that cohabiting couples' combined earnings relative to the state-level median of married couples' earnings strongly predicted marriage formation, providing evidence of a middle-class marriage norm—or "marriage bar"—that is difficult for the less-educated to achieve. In their cross-national investigation of childbearing within cohabitation, Perelli-Harris et al. (2010b:796) emphasized the link between economic instability and the "temporary and reversible nature of cohabitation" in contributing to a "pattern of disadvantage." They argued that the second demographic transition's focus on ideational change overlooks the role of increasing economic uncertainty, particularly in the 1980s and 1990s, for shaping aspects of family change among less-educated men and women. Together, these strands of research suggest that despite increases in cohabitation, the experiences of marital and cohabiting families may remain distinct.

McLanahan's (2004) diverging destinies is also consistent with the notion that marriage and cohabitation will remain distinct; indeed, this theory documents *growing* disparities in U.S. family experiences by education over time. McLanahan's central thesis is that the changes associated with the second demographic transition have led to two trajectories for women: one reflecting trends that imply gains in resources for children, and another that implies losses. For example, delayed childbearing is associated with gains in resources for children, whereas childbearing outside of marriage and union instability are associated with losses. Critically, women with the highest levels of education are following the trajectory that

represents gains, and women with the least education are following the trajectory that represents losses.

U.S. Instability in Comparative Context

The United States is exceptional in its high degree of union instability among both married and cohabiting couples (Andersson and Philipov 2002; Andersson et al. 2017; Cherlin 2005, 2009; Dronkers 2015). Cherlin (2005, 2009) emphasized the contradicting cultural models that play into the U.S. "marriage-go-round": that is, more transitions both into and out of marriage despite stronger attachment to the ideal of marriage, compared with Europe. Others have extended Cherlin's idea to the "family-go-round" or "relationship-go-round" (Tach et al. 2014; Warner et al. 2011:292), emphasizing the high degree of instability as a common feature of U.S. unions.

Socioeconomic disadvantage is an important feature of family instability in the United States and elsewhere. Long-standing upward trends in divorce have reversed for the most-educated in the United States and parts of Europe (Esping-Andersen and Billari 2015; Martin 2006; Matysiak et al. 2014), and lower education is strongly associated with marital dissolution in the United States (Martin 2006; McLanahan and Percheski 2008). The negative association between education and divorce is less consistent across Europe and is *positive* in some countries, particularly where divorce and cohabitation are relatively uncommon (Härkönen and Dronkers 2006; Matysiak et al. 2014). Although patterns are more mixed in Europe, the negative education gradient of divorce is becoming stronger in many countries (Härkönen and Dronkers 2006; McLanahan 2004). U.S. gradients by education are particularly steep: for the early 1990s first marriage cohort, approximately 15 % of college graduates were expected to separate within 10 years, compared with 45 % among those without a high school diploma (Martin 2006: figure 1).

Family instability has contributed to increases in the share of partners starting new relationships with previous union and childbearing experiences. Recent U.S. research has highlighted increases in *serial cohabitation* or multiple premarital cohabitations (Cohen and Manning 2010; Lichter et al. 2010). Increases in *multipartner fertility* or childbearing across partnerships have also been documented in the United States, Australia, Norway, and Sweden; and prevalence is particularly high in the United States, where approximately one-quarter of all mothers have children with two or more fathers (Thomson et al. 2014). The resultant family complexity may dilute resources for children (Halpern-Meekin and Tach 2008). Prior union and childbearing experiences are also associated with subsequent instability (Carlson et al. 2004; Lichter et al. 2006; Manlove et al. 2012; Musick and Michelmore 2015; Osborne et al. 2007; Sweeney 2010; Tach and Edin 2013; Teachman 2002, 2003). Finally, these prior family experiences are more common among unmarried and less-educated men and women (Carlson and Furstenberg 2006; Cohen and Manning 2010; Guzzo and Furstenberg 2007a, b; Lappegård and Rønsen 2013; Lichter et al. 2010; Tach and Edin 2013; Thomson et al. 2014), potentially compounding any disadvantage associated with family complexity. The literature has not always parsed out the association between prior union experiences with and without children involved, but we expect that the latter would be more closely associated with subsequent instability.

The relatively young age at first birth further distinguishes U.S. family patterns from those across much of Europe (Lesthaeghe and Neidert 2006) and plays into the dynamic of instability. Although teen birth rates in the United States have dropped to historic lows (Hamilton et al. 2015), they remain high relative to those in Western Europe. The United Kingdom comes closest at a rate of 15 teen births per 1,000 15- to 19-year-olds in 2014, compared with 24 per 1,000 in the United States (World Bank 2016). Early parenthood is associated with children's resources (Martin 2004; McLanahan 2004), and early family transitions are in turn associated with union instability (Teachman 2002).

Cohabiting parents who subsequently marry look more similar to those married at birth in their separation chances (Kiernan 2004: figure 4). Among recent U.S. cohorts, cohabiting parents who subsequently marry are indistinguishable from couples married at birth in their probability of separation, net of sociodemographic characteristics; cohabiting parents who do not marry are twice as likely to separate over five years (Musick and Michelmore 2015). These empirical patterns suggest that cohabiting parents may jointly plan marriage and childbirth with little concern for which comes first (regarding second-conception risks, see also Perelli-Harris 2014), and this may be particularly true where there is a weaker normative imperative to marry prior to a birth. For committed couples on the margin of marriage, greater legal protections may further incentivize transitions into marriage after childbirth (Perelli-Harris and Gassen 2012).

Approach

We compare data from the United States and seven European countries: Norway, Sweden, the United Kingdom, Austria, France, Italy, and Spain. These countries can be grouped into clusters that differ in their patterns of family change: the Nordic countries, the United Kingdom and continental Europe, and southern Europe (Matysiak et al. 2014; Sobotka and Touleman 2008). The Nordic countries were forerunners in cohabitation and have the highest share of births to cohabiting parents (Heuveline and Timberlake 2004; Perelli-Harris et al. 2012), and this region has also long had among the highest rates of divorce in Europe (Matysiak et al. 2014). The United Kingdom, France, and Austria have somewhat lower levels of childbearing within cohabitation and divorce, and Italy and Spain have relatively low levels of cohabitation and divorce (Andersson 2003; Sobotka and Touleman 2008). The United States is intermediate in its levels of childbearing within cohabitation, but it stands out in its very high levels of union instability.

Country clusters provide a useful heuristic approach for describing cross-national variation. Nonetheless, they encompass differences in family patterns that may be important in shaping union dissolution. For example, although childbearing in cohabitation is high in both Sweden and Norway, it was established earlier in Sweden and remains at a higher level (Thomson 2014). Within southern Europe, family patterns remain more traditional than elsewhere, but cohabitation and divorce are increasing, and more rapidly in Spain than Italy (Martín-García 2013; Vignoli and Ferro 2009). Finally, although the United Kingdom is closer to continental Europe in levels of marital instability, its young age at birth falls about midway between its European counterparts and the United States, which may contribute to

greater similarities between the United Kingdom and United States in the degree of disparity in parental resources available to children.

We provide a rich, descriptive account of the stability of cohabiting and married parents in cross-national perspective using data from the Harmonized Histories—a comparative database that draws on the Generations and Gender Surveys (GGS) from a number of European countries, combined with other surveys in the United States, United Kingdom, and Spain that include fertility and union histories. We compare differences between married and cohabiting families across countries in terms of mother's education and age at first birth, as well as indicators of the couples' prior family experiences. Importantly, these indicators account separately for prior unions that resulted in children and those that did not. Analyses control for the mothers' age at first union and foreign-born status and the couple's subsequent childbearing—characteristics that may vary cross-nationally and play into union instability (Phillips and Sweeney 2006; Teachman 2002, 2003).

The Harmonized Histories enable a detailed comparison of union formation, dissolution, and childbearing, allowing us to account for critical differences in couples' experiences across countries. Nonetheless, comparable indicators of family background and partner characteristics are limited, and some social indicators do not translate cross-nationally. For example, education classifications may not capture meaningful differences in educational systems across countries, and there is no standard or meaningful measure for race/ethnicity across countries. In the United States, union instability differs substantially across race/ethnicity, with historically higher levels among African Americans (Musick and Michelmore 2015; Phillips and Sweeney 2006). Supplementary analyses will address these potential limitations.

