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ESSAY

THE COHABITATION-GO-ROUND: COHABITATION AND FAMILY INSTABILITY ACROSS THE GLOBE

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THE COHABITATION-GO-ROUND COHABITATION AND FAMILY INSTABILITY ACROSS THE GLOBE



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Executive Summary

In recent decades, much of the globe has witnessed a retreat from marriage. This means more children are being born outside of marriage, either to single parents or cohabiting couples, in countries around the world. This social change raises two questions:

1. Are such children less likely to enjoy stable family lives?

2. Is the growth of nonmarital childbearing, including the growth of childbearing within a cohabiting union, associated with more family instability for children at the national level?

In Europe and the United States, this study finds that children born to cohabiting and especially single parents experience higher levels of family instability in the first 12 years of their lives, relying on data from the Harmonized Histories database. Using data from 100 countries around the globe, this study also finds that family instability is higher in countries where more children are born to single mothers and cohabiting couples. Finally, national-level data from 68 countries shows that the growth of cohabitation is associated with increases in family instability in countries around the world. In other words, marriage seems to be associated with more family stability for children across much of the globe, whereas cohabitation is typically associated with more instability.

Introduction

Scholars disagree about the importance of marriage when it comes to the welfare of children. Some argue that marriage per se does not play an important role in the welfare of children, at least in some countries, whereas others contend that marriage continues to play a central role in the welfare of children in all countries.¹ However, there is a growing consensus that the number of parental union transitions matters for children above and beyond family structure, with children being more likely to thrive in stable families and more likely to flounder in unstable ones.² As sociologist Andrew Cherlin noted in *The Marriage–Go–Round*, family instability is cause for concern "because it may increase children's behavioral and emotional problems. Simply put, some children seem to have difficulty adjusting to a series of parents and parents' partners moving in and out of their home."³

But if the institution of marriage—and the norms, customs, and laws associated with it—confers stability on family life, then marriage may matter, at least indirectly, when it comes to providing a stable family context for the rearing of children. On the other hand, if cohabitation is as stable as marriage in some countries, then the marital context of childrearing may not matter, at least in those countries. Accordingly, this essay takes up two central sets of questions:

 Do individual children born outside of marriage experience more family instability in countries across Europe and North America, regardless of parents' educational attainment? Do children born to cohabiting parents experience more family instability than their peers born to married parents in Western countries?

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¹ See, for instance: J. Stacey, "Good Riddance to 'The Family': A Response to David Popence" *Journal of Marriage and Family* 55, no. 3 (1993), on the one hand; and, on the other hand, see S. McLanahan and I. Sawhill, "Marriage and Child Wellbeing Revisited: Introducing the Issue," *The Future of Children* 25, no. 2: (Fall 2015).

² E.g., W. D. Manning, "Cohabitation and Child Wellbeing," The Future of Children 25, no. 2 (2015).

³ Andrew Cherlin, The Marriage-go-round: The State of Marriage and the Family in America Today (New York: Random House LLC, 2010): p. 5.

2. Are the societal levels of lone childbearing, as well as levels of childbearing in cohabiting unions, associated with more family instability for children in countries across the globe? And are increases in societal levels of childbearing outside of marriage, including childbearing among cohabiting couples, associated with increases in family instability in countries around the world?

These questions are particularly salient because the share of births taking place outside of marriage is on the rise in many countries across the globe. Likewise, cohabitation is an increasingly common context for the bearing and rearing of children in many countries. Yet not much is known about the relationships between marriage, cohabitation, and childbearing among unpartnered mothers, and family stability for children and families outside the West, including Latin America and the Caribbean, Africa, and Asia.

In this essay, we document the association between partnership context at birth—single, cohabiting, or married and stability in children's lives across a wide variety of countries. We focus on stability because it matters in children's lives. Family instability is associated with a host of negative outcomes for children⁴ even among children in higherincome households.⁵ For example, recent research from the United States revealed that maternal abuse increased when unions were dissolved, as well as when cohabiting relationships with stepfathers were formed.⁶ Union instability is also associated with childhood mortality risk in every region of the Global South.⁷