We assess union stability from the time of a couple's first birth together, differentiating between those who are married versus cohabiting at birth. In our event history analyses, we further account for transitions into marriage among cohabiting parents, a critical dimension of variation among cohabiting parents (e.g., Musick and Michelmore 2015). We address the following questions. First, within countries, how do cohabiting and married parents differ in their education, prior family experiences, and age at first birth—and is the marriage gradient in children's resources particularly steep in the United States? Second, across the eight countries, how do probabilities of separation differ for couples married at birth, married after having a birth within cohabitation, and cohabiting at birth without subsequently marrying—and are differences particularly stark in the United States? Third, to what extent do differences in the characteristics of U.S. and European parents potentially account for cross-country differences in levels of instability, and how are these in turn shaped by social class?

These analyses shed light on competing ideas about the nature of cohabitation and its role in the family system—that is, whether cohabitation is more similar to marriage where it is more prevalent, or whether differences in the stability and characteristics of married and cohabiting families persist even in contexts where cohabitation is a common part of family life. We might expect differences in the experiences of marriage and cohabitation to be particularly persistent in the United States. First, the symbolic value of marriage is arguably stronger in the United States than much of Europe, evident (for example) in public policies

to promote marriage, clashes over who can marry, and the scale of the wedding industry (Cherlin 2005, 2009). Second, the "diverging destinies"—or growing disparities in children's resources—common to the second demographic transition appear particularly steep and more closely tied to marriage in the United States (e.g., Kennedy and Bumpass 2008; McLanahan 2004: table 2). These generalizations, however, do not account for the substantial variation that characterizes European family patterns, and prior literature leaves these questions open.

Data and Method

Harmonized Histories

Data come from the Harmonized Histories file created by the Nonmarital Childbearing Network coordinated by Brienna Perelli-Harris (Perelli-Harris et al. 2010a).[1] Data for Austria, France, Italy, Norway, and Sweden come from the Generations and Gender Programme (GGP), a longitudinal survey of adults in 19 European countries. UK data are from the British Household Panel Survey (BHPS), Spanish data from the Spanish Fertility Survey, and U.S. data are from the National Survey of Family Growth. In some cases, we supplement the Harmonized File with data from original country sources. Table 8 in the appendix provides further information on the data sources and samples included in our analyses.[2]

Our sample is limited to women (men were not interviewed in Italy or Spain) aged 15–45 at interview (corresponding to the upper age bounds in the Austrian and U.S. surveys). From this sample of women, we generate a union-level file that includes all marriages and cohabitations bearing a first union child within 10 years of interview. Restricting our analysis to a 10-year window limits retrospection bias in union history reports (Hayford and Morgan 2008) and the disproportionate weighting of observed family processes by young mothers.[3] Ten years following the transition to parenthood captures a critical life stage, and most cohabitations will either transition to marriage or dissolve within 10 years. Although uncommon, women may contribute more than one union to the analysis file (models account for clustering, as described later). Across countries, interviews were conducted between 2005 and 2013. Sample weights for each country adjust for sample design and (in some cases) differential attrition; they are applied to all descriptive statistics and models presented here (for more on GGP weights, see Fokkema et al. 2016).

Union Stability, Union Status, and Transitions Around First Birth

Our data include the month and year of the female partners' (respondents') marriages, cohabitations, births, and separations, which we use to construct union records. We define union births as those born to coresidential couples. We compare dates to determine whether

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[1]Thanks go to the individual contributors of the Harmonized Histories data file (http://www.nonmarital.org), and especially to Karolin Kubisch at the Max Planck Institute for Demographic Research, who managed survey standardization, cleaning, documentation, and updates.
[2]We exclude a subset of countries from the Harmonized Histories due to concerns about data quality (Germany, Russia), a more restrictive age range than the one included here (Estonia, Poland), a lack of information on key variables (Hungary, the Netherlands, Switzerland), and insufficient sample size for analyses of interest (Belgium, Bulgaria, Lithuania, Romania).
[3]Limiting our window to births within 10 years of interview (when women are aged 15–45) includes women up to age 35 at the start of the window, after which only a small share of mothers in our study countries go on to have their first union birth.

couples were married or cohabiting at the time of their first union birth, whether and when cohabiting parents transitioned to marriage, and whether and when couples separated.

Education, Prior Family Experiences, and Parental Age

Education of the female partner is a dichotomous indicator for college-educated versus other. The coding is based on the International Standard Classification of Education (ISCED) (UNESCO 1997). A college degree or more corresponds to ISCED levels 5–6 versus levels 1–4 for those with lower levels of education (for a similar approach, see Perelli-Harris et al. 2010b).

We generate two indicators of *prior family experiences*, making a clear distinction between prior relationships with and without children, on the basis that these would have potentially very different implications for subsequent relationship stability. The first indicator relies on the union and childbearing histories of the female respondent to assess whether she had a *prior childless union*—that is, a marriage or cohabitation that preceded her current union and produced no children. The second indicator relies additionally on the respondent's proxy reports of whether her partner had children at the start of their union; it assesses whether either partner had a *child prior to the current union*. We examined more-detailed indicators in supplementary analyses, including (1) whether the female partner had a prior childless marriage or cohabitation, and (2) whether it was the female partner, male partner, or both who had a child prior to the current relationship. We show these more-detailed indicators in our descriptive tables, but we use the summary indictors (female partner had a prior childless union; either partner had a prior child) in our models. Supplementary results (available upon request) showed that associations between union stability and whether the female partner had a prior childless marriage or cohabitation were similar, as were associations between union stability and her, his, or their prior childbearing.

Data on prior family experiences are more limited for the male partner than for the female. Reports are not available in all countries about the prior cohabitation and marriage experiences of the male partner (e.g., in the United States, we know only about his prior marriages). Further, we lack detailed information on paternity status and thus cannot be certain that children born outside a coresidential union are children from a prior relationship; that is, some subset could be joint children born prior to coresidence. This would be more likely for younger child ages at the start of the cohabitation or marriage. In supplementary analyses (available upon request), we treated births occurring within one year of the coresidential union as the first union birth; we found the same pattern of results based on this alternative sample definition.

For our final indicator of parental resources, we generate a categorical variable for the female partner's age at first birth in the current union: <22, 22–25, 26–29, and 30+ years. On average, 80 % of these births are the woman's first birth, ranging from 74 % in the United States to 97 % in Italy.

Controls

In addition to these key measures, full models control for other characteristics of unions and individuals that may be associated with union instability. We include the number of months

from the start of the union to the couple's first birth together and an indicator for whether the couple goes on to have another child ("turning on" at the time of second birth). We also control for stable characteristics of the female partner: whether she was foreign-born and whether she lived with both biological parents from birth to age 15.[4] Data include few additional family background variables. For example, the education level of the respondent's mother is not available in all countries (i.e., it is missing in Spain). We tested the sensitivity of our models to including mother's education and found very similar results; thus, we left this variable out of final analyses for purposes of comparability. Data on the male partners across countries are also limited (as noted), constraining what we can learn about the interaction of partner characteristics.

Event History Models of Separation

To explore cross-national differences in union stability, we transform our union-level file into a union-month file. We assess union duration in units of a month to allow for relative precision in the timing of transitions into marriage and separation, which commonly occur at short durations among cohabitors. Time to separation is clocked from childbirth to reflect our interest in the stability of couples who have had a child together, a group of significance from scientific and policy perspectives. Our union-month file thus includes one record for every month at risk of union dissolution from the time of birth until separation or censoring at interview, for up to 120 months.

Following the strategy of Musick and Michelmore (2015) (see also Wu and Musick 2008), we model union transitions around the time of birth, assessing differences in stability across three union-birth trajectories: (1) married at birth (M→B), (2) cohabiting at birth and married at some time t following the birth (C→B→M), and (3) cohabiting at birth without marrying in the observation window (C→B). To examine the link between these trajectories and union stability, we estimate discrete-time event history models of the general form, separately by country:

$$\log[P_t/(1 - P_t)] = \alpha_1 + \alpha_2 dur_t + \alpha_3 dur_t^2 + \beta_1 x_1 + \beta_2 x_{2t} + \text{sociodemographic characteristics,}$$

$$(1)$$

where the log odds or logit of separation is an additive function of covariates, and t indexes union duration in months from a couple's first birth. The parameters α_1, α_2, and α_3 represent the baseline hazard, modeled as a quadratic function of duration, or the value of the log odds of separation at duration t when all other covariates are 0. The xs represent union status: a time-invariant indicator $x_1 = 1$ if cohabiting at birth (0 if married at birth), and a time-varying indicator $x_{2t} = 1$ if married in month t following birth (0 if cohabiting).

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[4]In Italy and Spain, data are not available on whether the respondent lived with both biological parents to age 15. For these two countries, we instead use information on whether the respondent's parents ever separated or divorced.

Net of sociodemographic characteristics, this model yields the following parameters for our three union-birth trajectories and selected contrasts among them:

Trajectories	Parameters	Key Contrasts
1) M→B	β_2	2 versus 1: β_1
2) C→B→M	$\beta_1 + \beta_2$	3 versus 1: $\beta_1 - \beta_2$
3) C→B	β_1	3 versus 2: $-\beta_2$

Parameter estimates are clustered at the individual level to account for correlation in error terms among women contributing more than one union. We test the statistical significance of contrasts (across union-birth trajectories and across countries) using the Wald test, which is computed based on the estimated coefficients and covariance matrix and is asymptotically equivalent to the likelihood ratio test.

To illustrate the implications of our models and differences in couple characteristics across countries, we generate a set of hypothetical scenarios of union stability. We use model estimates and vary assumptions about country-level couple characteristics to generate predicted probabilities of separation within five years of birth. Five-year separation probabilities provide a more intuitive measure than either an estimated odds ratio or predicted monthly probability. We first estimate predicted probabilities of separation for each month over five years, $p_1 - p_{60}$. In doing so, we allow the baseline hazard to vary freely in each month, set key characteristics to hypothetical values, and hold all others at their Month 1 weighted mean values. We then multiply these (conditional) monthly predicted probabilities to generate the probability of separation within five years of birth, equal to $1 - (1 - p_{60})(1 - p_{59}) \dots (1 - p_1)$. In what follows, we estimate a range of predictions based on observed characteristics and various counterfactuals to shed light on key findings.

Results

Characteristics of Cohabiting and Married Parents

Table 1 shows union status indicators around the time of first birth. Among all union-specific first births, the share to cohabiting couples is lowest in the southern European countries (Italy at 8 % and Spain at 29 %) and highest in the Nordic countries (Norway at 62 % and Sweden at 64 %). The United States, United Kingdom, and continental European countries fall in the middle, with the United States and United Kingdom at 41 % and 40 % cohabiting at birth, respectively, and Austria and France both at 45 %. Among those cohabiting at birth, the shares transitioning to marriage within five years range from a low in Spain of 23 % to a high of 55 % in Italy; the United States falls midrange at 44 %.

Table 2 describes explanatory variables and controls by country. The share of college graduates ranges from 14 % in Italy to 54 % in the United Kingdom; the United States is intermediate at 29 %. In prior childless unions, Italy is on the low end at 3 %, Sweden is high at 35 %, and the United States is again about midrange at 15 %. In all countries, the vast majority of prior childless unions were prior cohabitations (nearly all in Norway and Sweden). In contrast to its midrange levels of prior childless unions, the United States has the highest share of couples with children at the start of their union (37 %). The United

Kingdom is closest on this count, with 29 % of couples with children born prior to the start of their union. Despite having the highest share of women with prior childless unions, Sweden falls on the lower end in terms of couples with children from a prior union (15 %, on par with Spain); Italy has the lowest share (3 %). Notably, the United States also has the highest share of young mothers, with nearly one-quarter under age 22 at the time of the focal birth (first birth with the current partner). Again, the United Kingdom is the closest on this count (although still far behind), with 14 % of focal births to mothers under age 22. Given that U.S. couples more often start their unions with children from a prior partnership, we would expect even steeper gaps in age at *first* birth.

Table 3 shows differences in key variables—education, prior childbearing, and early parenthood—for couples cohabiting versus married at the time of their first birth. Social gradients are evident across countries: cohabiting births are more common among women with lower levels of education, parents with children from prior unions, and younger women. Education gradients are by far steepest in the United States, where 53 % of births to women with low or moderate education are within cohabitation, compared with 10 % among college graduates. Next in line is the United Kingdom, where 51 % of births to less-educated women are to cohabiting couples versus 30 % of those to college graduates—or 1.7 times the share in the lower (vs. higher) education groups in the United Kingdom versus 5.5 times in the United States. Elsewhere, this ratio ranges from 1.2 (Sweden, Austria, and Italy) to 1.5 (France).

Family complexity gradients (Table 3), measured by whether either partner had a child prior to the start of the union, are also relatively steep in the United States. Sixty five percent of births to U.S. couples with prior children occur within cohabitation, compared with 36 % of those to couples with no prior children. Levels are similar in the United Kingdom. Only in Italy and Spain (where both cohabitation and prior childbearing are overall much less prevalent) do we find bigger differences in union status between those with and without children from a prior union. Finally, cohabiting births are much more concentrated among young parents in the United States and United Kingdom (where early childbearing is also much higher) than elsewhere. In both countries, most births occurring to young mothers (<22) in a union occur within cohabitation (69 % and 91 % in the United States and United Kingdom, respectively), whereas the vast majority of births to women aged 30 and older (nearly 80 % in both countries) occur within marriage. The share cohabiting does not differ by age of mother in Sweden. Notably, across all three indicators of parental resources shown here, we find no or small differences between cohabiting and married couples in Sweden.

Union Stability Across Union-Birth Trajectories and Countries

Table 4 shows results from discrete-time event history models predicting the monthly log-odds of separation among couples who had a child together within 10 years of interview, separately by country. Model 1 (panel 1) includes only our union status indicators and duration from the couple's first birth modeled as a quadratic (duration variables are included but not shown). Model 2 (panel 2) adds our full set of controls for education, family complexity, parental age, and other sociodemographic characteristics. To facilitate interpretation of the union status indicators (cohabiting at birth and married at time t), we

manipulate the coefficients (per our earlier description in the models section) and present odds ratios contrasting our three key union-birth trajectories: MB = married at birth; CBM = cohabiting at birth and married at *t* following birth; CB = cohabiting at birth without subsequently marrying by the interview date.

The modal pattern that emerges from Models 1 and 2 (Table 4) is high relative odds of separation among couples cohabiting at birth who do not subsequently marry by the interview date (CB), compared with couples married at birth (MB). The higher odds of separation among the cohabitors who do not marry range from 2.03 (Sweden) to 5.08 (Italy) in Model 1 without controls, and from 1.44 (Spain, not statistically significant) to 3.67 (Italy, $p < .10$) in Model 2 with all controls. Only in Spain—and net of controls—is the difference in stability between these two groups not statistically significant. Another common pattern across countries evident in Table 4 is the similarity in separation odds between couples cohabiting at birth who subsequently marry (CBM) and those married at birth (MB). Net of controls, the separation odds of these couples differ significantly from those married at birth only in Austria and Spain ($p < .10$) (although odds are high but not statistically significant in Italy; they are closer to 1.00 elsewhere).

When assessed relative to marriage, U.S. cohabitors do not stand out in their odds of separation (Table 4). U.S. cohabiting parents who do not transition to marriage have odds of separation of 4.09 (Model 1) and 2.06 (Model 2) times that of couples married at birth; net of controls, the odds of separation among cohabiting parents who marry after a birth are no different than those of couples married at birth (Model 2). We tested differences between the United States and comparison countries in the relative odds of separation among cohabiting and married parents. We found differences only with Austria and Spain, and U.S. cohabitors were not consistently less stable relative to married couples (e.g., the odds of separation among CB and CBM vs. MB were higher in Austria than the United States).