It is easy to think of lone parenthood as disadvantageous for children because lone parents frequently have less income than coupled parents, and they always have less time. Nonetheless, part of the disadvantage associated with being born to a single mother may be the heighted risk of subsequent union transitions faced by children of single mothers.⁸ That's because union transitions appear to present children with more challenges than merely being reared by a lone parent.⁹ Research from the United States shows that most children born to single parents are drawn into cohabiting or marital relationships while they are growing up, and relationships formed after the birth of a child are less stable—even if the biological parents partner.¹⁰ This is in part because couples who commit to one another before

⁵ M. Hout and T. A. DiPrete, "What We Have Learned: RC28's Contributions to Knowledge About Social Stratification," *Research in Social Stratification and Mobility* 24, no. 1 (2006); W. Sigle-Rushton, J. Hobcraft, and K. Kiernan, "Parental Divorce and Subsequent Disadvantage: A Cross-Cohort Comparison," *Demography* 42, no. 3 (2005); F. Steele, W. Sigle-Rushton, and Ø. Kravdal, "Consequences of Family Disruption on Children's Educational Outcomes in Norway," *Demography* 46, no. 3 (2009).

⁶ W. Schneider, "Relationship Transitions and the Risk for Child Maltreatment," *Demography* 53, no. 6 (2016): 1771-1800.

⁷ L. DeRose, et al. "Maternal Union Instability and Childhood Mortality Risk in the Global South, 2010-2014." *Population Studies* (forthcoming).

⁸ S. McLanahan, "Income Instability and Complexity After Nonmarital Birth: Outcomes for Children in Fragile Families," In M. J. Carlson & P. England (eds.), *Social Class and Changing Families in an Unequal America* (Palo Alto, CA: Stanford University Press, 2011); S. McLanahan and A. N. Beck, "Parental Relationships in Fragile Families," *The Future of Children* 20, no. 2 (2010).

⁹ For instance, daughters of stably single mothers are less likely to have premarital births than children of divorced mothers, L. L. Wu (1996), and more union transitions generally mean more behavior problems, regardless of parents' current union status [see for example: J. M. Najman et al., "Impact of Family Type and Family Quality on Child Behavior Problems: A Longitudinal Study," *Journal of the American Academy of Child & Adolescent Psychiatry* 36, no. 10 (1997); P. Fomby and C. Osborne, "Family Instability, Multi-partner Fertility, and Behavior in Middle Childhood, *Journal of Marriage and Family*, September (2016).] Mothers entering new unions has, however, been associated with improvement in educational outcomes among children of single mothers with higher socioeconomic status: [see for example: R. L. Wagmiller, E. Gershoff, P. Veliz, and M. Clements, "Does Children's Academic Achievement Improve When Single Mothers Marry?" *Sociology of Education* 83, no. 2 (2010).]

¹⁰ C. Gibson-Davis, "Magic moment? Maternal Marriage for Children Born Out of Wedlock," *Demography* 51, no. 4 (2014).

⁴ S. L. Brown, "Marriage and Child Well-being: Research and Policy Perspectives," *Journal of Marriage and Family* 72, no. 5 (2010); R. Crosnoe and S. E. Cavanagh, "Families with Children and Adolescents: A Review, Critique, and Future Agenda," *Journal of Marriage and Family* 72, no. 3 (2010); S. E. Cavanagh and A. C. Huston, "The Timing of Family Instability and Children's Social Development," *Journal of Marriage and Family* 70, no. 5 (2008); C. Osborne and S. McLanahan, "Partnership Instability and Child Well-being," *Journal of Marriage and Family* 69, no. 4 (2007); P. Fomby and A. J. Cherlin, "Family Instability and Child Well-being," *Journal of Marriage and Family* 69, no. 4 (2007); P. Fomby and A. J. Cherlin, "Family Instability and Child Well-being," *Journal of Marriage and Family* 69, no. 4 (2007); P. Fomby and A. J. Cherlin, "Family Instability and Child Well-being," *Journal of Marriage and Family* 69, no. 4 (2007); P. Fomby and A. J. Cherlin, "Family Instability and Child Well-being," *Journal of Marriage and Family* 69, no. 4 (2007); P. Fomby and A. J. Cherlin, "Family Instability and Child Well-being," *Journal of Marriage and Family* 69, no. 2 (2007); J. A. Goodnight, et al., "Effects of Multiple Maternal Relationship Transitions on Offspring Antisocial Behavior in Childhood and Adolescence: A Cousin-Comparison Analysis," *Journal of Abnormal Child Psychology* 41, no. 2 (2013); S. L. Hofferth and F. Goldscheider, "Family Structure and the Transition to Early Parenthood," *Demography* 47, no. 2 (2010); L. L. Wu, "Effects of Family Instability, Income, and Income Instability on the Risk of a Premarital Birth," *American Sociological Review* 72, no. 2 (1996).

having a biological child usually have a deeper commitment than those who partner in the wake of getting prega As Daniel Lichter and his colleagues put it, "moving in together following a pregnancy—especially an unintended one—is unlikely to lead to marital success or union stability."¹² Accordingly, we evaluate whether children born to unpartnered mothers in countries besides the United States share this higher risk of family instability.