Comparing odds ratios across models in Table 4 gives an approximation of the extent to which differences between married and cohabiting couples in observed covariates account for within-country differences in union stability across union-birth trajectories. In the United States, the greater odds of separation among cohabiting parents (both those who marry (CBM) and those who do not (CB)) versus married parents (MB) diminish by approximately one-half from Model 1 (no controls) to Model 2 (all controls). This decline in the estimated odds of separation accounting for controls among cohabiting parents relative to married parents is common across countries, although accounting for controls seems to make the most difference in the United States and, to a somewhat lesser extent, the United Kingdom. The social gradients between marriage and cohabitation are steepest in the United States and the United Kingdom, and accounting for the relatively disadvantaged position of cohabiting parents accounts for a relatively large share of the gap in stability between cohabiting and married parents in these countries.

We find similar patterns of association between sociodemographic characteristics and union instability across countries (Model 2, Table 4). The odds of separation are lower among the more-versus less-educated (odds ratios <1) in all countries but Italy, although contrasts are statistically significant only for the United States, Norway, and Sweden. Mixed findings for

the association between education and union dissolution in Europe—and the suggestion of a positive education gradient in Italy—are consistent with recent investigations (Härkönen and Dronkers 2006; Matysiak et al. 2014). We see no clear patterns of association between prior childless unions and subsequent dissolution, but having a child from a prior partnership is associated with statistically significant, substantially increased odds of separation in the United States (odds ratio 1.56), Norway (1.73), Sweden (1.74, $p < .10$), France (2.85), Italy (5.15), and Spain (2.03, $p < .10$). Older age at focal birth is strongly associated with stability (with at least one contrast statistically significant in all countries but Italy). The gains to age continue to accrue into the late 20s and 30s; for example, mothers 30 and older at birth have odds of separation that are 60 % to 75 % lower than mothers under age 22 at birth in all but Austria and Italy. Other controls are associated with union instability largely as expected: longer duration from union start to birth, having another child together, and the respondent living with both biological parents growing up are associated with reduced odds of separation in most study countries. Foreign-born status is statistically significant only in the United States and is associated with 43 % lower odds of separation (likely because of the composition of U.S. immigrants, who tend to come from countries with more stable family patterns).

Table 5 shows predicted probabilities of separation within five years by country and union status derived from Model 2 (Table 4). This exercise highlights country-level differences as estimated by our models in a metric more intuitive than odds ratios. In the first row, overall estimates are the product of monthly predicted probabilities allowing the baseline hazard to vary with month and holding all other covariates at their weighted mean values in Month 1. Estimates in the next three rows are generated in a similar way, although varying indicators of union status to illustrate differences in separation probabilities by union-birth trajectory, holding all else constant. The final two rows show ratios of predicted probabilities of separation for union-birth trajectories involving cohabitation relative to couples married at birth. In predicting separation probabilities for cohabiting parents who subsequently marry (CBM), we assume that marriage occurs immediately following birth; that is, we turn our time-varying marriage variable "on" in the month following birth. We found that separation probabilities were somewhat higher in most countries if we turned the marriage variable on later, although patterns were the same irrespective of assumptions about the timing of marriage following birth. We focus on separation within five years because we observe most cohabiting couples within this time frame; 10-year estimates showed the same patterns of separation at higher levels. (Results of sensitivity tests are available upon request.)

The highest overall proportion separating within five years is in the United States (24 %, Table 5). Proportions separating in other countries are much lower, ranging from 6 % (Italy and Spain) to 14 % (United Kingdom). Consistent with the odds ratios reported in Table 4, cohabiting couples who do not subsequently transition to marriage (CB) have the highest predicted probabilities of separation within five years in all countries but Spain, ranging from an estimated 8 % in Spain to 35 % in the United States. Married couples at birth (MB) tend to have the lowest predicted probabilities, ranging from 5 % (Sweden, Italy, Spain) to 19 % (United States), although as noted earlier (Table 4), we find few statistically significant differences in separation between this group and cohabiting couples who subsequently marry (CBM). The higher probabilities of instability in the United States are striking, where

parents married at birth are estimated to separate at proportions more in line with cohabitors elsewhere—indeed, at substantially *higher* proportions than cohabiting parents in Norway and Sweden.

Hypothetical Scenarios Exploring Cross-Country Differences in Stability

Next, we examine two sets of simulations to further flesh out the implications of our descriptive statistics and models: one to explore how differences in the characteristics of couples play into cross-country differences in union instability (Table 6), and the other to highlight the magnitude of social class differences in union instability across countries (Table 7). These simulations can be viewed as an accounting exercise designed to facilitate cross-country comparisons and are not meant to represent causal or behavioral processes.

For the first set of simulations in Table 6, we generate predicted probabilities of separation within five years from model estimates (Model 2, Table 4), but instead of setting all sociodemographic characteristics to country-specific observed values as in Table 5, we alter values on education, age, and family complexity. Treating the United States as the reference country in panel 1 and Italy as the reference in panel 2, we assign characteristics of couples from these countries to comparison countries and assess the simulated change in instability. The United States and Italy are both outliers among our countries of study: the United States stands out in its high levels of instability, prior childbearing, and early childbearing. Italy, by contrast, stands out in its low levels of instability, education, and family complexity. This thought experiment provides a descriptive assessment of how couple characteristics at these two extremes might be expected to play into union instability elsewhere, given country-specific associations shown in Table 4.

The first set of rows in each panel of Table 6 shows five-year predicted probabilities of separation altering the characteristics of couples, and the second set shows the percentage change in probabilities relative to baseline that result from the simulation. Assigning U.S. characteristics to couples (panel 1) increases simulated separation probabilities substantially in most countries—between 43 % (Norway) and 130 % (Italy). Prior childbearing and early childbearing, which are more common in the United States than elsewhere and are generally associated with instability, play an important role in this accounting.

Education plays a more mixed and relatively small role, except in Norway and Sweden, where the share of college graduates is higher than in the United States and education is strongly and negatively associated with instability. Only in Austria and the United Kingdom does assigning U.S. characteristics have negative or modest implications overall for instability (–2 % and 16 %, respectively). Compared with Austria, the United States has higher levels of family complexity and younger mothers, but these factors are inconsistently or weakly associated with instability in Austria (Table 4). Similarly in the United Kingdom, education and family complexity are inconsistently or weakly associated with instability; age is more strongly associated, and assigning the younger age distribution of U.S. mothers increases simulated separation probabilities in the United Kingdom by 19 %.

Assigning Italy's characteristics to couples (panel 2, Table 6) decreases simulated separation probabilities in most countries, although somewhat modestly—between 11 % (Norway) and

26 % (United States). In Italy, family complexity is uncommon, and age at birth is relatively high, both of which tend to reduce union instability across countries. The share of college-educated mothers in Italy is also low, however, and this contributes to higher simulated separation probabilities in Sweden. Overall, separation probabilities are estimated to be 43 % higher in Sweden, assuming Italy's education, family complexity, and age distributions. This exercise results in very little change in the simulated probability separating in Austria. Analogous to findings from panel 1 (Table 6), we see differences in the characteristics of Austrian and Italian couples (e.g., higher family complexity in Austria), but these are not significantly associated with union instability in Austria.

In the next set of simulations in Table 7, we explore social class differences in union instability across countries. Here, instead of trying to isolate the association between education and instability by holding all else constant (as we did in estimating predicted probabilities of separation for union-birth trajectories), we ask how education and the characteristics that go along with it play into differences in union stability across education groups. We estimate predicted probabilities of separation among the low- and moderately educated versus the college-educated, simultaneously varying all other covariates so that each education group is assigned their own country-specific characteristics.

Predicted probabilities of separation range from .05 (Italy) to .35 (United States) among the low- and moderately educated (the equivalent of some college or less) and .04 (Sweden and Spain) to .10 (United Kingdom and Austria) among the highly educated (the equivalent of college or higher). The predicted probabilities of separation are higher among the less-educated in all countries but Italy, where we estimated a positive association between high education and separation (although not statistically significant, Table 4). The difference in separation probabilities between the low- and high-education groups in the United States (.35 vs. .09, respectively) is by far the largest, resulting in a gap of .25 points. The difference in union instability between the low- and high-education groups is also striking in Sweden, although levels are lower (.15 predicted probability of separation among the least-educated vs. .04 among the highest-educated).

The large gap in simulated separation probabilities by education in the United States reflects both the lower odds of separation among college graduates (0.59 the odds of separation relative to the less-educated, Table 4) and the very different characteristics of parents by education (see Table 9 in the appendix). In all countries, college-educated parents have characteristics that tend to be associated with stability: they are more likely to be married at birth and to have no prior children, and are older at birth. U.S. college graduates look similar to their high-educated European counterparts in prior childbearing (16 % in a union with children from a previous relationship) and age at birth (46 % aged 30 or older at the time of the focal birth), although they are less often cohabiting at birth (10 %) than all but Italian couples (also 10 %). Their probabilities of separation are well in line with their high-educated European counterparts. By contrast, less-educated mothers in the United States are more often in complex families (46 % in a union with children from a previous relationship), younger at birth (33 % less than age 22 at the time of the focal birth), and more disadvantaged (less than one-half lived with both biological parents growing up). Their

predicted probabilities of separation are substantially higher than their European counterparts.

Sensitivity Analyses

Supplementary models address two potential limitations of our analysis: namely, sensitivity of results to our coding of education, and lack of controls for racial/ethnic variation, particularly in the United States. First, we estimated models of union separation with a more-detailed education variable, using ISCED-7 codes to distinguish between low (1–2, corresponding to no high school diploma in the U.S. context) and moderate education (3–4, corresponding to high school diploma and some college in the U.S. context). We found only one statistically significant difference (in Norway, $p < .10$) in the association between low and moderate education and union instability. Simulated predicted probabilities of separation among the lowest-educated were (in most cases) modestly higher than what we report in Table 7 for the low- and moderately educated together.

We estimated a second set of supplementary models to rule out the possibility that higher levels of instability among U.S. racial/ethnic minorities accounts for higher levels of instability in the United States overall. Table 10 in the appendix compares results from our main models in Table 4 with the same models estimated for non-Hispanic white mothers only (62 % of our U.S. sample). Predicted probabilities of separation among non-Hispanic white mothers were only somewhat lower than those for the full sample (panel 3). Basic U.S.–European comparisons are the same whether we draw on findings from the full sample or the majority race/ethnicity sample.

Discussion

This study sheds light on competing ideas about the nature of cohabitation and its role in the family system, focusing in particular on the instability of couples with children. The question of family instability is critical for assessing the potential implications of family change for the next generation. Our approach is novel in highlighting within-country differences in the characteristics of married and cohabiting parents and in turn exploring how these might account for cross-country differences in union instability. Further, it pays close attention to differences between cohabiting couples who marry and those who do not. Our findings complicate ideas about the second demographic transition and the notion that differences between marriage and cohabitation should diminish as cohabitation becomes more established. They are consistent with a pattern of disadvantage among nonmarital families (Esping-Andersen and Billari 2015; Perelli-Harris et al. 2010b) and extend accounts of diverging destinies by showing differences in the magnitude of these social gradients across national context and the extent to which they may be compounded by disparities in other indicators of parental resources.

Our analysis documents a great deal of diversity in U.S. and European families. Even in southern Europe, where family change has been slower to take hold, nearly one-third of union births in Spain were to cohabiting couples in the mid-2000s (still only 8 % in Italy). In the Nordic countries, where cohabitation is long-standing, nearly two-thirds of union births were to cohabitors during our study period. Do we find stronger similarities between

cohabitation and marriage where cohabitation is long-standing and common, or are there persistent differences, consistent with cohabitation as a "budget" route to family formation (Furstenberg 1996)? Evidence is somewhat mixed.

Cohabiting parents who did not subsequently marry by the interview date had higher odds of separation than married parents in all study countries (not statistically significant in Spain, Table 4), net of controls for sociodemographic characteristics. Differences in the stability of cohabiting and married parents were relatively weak, however, in the Nordic countries and strongest in Italy. Finding the Nordic countries on one end of the continuum and Italy on the other—that is, greater similarity where cohabitation is longer-standing and more common—is consistent with ideas related to the second demographic transition (although Spain does not fit the pattern).

Across all study countries, we also found that cohabiting parents were disadvantaged relative to married parents (Table 3). As with stability, differences between cohabitation and marriage in education, prior childbearing, and mother's age were relatively weak in the Nordic countries. Education and age gradients were by far strongest in the United States and United Kingdom, where cohabitation levels are intermediate. This is less consistent with the second demographic transition and more consistent with the notion that differences between cohabitation and marriage are persistent—and that cohabitation will remain a distinct and disadvantaged family form, even where it is common. Controlling for socioeconomic characteristics of cohabitors goes further in the United States and United Kingdom than elsewhere in accounting for differences in the stability of married and cohabiting parents.

In most countries, the odds of separation among cohabiting parents who subsequently married were statistically indistinguishable from those married at birth, net of controls (Spain and Austria were exceptions). This is an important distinction that is not often emphasized in the literature. If cohabiting parents who married after a birth experienced less stability than those who married before, it might suggest that marriages following childbirth were largely in response to unplanned or ambivalently timed pregnancies. Similarity in the subsequent stability of couples who marry before and after parenthood suggests instead that many parents may be jointly planning marriage and childbirth as the quality and commitment of their relationships grow, with little regard to which comes first (Musick and Michelmore 2015; Perelli-Harris 2014). This is consistent with waning societal pressure to marry and the blurring of boundaries between marriage and cohabitation (e.g., Cherlin 2004; van de Kaa 1987).

Low education, prior childbearing, and early age at birth were associated with union instability, fairly consistently across countries. Education gradients were negative for all but Italy, although not always statistically significant, in line with recent work showing variation in the relationship between education and divorce in Europe (Härkönen and Dronkers 2006; Matysiak et al. 2014). We found no statistically significant associations between having a prior childless union and separation, but having a child from a prior partnership was associated with statistically significant, substantially increased odds of separation in most countries. Relevant to growing research in the United States on family complexity, the proportion of mothers in our U.S. sample with prior childless unions was midrange relative

to comparison countries (15 % vs. a range elsewhere of 3 % in Italy and 35 % in Sweden), but the proportion with children from a prior union was much higher. In the United States, 37 % of couples had children from prior unions versus a range elsewhere of 3 % in Italy and 29 % in the United Kingdom. The United States does not stand out in the dissolution of childless unions; what distinguishes instability in U.S. relationships is the involvement of children. This is a novel way of looking at prior family experiences. The distinctiveness of U.S. patterns and the importance of multiple childbearing— but not childless—prior unions has not been clear from prior research and represents a fruitful area for further study.

In a series of simulations, we explored the implications of variation in education, prior childbearing, and mother's age for differences in union instability across countries, using couple profiles from the United States and Italy—outliers among our study countries in their high and low levels of union instability. With the exception of Austria, and to a lesser extent the United Kingdom, simulations showed substantially higher instability in our comparison countries given U.S. couple characteristics (as much as 130 % higher in Italy). By contrast, simulated instability was lower in most countries given Italian couple characteristics, albeit more modestly so (as much as 33 % lower in the United Kingdom). These results stemmed largely from variation in prior and early childbearing, which are high in the United States and low in Italy, and generally associated with instability. Simulations illustrate the importance of differences in these characteristics, yet nonetheless also highlight that they are not the whole story: altering couple characteristics left much cross-country variation unaccounted for. For example, even when assigned Italy's very low family complexity and high maternal age, simulated probabilities of separation in the United States remained substantially higher than baseline levels elsewhere.

Estimated probabilities of separation within five years of a birth were on the order of approximately two and four times higher in the United States than elsewhere. We showed that this was not due to higher relative separation odds among U.S. cohabiting versus married parents, which were on par with comparison countries, net of controls. U.S. marriages were about as stable as cohabitations in most of the countries we studied, and they were *less* stable than cohabitation in Norway and Sweden. Various unobserved processes potentially underlie these differences. For example, unintended fertility is high in the United States (Musick 2002), and unintended childbirth is associated with parental strain (Su 2012). Measures of pregnancy intendedness are standard in the United States but generally not included in European fertility surveys; thus, we are unable to directly assess the contribution of unintended fertility to cross-national variation in union dissolution. Cherlin (2009) emphasized competing cultural models of marriage and individualism in the United States that play into the greater tendency to form, dissolve, and reform partnerships. These models are both intensely held in the United States and simultaneously support the ideal of marriage as a sacred vow and route to self-fulfillment, which in turn can be drawn on to justify beginning or ending a relationship.