Research from the United States further shows that children born to cohabiting parents also face an elevated risk of family instability relative to children born to married parents because cohabitation is less stable than marriage,¹³ even when children are present.¹⁴ Research suggests that the most stable cohabitations are converted to marriage around the time of childbirth, and that the riskier unions remain as cohabitations: those cohabiting at the time of childbirth are thus a mixed set of those who will soon marry (with similar dissolution risks to those with marital births¹⁵), and of more dissolution-prone couples.¹⁶

Children who start out living with both their biological parents might still have more stable family lives than children born to single mothers because initial transitions among lone parents might be motivated by a desire to be in union. Nevertheless, children born to cohabiting unions in the United States used to experience even more transitions than children born to single mothers,¹⁷ and recent data show only a modest stability advantage if unmarried parents were living together at the time the child was born.¹⁸ Thus, the amount of instability in children's lives associated with the parents' union status at birth has varied across time in the United States, and we investigate how much it varies across countries.

Our central question about how much partnership context at childbirth matters for subsequent stability in children's lives cannot be addressed without attention to social class. Greater instability associated with nonmarital births can be caused by partnership context, but instability can also *result* from the same kinds of conditions that make marital births less likely: low resources, poor job prospects, and little reason to delay childbearing in hope of more prosperous times.¹⁹ How much cohabiting births are concentrated among women with low socioeconomic status varies between countries, but the data for European countries nonetheless support the generalization that childbearing during cohabitation is more characteristic of women with lower educational attainment.²⁰ We structured our analysis to remove some of the effects of social class.

¹¹ S. Stanley, "Marriage and Positive Child Outcomes: Commitment, Signaling, and Sequence," Institute for Family Studies (2014).

¹³ K. B. Guzzo, "Trends in Cohabitation Outcomes: Compositional Changes and Engagement Among Never-Married Young Adults," *Journal of Marriage and Family*, 76, no. 4 (2014); R. K. Raley and E. Wildsmith, "Cohabitation and Children's Family Instability," *Journal of Marriage and Family*, 66, no. 1 (2004); S. L.
 Brown, J. B. Stykes, and W. D. Manning, "Trends in Children's Family Instability, 1995-2010," *Journal of Marriage and Family*, 78, no. 5 (2016); D. R. Graefe and D. T. Lichter, "Life Course Transitions of American Children: Parental Cohabitation, Marriage, and Single Motherhood," *Demography 36, no.* 2 (1999).
 ¹⁴ W. D. Manning, P. J. Smock, and D. Majumdar. "The Relative Stability of Cohabiting and Marital Unions for Children," *Population Research and Policy Review* 23, no. 2 (2004); C. Osborne, W. D. Manning, and P. J. Smock, "Married and Cohabiting Parents' Relationship Stability: A Focus on Race and Ethnicity," *Journal of Marriage and Family* 69, no. 5 (2007); K. Musick and K. Michelmore, "Cross-National Comparisons of Union Stability in Cohabiting and Married Families with Children," Paper presented at the Population Association of America: Annual Meeting in Washington, DC (2016); Jennifer Manlove et al., "Union Transitions Following the Birth of a Child to Cohabiting Parents," *Population Research and Policy Review* 31, no. 3 (2012): 361–86; S. Kennedy and L. Bumpass, "Cohabitation and Children's Living Arrangements: New Estimates from the United States," *Demographic Research* 19, no. 47 (2008).

¹⁵ K. Musick and K. Michelmore, "Change in the Stability of Marital and Cohabiting Unions Following the Birth of a Child," *Demography* 52, no. 5 (2015).
 ¹⁶ D.T. Lichter, K. Michelmore, R. N. Turner, and S. Sassler, "Pathways to a Stable Union? Pregnancy and Childbearing Among Cohabiting and Married couples," *Population Research and Policy Review* 35, no. 3 (2016).