In addition to its exceptionally high levels, the degree to which risk factors cluster around education is another distinguishing feature of U.S. instability. The United States provides the clearest illustration among our study countries of diverging destinies, in which women at the bottom and top of the education distribution are following distinct trajectories of family

change. In simulations that assigned characteristics typical of higher- and lower-educated groups in each country, we found higher separation probabilities among the less-educated in all but Italy, ranging from 1.4 times higher in Austria to more than 4 times higher in Sweden. The absolute gap was by far largest in the United States; indeed, separation probabilities of U.S. college graduates (9 % over five years) were in line with their European counterparts, whereas less-educated couples had separation probabilities (35 %) that ranged from two to seven times higher than less-educated couples elsewhere. Less-educated U.S. couples are outliers in the cross-national context in their high levels of prior childbearing and young age at birth but not their detachment from marriage. U.S. college graduates look quite similar to college graduates in comparison countries, with the striking exception of their low share cohabiting at birth. Only 10 % of college graduates in the United States were cohabiting at birth, on par with college graduates in Italy but lower than those in all other countries (ranging from 22 % of college graduates in Spain to 57 % in Sweden). Is the hold that college graduates have on marriage a durable phenomenon or an echo of past U.S. family patterns that will also fade away? We have seen fading education differences in cohabiting births between the low-educated (less than high school) and moderately educated (high school or some college) in the United States (Cherlin 2011; Musick and Michelmore 2015). If this trend continues into the higher education ranks of college graduates, what should we expect in terms of the stability of these unions?

Parental separation is high in the United States relative to Europe, and the implications for children are potentially exacerbated by distinct features of the U.S. context. One feature is the tighter packaging of factors associated with union instability in the United States—lower education, prior childbearing, early childbearing—that may compound any resource loss associated with parental separation. As Cherlin and Seltzer (2014:237) noted, the family safety net "can only stretch as far as its members' financial resources allow." This suggests a critical role for public policy in mediating the potential negative effects of economic vulnerability on children. Yet the relatively weak U.S. social safety net is another feature potentially exacerbating the implications of parental separation for U.S. children. The U.S. social safety net has turned away from serving its most vulnerable since the 1980s (Moffitt 2015) and does little relative to other rich countries to pull single-parent families out of poverty (Maldonado and Nieuwenhuis 2015; Smeeding 2005). Diverging destinies appear to be a common feature of family life, evident across the countries examined here, but more stark in the United States and likely more consequential for the next generation.

Acknowledgments

Appendix

Table 8

Harmonized Histories data sources, dates, respondent upper age limits, and sample sizes

Country	Data Source	Survey Dates		Survey Age Range	Number of Women in Survey	Number of Women in Analysis[a]	Number of Unions in Analysis	Number of Union Dissolutions in Analysis
		From	To					
Austria[b]	Generations and Gender Survey	September 2008	March 2009	18–46	3,001	772	817	93
France	Generations and Gender Survey	September 2005	December 2005	17–79	5,708	750	795	143
Italy[c]	Generations and Gender Survey	January 2003	December 2003	18–64	5,115	680	689	39
Norway	Generations and Gender Survey	January 2007	October 2008	19–81	7,541	1,050	1,142	143
Spain	Spanish Fertility Survey	April 2006	May 2006	16–98	9,737	1,210	1,281	70
Sweden[d]	Generations and Gender Survey	April 2012	April 2013	18–79	4,991	670	710	65
United Kingdom	British Household Panel Survey	September 2005	May 2006	16–80	7,856	587	628	103
United States[e]	National Survey of Family Growth 2006–2010, 2011–2013	June 2006	December 2013	15–45	17,880	4,616	5,232	1,830

Source: Harmonized Histories manual (Perelli-Harris et al 2010a).

[a] Includes 15- to 45-year-old women who have had a first union-specific birth within 10 years of the interview date.

[b] We use the original Austrian GGS to estimate parental separation by age 15.

[c] We obtain the month and year of birth for household children from the Istituto Nazionale di Statistica (http://www.istat.it/it/archivio/4967). Month of birth was not included in the Italian version of the Harmonized Histories.

[d] We use the original Swedish GGS to fill in missing data on parental separation by age 15 in the Harmonized Histories.

[e] The U.S. version of the Harmonized Histories is supplemented with the release of the 2011–2013 National Survey of Family Growth.

Table 9

Characteristics of couples with a first birth together, by respondent education and country

	Low/Moderate Education								High Education							
	United States	Norway	Sweden	United Kingdom	Austria	France	Italy	Spain	United States	Norway	Sweden	United Kingdom	Austria	France	Italy	Spain
Union Status Indicators																
Cohabiting at birth ($x_1 = 1$)	0.53	0.68	0.70	0.51	0.46	0.61	0.08	0.31	0.10	0.55	0.57	0.30	0.37	0.41	0.10	0.22
Proportion of all months spent married following birth ($x_{2t} = 1$)	0.61	0.43	0.40	0.62	0.63	0.49	0.96	0.77	0.96	0.55	0.48	0.78	0.76	0.67	0.95	0.81
Family Complexity																
Respondent had prior childless union	0.14	0.21	0.31	0.10	0.15	0.13	0.03	0.06	0.16	0.26	0.39	0.16	0.25	0.14	0.04	0.09
Respondent or partner had children at union start	0.46	0.31	0.22	0.37	0.22	0.24	0.03	0.16	0.16	0.15	0.07	0.22	0.16	0.11	0.00	0.11
Respondent Age at Focal Birth																
<22	0.33	0.14	0.09	0.20	0.15	0.15	0.03	0.12	0.02	0.03	0.02	0.08	0.03	0.01	0.00	0.02
22–25	0.29	0.24	0.25	0.25	0.29	0.28	0.12	0.17	0.15	0.17	0.08	0.15	0.08	0.19	0.02	0.05
26–29	0.19	0.32	0.26	0.27	0.29	0.28	0.34	0.33	0.38	0.39	0.35	0.26	0.32	0.41	0.28	0.28
30+	0.19	0.30	0.40	0.28	0.27	0.29	0.51	0.38	0.46	0.41	0.55	0.51	0.58	0.39	0.70	0.65
Months From Union Start to Birth	29.70	39.14	45.29	31.25	44.95	39.99	39.25	41.76	48.39	46.05	53.61	48.80	53.05	51.04	38.80	48.77
Couple Had Another Child Together (*t*)	0.33	0.33	0.32	0.34	0.34	0.36	0.26	0.22	0.38	0.44	0.45	0.34	0.35	0.38	0.27	0.30

	Low/Moderate Education								High Education							
	United States	Norway	Sweden	United Kingdom	Austria	France	Italy	Spain	United States	Norway	Sweden	United Kingdom	Austria	France	Italy	Spain
Foreign-born	0.17	0.08	0.15	0.03	0.27	0.11	0.05	0.15	0.18	0.03	0.15	0.03	0.28	0.07	0.05	0.14
Lived With Both Biological Parents Through Age 15	0.53	0.83	0.62	0.69	0.77	0.79	0.97	0.91	0.74	0.88	0.80	0.80	0.81	0.90	0.97	0.94
N(unions)	4,073	522	351	299	674	470	593	952	1,158	586	355	314	142	325	96	301
N(union-months)	48,596	7,995	1,907	2,784	5,086	6,023	14,122	24,840	61,839	33,717	21,003	19,674	7,423	18,410	4,874	14,124

*Notes: N*s are unweighted. All means are weighted using SVY procedures in STATA 12. Time-invariant characteristics are measured in the month of the couple's first birth together (i.e., the first month of the union-month file). Couples' (time-varying) subsequent childbearing is estimated from the full union-month sample.

Source: Harmonized Histories and the 2006–2010 and 2011–2013 National Survey of Family Growth (women only, under 45 years). Sample is limited to couples with a first child together within 10 years of interview.

Table 10

Odds ratios from discrete-time event history models of separation within 10 years of birth, United States only, by race

	All (from Table 4)	Non-Hispanic White Only
1. Model 1		
Union-birth trajectories[a]		
CBM (vs. MB)	1.98[**]	2.18[***]
CB (vs. MB)	4.09[***]	4.69[***]
CB (vs. CBM)	2.06	2.15
2. Model 2		
Union-birth trajectories[a]		
CBM (vs. MB)	0.88	0.84
CB (vs. MB)	2.06[***]	2.18[***]
CB (vs. CBM)	2.34[***]	2.60[***]
Respondent education		
Low/moderate (reference)	1.00	1.00
High	0.59[***]	0.57[**]
Family complexity		
Respondent had prior childless union	0.85	0.84
Respondent or partner had children at union start	1.56[***]	1.59[***]
Respondent age at focal birth		
<22 (ref.)	1.00	1.00
22–25	0.72[**]	0.72[*]
26–29	0.45[***]	0.36[***]
30+	0.42[***]	0.34[***]
Number of months from union start to birth	0.99[*]	0.99[*]
Couple had another child together (t)	0.64[***]	0.65[*]
Foreign-born	0.56[***]	0.56
Lived with both biological parents through age 15	0.74[***]	0.80[†]
N(union-months)	244,616	124,205
3. Predicted Separation Rates Within Five Years of Birth[a]		
Overall	0.24	0.22

	All (from Table 4)	Non-Hispanic White Only
MB	0.19	0.17
CBM	0.17	0.14
CB	0.35	0.33

*Notes: N*s are unweighted. All models are weighted using SVY procedures in STATA 12. Union duration (in months from first birth) and union duration-squared are included in Models 1 and 2 but not shown.

Source: Harmonized Histories and the 2006–2010 and 2011–2013 National Survey of Family Growth (women only, under 45 years). Sample limited to couples with a first child together within 10 years of interview.

[a]CBM = cohabiting at birth and married at *t* following birth; MB = married at birth; CB = cohabiting at birth without ever marrying.

[†]*p* < .10;

[*]*p* < .05;

[**]*p* < .01;

[***]p < .001 (differences from 1.00)

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Table 1

Union status around a couple's first birth, by country

	United States	Norway	Sweden	United Kingdom	Austria	France	Italy	Spain
Union Status Indicators								
Cohabiting at birth ($x_1 = 1$)	0.41	0.62	0.64	0.40	0.45	0.45	0.08	0.29
Proportion of all months spent married following birth ($x_{2t} = 1$)	0.72	0.49	0.44	0.71	0.65	0.56	0.96	0.78
N (unions)	5,232	1,142	710	628	817	795	689	1,281
N (union-months)	244,529	66,065	40,721	34,933	44,375	44,941	41,147	67,641
Transitions to Marriage Among Those Cohabiting at Birth								
Married within 1 year	0.11	0.09	0.08	0.07	0.11	0.09	0.23	0.06
Married within 2 years	0.22	0.18	0.16	0.20	0.22	0.17	0.39	0.11
Married within 5 years	0.44	0.35	0.37	0.46	0.48	0.36	0.55	0.23
Married within 10 years	0.63	0.45	0.55	0.62	0.61	0.44	0.55	0.25
N (unions)	2,525	696	452	282	365	425	56	347
N (union-months)	99,729	38,259	25,486	14,520	17,953	21,942	2,472	15,282

Notes: *N*s are unweighted. All means are weighted using SVY procedures in STATA 12. Cohabiting at birth is measured in the month of the couple's first birth together (i.e., the first month of the union-month file). Married in month *t* is estimated from the full union-month sample. Transitions to marriage are generated from life tables that treat union dissolution as a competing risk.

Source: Harmonized Histories and the 2006–2010 and 2011–2013 National Survey of Family Growth (women only, under 45 years of age). Sample is limited to couples with a first child together within 10 years of interview.

Table 2

Characteristics of couples with a first birth together, by country

	United States	Norway	Sweden	United Kingdom	Austria	France	Italy	Spain
Respondent Education								
Low/moderate	0.71	0.54	0.50	0.46	0.82	0.59	0.86	0.75
High	0.29	0.46	0.50	0.54	0.18	0.41	0.14	0.25
Respondent Had Prior Childless Union	0.15	0.23	0.35	0.13	0.17	0.14	0.03	0.06
Respondent had prior childless marriage	0.04	0.02	0.01	0.04	0.03	0.02	0.01	0.02
Respondent had prior childless cohabitation	0.11	0.21	0.34	0.11	0.14	0.12	0.01	0.04
Respondent or Partner Had Children at Union Start	0.37	0.23	0.15	0.29	0.21	0.18	0.03	0.15
Respondent had children	0.26	0.15	0.08	0.20	0.12	0.11	0.03	0.10
Partner had children	0.22	0.12	0.09	0.16	0.11	0.10	0.00	0.06
Respondent Age at Focal Birth								
<22	0.24	0.08	0.05	0.14	0.13	0.09	0.03	0.10
22–25	0.25	0.22	0.16	0.20	0.25	0.24	0.10	0.14
26–29	0.24	0.35	0.31	0.26	0.30	0.33	0.33	0.32
30+	0.27	0.35	0.48	0.40	0.32	0.33	0.54	0.44
Duration From Union Start to Birth (in months)	35.05	41.63	49.37	40.66	46.39	44.55	39.18	43.35
Couple Had Another Child Together (t)	0.35	0.38	0.43	0.37	0.32	0.34	0.26	0.26
Respondent Foreign-born	0.17	0.10	0.15	0.03	0.27	0.09	0.05	0.15
Respondent Lived With Both Biological Parents Through Age 15	0.59	0.85	0.71	0.75	0.77	0.84	0.97	0.92
N(unions)	5,232	1,142	710	628	817	795	689	1,281
N(union-months)	244,529	66,065	40,721	34,933	44,375	44,941	41,147	67,641

*Notes: N*s are unweighted. All means are weighted using SVY procedures in STATA 12. Time-invariant characteristics are measured in the month of the couple's first birth together (i.e., the first month of the union-month file). Couples' (time-varying) subsequent childbearing is estimated from the full union-month sample. Parental separation was not available at age 15 for Italy and Spain. For those countries, we evaluated whether the parents ever separated rather than by age 15.

Source: Harmonized Histories and the 2006–2010 and 2011–2013 National Survey of Family Growth (women only, under 45 years). Sample is limited to couples with a first child together within 10 years of interview.

Table 3

Proportion of births within cohabitation (vs. marriage) by education, prior childbearing, and parental age, by country

	Respondent Education			Respondent or Partner Had Children at Union Start			Respondent Age at Focal Birth				
	Low/Moderate	High	Ratio (low to high)	Either Had Children	Neither Had Children	Ratio (either to neither)	<22	22–25	26–29	30+	Ratio (<20: 30+)
United States	.53	.10	5.5 *	.65	.36	1.8 *	.69	.48	.28	.22	3.2 *
Norway	.72	.55	1.3 *	.76	.56	1.3 *	.83	.67	.56	.60	1.4 *
Sweden	.71	.57	1.2 *	.76	.62	1.2 *	.68	.68	.66	.60	1.1
United Kingdom	.51	.30	1.7 *	.61	.39	1.6 *	.91	.48	.32	.23	3.9 *
Austria	.46	.37	1.2 *	.52	.43	1.2 *	.64	.45	.40	.40	1.6 *
France	.61	.41	1.5 *	.67	.50	1.3 *	.84	.55	.42	.53	1.6 *
Italy	.10	.08	1.2	.25	.07	3.4 *	.21	.07	.04	.10	2.1
Spain	.31	.22	1.4 *	.55	.22	2.5 *	.52	.38	.24	.24	2.1 *

Notes: *N*s are unweighted. All means are weighted using SVY procedures in STATA 12. Characteristics are measured in the month of the couple's first birth together.

Source: Harmonized Histories and the 2006–2010 and 2011–2013 National Survey of Family Growth (women only, under 45 years). Sample is limited to couples with a first child together within 10 years of interview.