¹⁷ Raley and Wildsmith, (2004).

¹⁸ Brown, Stykes, and Manning, (2016).

¹⁹ S. McLanahan, "Diverging Destinies: How Children are Faring Under the Second Demographic Transition," *Demography* 41, no. 4 (2004); K. Edin and T. J. Nelson, *Doing the Best I Can*, (University of California Press, 2013).

²⁰ B. Perelli-Harris, et al., "The Educational Gradient of Childbearing within Cohabitation in Europe," *Population and Development Review* 36, no. 4 (2010), see especially Figure 2.

¹² D. T. Lichter, K. Michelmore, R. N. Turner, and S. Sassler, "Pathways to a Stable Union? Pregnancy and Childbearing Among Cohabiting and Married Couples," *Population Research and Policy Review* 35, no. 3 (2016).

In summary, the research from the United States leads us to believe that partnership context at birth typically matters for children because that context is related to the stability of the parental union. Among adults, the overall well-being advantage associated with being married rather than cohabiting is narrower in countries where cohabitation is more common.²¹ Accordingly, we also test to see if cohabitation is more stable for children in countries where cohabiting births are more common.

Analysis based on children's life histories

Approach: analysis of individual children

We evaluate the relationship between parental union status at birth and subsequent union transitions for individual children using data from 17 countries. The data for Austria, Belgium, Bulgaria, Estonia, France, Georgia, Hungary, Italy, Lithuania, Norway, Romania, and Russia come from the Generations and Gender Surveys (GGS), which interviewed nationally representative samples of the resident population in each country. The Dutch data come from the 2003 Fertility and Family Survey (FFS). The data for the United Kingdom are from the British Household Panel Survey (BHPS).²² The Spanish data come from the Survey of Fertility and Values conducted in 2006; the Polish data are from the Employment, Family, and Education survey conducted in 2006; and the United States data are from the National Survey of Family Growth 2006-10.

These surveys all asked retrospective questions about when children were born, as well as the timing of entries and exits from cohabiting and marital unions; they have been standardized into a dataset called the Harmonized Histories.²³ The surveys that comprise the Harmonized Histories have been frequently used in other studies and are generally considered high quality. In particular, fertility and marriage trends from most of the Generations and Gender Surveys reflect trends found in vital registration statistics.²⁴ We were not able to include Germany here, however, due to severe mismatches between vital registration and GGS birth estimates.²⁵

Men were interviewed in some countries, but not all, so we used women's reports of union status at the time of the child's birth (single, cohabiting, or married).²⁶ We then counted union transitions occurring before the child's twelfth birthday among children born in 1985 or later. We counted both union formation and dissolution as transitions, but we did not count it as a transition when cohabiting couples married since there was no change in their child's living arrangements.

Any association between union status at birth and transitions in the first 12 years of a child's lifetime might reflect class differences in probability of marriage. That is, in the countries included in the Harmonized Histories,

²⁵ B. Perelli-Harris and M. Lyons-Amos, "Changes in Partnership Patterns Across the Life Course: An Examination of 14 Countries in Europe and the United States," *Demographic Research* 33, no. 6 (2015); B. Perelli-Harris and M. Lyons-Amos, "Partnership Patterns in the United States and across Europe: The Role of Education and Country Context," *Social Forces* 95, no. 1 (2016).

²⁶ See also the justification for analyzing maternal union transitions in Brown et al. (2016).

 ²¹ J. P. M. Soons and M. Kalmijn, "Is Marriage More than Cohabitation? Well-being Differences in 30 European Countries," *Journal of Marriage and Family* 71, no. 5 (2009).
 ²² To date, the Harmonized Histories include the BHPS but not the later UK Longitudinal Survey (Understanding Society) that includes part of the BHPS sample. We utilized the Understanding Society data for the individual country analyses, but only data available in the Harmonized Histories for the pooled analyses.
 ²³ B. Perelli-Harris, M. Kreyenfeld, and K. Kubisch, "Technical Manual for the Harmonized Histories Database," MPIDR Working Paper (Rostock, Germany: Max Planck Institute for Demographic Research, 2010-2011); also see www.nonmarital.org. Despite slightly different survey designs, the union histories are relatively comparable. Questions about cohabitation generally refer to co-resident relationships with an intimate partner that last more than three months. In the Italian and Austrian surveys, however, there is no minimum duration. Registered unions, or PACS, are recorded in the French GGS, but we include them with marriages because they are officially registered. Fewer than 1 percent of relationships in the French GGS are recorded as PACS. All sampling designs are accounted for using the provided individual level weights where relevant. Where no individual level weights were provided, surveys were assumed to be self-weighting. Italian data within the Harmonized Histories are missing birth months, and these dates are imputed via a random draw from a uniform distribution to ensure no systematic error.
 ²⁴ J. Vergauwen, et al., "Quality of Demographic Data in GGS Wave 1," *Demographic Research* 32, no. 24 (2015).

marriage is more common among the more highly educated than among those with less education.²⁷ Thus, a great number of transitions among children born to cohabitation may reflect the effects of lower socioeconomic status rather than partnership context at birth.

We address this issue by controlling for maternal education²⁸ when predicting the probability of children experiencing at least one union transition in a logistic regression model with data pooled across all countries. Our first pooled regression controls only for maternal education at the time of first childbirth and country of residence; the second adds controls for maternal age (because stability is associated with both age and marriage) and grandmother's education (as a further control for socioeconomic status).

In addition, we compile transition histories by both maternal education and partnership context at birth—single, cohabiting, or married—for each country. Thus, we are able to answer two related but different questions: 1) does parental union status at birth affect children's experience of family stability regardless of maternal education level? and 2) is the relationship between union status at birth and subsequent stability the same across maternal education levels?

Results: analysis of individual children

Comparing children born during cohabitation and marriage

We first estimated the stability gap between cohabitation and marriage across all 17 countries. Children born to cohabiting couples were over twice as likely to experience at least one maternal union transition by age 12 than children born to married couples (Model 1, Table 1). This gap is larger than the gap associated with maternal education, as children were 19 percent more likely to experience a transition if their mother has moderate education (compared to high), and 30 percent more likely to experience a transition if their mother has low education.

We then added controls for maternal age and grandmother's education, but the stability gap between marriage and cohabitation is not affected much by these controls (Model 2, Table 1). The risk of experiencing a union disruption before age 12 was still almost twice as great among children born to cohabiting parents as among children born to married parents in the second model.

When we estimated the stability gap between marriage and cohabitation separately by country, we found a stability advantage for children born to cohabiting unions in the United Kingdom that was inconsistent with previous work that had analyzed earlier births from the British Household Panel Survey than the ones we included (1985-96).²⁹ Because we did not know whether our finding greater stability among children born to cohabiting couples than married couples accurately reflected change over time, we re-analyzed births from 1985-96 in the United Kingdom using data from the Understanding Society survey.³⁰ We then found a stability advantage to marriage that was consistent with both earlier research on the United Kingdom and almost all other countries in the Harmonized History data. We therefore show results obtained from the Understanding Society survey when presenting individual country results (Table 2 and Figure 1).

The probability of a child experiencing at least one maternal union transition by age 12 is shown separately by country and maternal education level in Figure 1. We focus first on children whose mothers had moderate education

²⁷ B. Perelli-Harris and M. Lyons-Amos (2016).

²⁸ We use the International Standard Classification of Education (ISCED) 1997 levels and divide them into low (ISCED 1 & 2; completed basic secondary), moderate [ISCED 3 & 4; beyond secondary education but less than completed college (including vocational and technical schools)], and high (ISCED 5 & 6; university degree and higher). These categories are standardized, but still have different meaning across countries. Within countries, as we use them, they still provide a means of controlling for socioeconomic background. Some mothers will attain higher levels of education after childbirth.

 ²⁹ K. Kiernan, "The Rise of Cohabitation and Childbearing Outside Marriage in Western Europe," *International Journal of Law, Policy and the Family* 15, no.1 (2001).
 ³⁰ The British Household Panel Survey (BHPS) officially ended in 2008, but all remaining participants were eligible to be interviewed in wave 2 of the

Understanding Society survey (beginning in January 2010), as found at: https://www.understandingsociety.ac.uk/about/bhps-in-understanding-society. Thus, the Understanding Society data includes more observations for the 1985-96 birth cohort: many from the original BHPS sample, plus births reported for the same time period from the Understanding Society wave 1 sample.