*
Difference in proportion cohabiting is statistically different between groups compared in the ratio column (two-way *t*-tests)

Table 4

Odds ratios from discrete-time event history models of separation within 10 years of birth, by country

	United States	Norway	Sweden	United Kingdom	Austria	France	Italy	Spain
1. Model 1								
Union-birth trajectories[a]								
CBM (vs. MB)	1.98 **	1.46	1.86	1.99	3.05 *	0.85	1.77	4.47 **
CB (vs. MB)	4.09 ***	2.12 ***	2.03 ***	5.02 ***	2.94 ***	3.81 ***	5.08 ***	2.43 **
CB (vs. CBM)	2.06	1.45	1.09	2.52	0.96	4.48	2.87	0.54
2. Model 2								
Union-birth trajectories[a]								
CBM (vs. MB)	0.88	1.02	1.11	1.21	2.14 *	0.45	2.16	4.03 †
CB (vs. MB)	2.06 ***	1.53 **	1.67 *	2.70 *	2.35 ***	2.52 ***	3.67 †	1.44
CB (vs. CBM)	2.34 ***	1.50	1.50	2.23	1.10	5.53	1.70	0.36
Respondent education								
Low/moderate (reference)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
High	0.59 ***	0.58 *	0.36 **	0.91	0.77	0.69	1.58	0.85
Family complexity								
Respondent had prior childless union	0.85	1.09	1.10	1.97	1.12	0.79	2.41	1.78
Respondent or partner had children at union start	1.56 ***	1.73 *	1.74†	0.85	0.85	2.85 ***	5.15 *	2.03 †
Respondent age at focal birth								
<22 (ref.)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
22–25	0.72 **	0.41 **	0.59	0.68	0.43 **	0.48 *	2.39	0.71
26–29	0.45 ***	0.42 **	0.45 †	0.27 ***	0.66	0.53 *	2.02	0.71
30+	0.42 ***	0.30 ***	0.35 *	0.27 **	0.74	0.27 ***	1.39	0.29 *
Months from union start to birth	0.99 *	1.00	0.99	1.00	0.99 **	0.99	1.01	1.01 †
Couple had another child together (t)	0.64 ***	0.62 †	0.74	0.31 ***	0.54 †	0.35 ***	0.32 †	0.47 †
Foreign-born	0.56 ***	0.73	1.64	0.57	1.08	1.57	0.49	1.25
Lived with both biological parents through age 15	0.74 ***	0.61 *	0.45 **	0.62 †	0.80	0.71	0.37	0.47 †
N (union-months)	244,616	64,470	40,126	34,288	44,241	44,565	41,147	66,319

Notes: *N*s unweighted. All models are weighted using SVY procedures in STATA 12. Union duration (in months from first birth) and union duration-squared are included in Models 1 and 2 but not shown. Comparisons of union-birth trajectories are derived from combining and testing coefficients on cohabiting at birth and married at time *t*.

Source: Harmonized Histories and the 2006–2010 and 2011–2013 National Survey of Family Growth (women only, under 45 years). Sample is limited to couples with a first child together within 10 years of interview.

[a]MB = married at birth; CBM = cohabiting at birth and married at *t* following birth; CB = cohabiting at birth without ever marrying.

[†]*p* < .10;

[*]*p* < .05;

[**]*p* < .01;

[***]*p* < .001 (differences from 1.00)

Table 5

Predicted probabilities of separation within five years of birth derived from discrete-time event history models, by country and union status

	United States	Norway	Sweden	United Kingdom	Austria	France	Italy	Spain
Overall	.24	.13	.07	.14	.13	.13	.06	.06
Union-Birth Trajectories[a]								
MB	.19	.10	.05	.09	.09	.08	.05	.05
CBM	.17	.10	.06	.11	.18	.04	.11	.20
CB	.35	.15	.09	.23	.20	.19	.17	.08
Ratio CBM/MB	0.89	1.02	1.11	1.19	2.03	.47	2.09	3.70
Ratio CB/MB	1.85	1.49	1.64	2.48	2.21	2.37	3.43	1.43

Notes: Predicted probabilities of separation are derived from Model 2 (with all controls) in Table 4, allowing union duration to vary with month, varying union status, and holding all other covariates at their country-specific weighted mean values in Month 1. Monthly conditional probabilities of separation are multiplied to generate estimated proportions separating within five years.

Source: Harmonized Histories and the 2006–2010 and 2011–2013 National Survey of Family Growth (women only, under 45 years). Sample is limited to couples with a first child together within 10 years of interview.

[a]MB = married at birth; CBM = cohabiting at birth and married at *t* following birth; CB = cohabiting at birth without ever marrying.

Table 6

Simulations derived from discrete-time event history models, assigning characteristics of U.S. and Italian couples to generate estimates of separation within five years of birth, by country

1. United States as Reference	Norway	Sweden	United Kingdom	Austria	France	Italy	Spain
Predicted Probabilities							
Baseline (all own characteristics)	.13	.07	.14	.13	.13	.06	.06
Education	.14	.09	.13	.12	.13	.06	.06
Age	.15	.09	.16	.13	.14	.06	.07
Family complexity	.14	.08	.14	.12	.15	.11	.07
All the above	.18	.12	.16	.13	.18	.13	.09
Percentage Change in Predicted Probabilities							
Education	12.7	28.5	−2.7	−3.0	4.6	14.2	1.9
Age	17.8	21.0	18.7	4.2	14.4	3.8	22.4
Family complexity	7.9	8.6	0.4	−2.7	20.8	94.8	22.5
All the above	42.7	68.0	16.0	−1.7	43.9	129.5	52.4

2. Italy as Reference	United States	Norway	Sweden	United Kingdom	Austria	France	Spain
Predicted Probabilities							
Baseline (all own characteristics)	.24	.13	.07	.14	.13	.13	.06
Education	.26	.15	.12	.12	.13	.13	.06
Age	.19	.11	.07	.11	.13	.11	.05
Family complexity	.22	.11	.07	.13	.13	.11	.05
All the above	.18	.11	.10	.09	.13	.10	.05
Percentage Change in Predicted Probabilities							
Education	5.4	14.8	60.5	−10.4	−0.9	5.5	2.7
Age	−20.4	−10.3	−4.3	−20.7	4.4	−14.9	−10.0
Family complexity	−11.3	−13.2	−7.5	−5.1	1.3	−12.7	−10.3
All the above	−25.6	−10.5	42.5	−32.7	4.8	−21.7	−17.1

Notes: Predicted probabilities of separation are derived from Model 2 (with all controls) in Table 4, allowing union duration to vary with month, varying key covariates, and holding others constant. Baseline estimates hold all covariates at their country-specific weighted means. Simulations in subsequent rows assign U.S. (panel 1) and Italian (panel 2) means on specified characteristics. Monthly conditional probabilities of separation are multiplied to generate estimated proportions separating within five years.

Source: Harmonized Histories and the 2006–2010 and 2011–2013 National Survey of Family Growth (women only, under 45 years). Sample is limited to couples with a first child together within 10 years of interview.

Table 7

Simulations derived from discrete-time event history models, assigning country-specific characteristics of low-/moderate- and high-education groups to generate estimates of separation within five years of birth, by education and country

	United States	Norway	Sweden	United Kingdom	Austria	France	Italy	Spain
Low-/Moderate Education (some college or less)	.35	.19	.15	.18	.14	.18	.05	.07
High Education (college or more)	.09	.09	.04	.10	.10	.07	.08	.04
Gap Between Low-/Moderate and High Education	.25	.10	.12	.08	.04	.11	−.02	.03
Ratio Low-/Moderate to High Education	3.75	2.18	4.26	1.77	1.41	2.54	0.70	1.61

Notes: Predicted probabilities of separation are derived from Model 2 (with all controls) in Table 4, allowing union duration to vary with month, varying education, and holding all covariates at the country-specific weighted mean values in Month 1 for the low-/moderate- and high-education groups. Monthly conditional probabilities of separation are multiplied to generate estimated proportions separating within five years.

Source: Harmonized Histories and the 2006–2010 and 2011–2013 National Survey of Family Growth (women only, under 45 years). Sample is limited to couples with a first child together within 10 years of interview.