 Table 1 Odds ratios for experiencing at least one maternal union transition by age 12, data from Harmonized Histories pooled across countries

	MODEL I	MODEL 2
Partnership context at birth (ref=married)		
Single	205.02***	195.70***
Cohabiting	2.05***	1.96***
Maternal education (ref=high)		
Medium	1.19 ***	1.06
Low	1.30 ***	1.03
Maternal age at first birth (mean centered)		0.88***
Grandmother's education (ref=medium/high)		
Low		0.94***
Country (ref=Austria)		
Belgium	0.78 *	0.82
Bulgaria	0.58 ***	0.49***
Estonia	2.11 ***	1.81***
France	1.18	1.25*
Georgia	0.70 ***	0.59***
Hungary	1.72 ***	1.54***
ltaly	0.10 ***	0.11***
Lithuania	2.67 ***	2.42***
Netherlands	0.74 **	0.91
Norway	1.26 **	1.28**
Poland	0.78 *	0.73**
Romania	0.66 ***	0.62***
Russia	2.55 ***	2.18***
Spain	0.54 ***	0.55***
United Kingdom	1.87 ***	1.80***
United States	3.50 ***	3.02***
Constant	0.08 ***	0.10***
	•	

levels (**Panel A**) because it is the only education category with adequate sample size for cohabiting births in every country. Cohabiting births are rare among women with high education in Bulgaria, Hungary, Lithuania, Poland, and Romania, while they are rare among women with low education in Lithuania and Russia. Shaded bars in **Panels B** and **C** of Figure 1 are based on fewer than 30 children's experiences.³¹ We note that the levels of instability shown for the United Kingdom are not fully comparable to the levels in other countries because the data do not come from the Harmonized Histories.

It is immediately obvious from Panel A of Figure 1 that the stability advantage that children born to married couples enjoy over those born to cohabiting couples is quite sizable in some countries (e.g., in Romania, 22 percent

 $^{\scriptscriptstyle 31}$ Table 2 shows the underlying data for all three panels of Figure 1





Figure 1 Union status at birth and subsequent stability







Panel C: Percent experiencing at least one transition by age 12 among children of mothers with low education

of children born to cohabiting couples see their parents split by age 12, compared to 6 percent of children born to married couples) and very modest in others (e.g., in Estonia, the percentages are 22 and 21, respectively). In Bulgaria, the stability gap actually favors children born to cohabiting couples with only 2.4 percent of cohabiting unions dissolved by age 12, compared to 5.9 percent of marriages.

The size of the stability advantage to marriage does not have a clear geographic pattern, as it is largest in percentage terms in Italy, Romania, Lithuania, and Belgium. It also seems unrelated to the share of births to cohabiting couples in the country: countries in **Figure 1** are arrayed from low levels of cohabiting births to high ones. Thus, the notion that when cohabitation becomes more common it also becomes more similar to marriage in terms of stability for children is not supported by these data.³²

Results at other education levels are quite similar to what we see for children of moderately-educated mothers. Overall, children born to married couples are less likely to experience a transition than children born to cohabiting couples. The stability gap favors cohabiting couples at the highest education levels in Spain and the Netherlands (by 1-2 percentage points), and at the lowest education levels in Spain and Estonia (by 1-3 percentage points).

Despite these outliers, the stability gap does not vary much by maternal education level. Children of mothers with moderate education are more likely to experience the dissolution of a parental union by age 12 by an average of about 11 percentage points if their parents were cohabiting when they were born than if their parents were married. Among children of mothers with low and high educational attainment, the gap averages 8 and 10 percentage points, respectively. In 11 of the countries, the stability gap is either constant across education levels or slightly larger among the moderately educated as in the cross-country averages. In Estonia, Romania, and the United States, marriage is most strongly associated with stability among children of the most educated, but in Belgium, the Netherlands, and Poland, marriage is most strongly associated with stability among the least educated.

Children born to lone mothers

Few children are raised by stably single mothers from birth to age 12 in any country: less than 10 percent everywhere besides the United Kingdom and Belgium, where about one-quarter of children born to single mothers enjoy family stability (Table 2). Spanish children of mothers with moderate education also have relative high rates of family stability. Children born to single mothers are also more likely to undergo two or more transitions before their twelfth birthday (the average across countries is 19 percent as compared to 7 percent of children born to cohabiting couples, and 6 percent of children born to married couples).

The variation across countries in the share of children experiencing two or more union transitions is shown in **Figure 2**. Very different cultural contexts share similar levels of instability for children born to single mothers, e.g., Hungary and Norway, whereas such children in France experience markedly more instability than in Belgium. Again, the instability associated with being born to a single mother does not seem to vary with prevalence of cohabiting births.

Analysis based on country-level data

Approach: country-level analysis

Our individual-level data cover only Europe and the United States. While the wide variety of European countries affords a valuable comparative perspective, it leaves out most of the world. Most other countries do not have suitable data for relating union status at birth with the number of subsequent family transitions in children's lives. We can, nonetheless, relate normative contexts for childbirth with degree of family stability for a wide variety of countries

³² We also tested this formally using multilevel regression analysis and came to the same conclusion.

	Mother's Educational Attainment	ording to partnership context at bi Harmonized Histories and the UK Percent experiencing at least one transition		Mean number of transitions at age 12			
		SINGLE	COHABITING	MARRIED	SINGLE	COHABITING	MARRIED
ustria	HIGH	91	20	8	0.45	0.30	0.10
	MEDIUM	97	15	9	1.14	0.30	0.10
	LOW	93	15	10	1.07	0.30	0.10
elgium	HIGH	79	8	8	1.03	0.12	0.12
	MEDIUM	74	20	10	0.81	0.22	0.12
	LOW	74	22	6	0.80	0.30	0.08
Bulgaria	HIGH	100	4	5	1.00	0.04	0.06
	MEDIUM	92	2	6	1.13	0.05	0.07
	LOW	96	7	6	1.43	0.09	0.07
Estonia	HIGH	100	19	14	1.19	0.24	0.18
	MEDIUM	100	22	21	1.40	0.32	0.28
	LOW	100	25	27	1.38	0.38	<mark>0.40</mark>
France	HIGH	90	18	9	1.13	0.19	0.11
	MEDIUM	91	16	11	1.14	0.19	0.15
	LOW	85	23	14	1.11	0.34	0.19
Georgia	HIGH MEDIUM LOW	100 100 -	10 9 10	8 6 5	1.29 1.06	0.13 0.10 0.10	0.09 0.06 0.06
Hungary	HIGH	100	30	13	1.31	0.30	0.15
	MEDIUM	98	35	12	1.19	0.43	0.15
	LOW	100	30	16	1.34	0.32	0.21
taly	HIGH	100	2	0	1.00	0.02	0.00
	MEDIUM	98	16	0	1.11	0.16	0.00
	LOW	98	13	0	1.04	0.14	0.00
_ithuania	HIGH	100	38	18	1.11	0.38	0.20
	MEDIUM	95	50	20	1.11	0.53	0.23
	LOW	100	7	23	1.22	0.07	0.25
Netherlands	HIGH	100	4	6	1.00	0.04	0.09
	MEDIUM	100	9	5	1.30	0.10	0.07
	LOW	100	21	9	1.45	0.36	0.12
Norway	HIGH	89	17	8	1.13	0.21	0.11
	MEDIUM	92	21	11	1.14	0.32	0.12
	LOW	90	21	15	1.15	0.29	0.24
Poland	HIGH	92	5	3	1.00	0.05	0.03
	MEDIUM	100	14	7	1.15	0.13	0.08
	LOW	97	31	7	1.12	0.42	0.08
Romania	HIGH	100	33	5	1.00	0.33	0.06
	MEDIUM	96	22	6	1.34	0.27	0.08
	LOW	100	14	5	1.25	0.16	0.06
Russia	HIGH	97	32	20	1.37	0.38	0.25
	MEDIUM	97	31	20	1.38	0.37	0.26
	LOW	100	12	19	1.82	0.15	0.24
Spain	HIGH	100	3	4	1.75	0.03	0.06
	MEDIUM	78	7	5	0.92	0.09	0.06
	LOW	97	5	6	1.08	0.06	0.08
Jnited Kingdom	HIGH MEDIUM LOW	74 73 71	51 60 66	27 30 39			
United States	HIGH	98	49	18	1.52	0.81	0.28
	MEDIUM	97	45	27	1.59	0.68	0.43
	LOW	97	41	26	1.66	0.64	0.43

Figures based on less than 30 children's experiences are shaded in grey. Cases where cohabiting unions are more stable than marital unions are highlighted in yellow.



Figure 2 Share experiencing two or more union transitions by age 12 amon born to single mothers with moderate education

across the globe. This analysis is at the country level rather than the individual level. Instead of using maternal union status at birth as a predictor of subsequent union transitions, we use the proportion of births in each union status—single, cohabiting, or married—as a predictor of the proportion of children living with both biological parents at older ages.

Cross-sectional analysis

Childbirth outside of a union obviously exposes children to the risk of parents never forming a union, but they still may. Nonetheless, we would expect that both because of unions not forming and because those formed tend to be more fragile than those established before childbirth,³³ greater shares of births to single parents would lead to greater shares of children reared apart from at least one of their biological parents. The proportion of births to cohabiting couples can be expected to condition later living arrangements to the extent that cohabiting unions are more fragile than marital unions.

Country-level analyses are notoriously subject to the ecological fallacy-making inferences about individuals from data groups. To illustrate, if marriages dissolved more frequently in countries where cohabitation was common, higher proportions born to cohabiting couples could be associated with fewer children living with both biological parents, even if cohabitation and marriage dissolved at equal rates. While acknowledging that national-level associations do not prove individual-level processes, we nonetheless believe that it is valuable to assess whether the normative context of births is related to aggregate family stability. Even if the processes do not operate on the individual level, it is still useful to know whether large proportions of births to single and/or cohabiting parents are related to family stability at the aggregate level.

We were able to compile national level data on the partnership context of births and children's later living arrangements (proportion living with both biological parents) for 100 countries (see list and data sources in the **E-ppendix**). For example, in the Ukraine we know the distribution of union status among women having a child less than one year old³⁴ from the Reproductive Health Survey in 1999. We used the proportion of births to single,

³³ C. Gibson-Davis (2014).

³⁴ We tabulated union status at interview among women giving birth in the last year; some women will have entered or formalized unions since childbirth, and others will have dissolved them, but 1) these individual-level measurement errors are offsetting, and 2) our aim is to measure the normative context for births rather than to measure individual birth context precisely (since we do not follow individuals over time like in the individual-level analysis using the Harmonized Histories).



Within countries, the growth of cohabitation is associated with a rise in family instability.



cohabiting, and married women in 1999 as a predictor of the proportion of 8-year-old children living with both biological parents in the 2007 Demographic and Health Survey. Similarly, we used the distribution of births by union status in 2007 as a predictor of the proportion of 5-year-old children living with both biological parents in 2012 (from the Multiple Indicators Cluster Survey). We include the child's age and age squared in our models to adjust for the fact that living arrangements were measured at various ages.

Change over time analysis

Our first national-level analysis allows us to establish the correlation between proportions of children *born* to single, cohabiting, and married women, and proportions of children living with both biological parents *later on*. Even when controlling for many other country-level factors,³⁵ there still may be important cultural and political factors omitted. Therefore, we also sought to test how change over time in countries' partnership contexts at birth related to change over time in children's living arrangements. In other words, we tested whether *within countries* the growth in single and cohabiting childbearing predicted the growth in proportions of children living apart from at least one biological parent.

In order to analyze change over time within countries, we needed measurements of both partnership context of births and children's living arrangements at two different points in time. These data were available for 69 countries. We omitted the Democratic Republic of the Congo from our analysis because its 20 percentage-point decrease in births to single mothers from 2001 to 2007 probably reflects more about political instability than shifts in the normative context of childbearing in the country. We proceed with data from 68 countries.

The value of having more than one observation per country is enormous. If we simply documented an association between the proportion cohabiting near the time of childbirth and the proportion of children living with both biological parents later, it is quite possible that some cultural or other factor drives both—that birth context does not actually matter for subsequent stability. If, however, we use *the change* in the context of births as a predictor of the change in family stability (rather than using only the context of births as a predictor of family stability), a spurious relationship is far less likely. When analyzing change in levels rather than the levels themselves, everything that is time-invariant about the country (e.g., cultural factors, political systems) is controlled.³⁶

In addition to partnership context at birth, both rates of parental mortality and prevalence of non-coresidential unions would affect the probability of children living with both biological parents. While we ideally include these as controls in our analysis, suitable data are only available for a subset of our countries. We minimized the effect of parental mortality on our analysis by omitting orphans and semi-orphans from both the numerator and the denominator when calculating the proportion living with both biological parents whenever possible. This information was available in the two most common data sources for low-income countries—the Multiple Indicator Cluster Surveys and the Demographic and Health Surveys—and generally not available for higher-income countries. Parental death is, however, rare among children under 15 in higher-income countries, so our correction is least consequential where it is not possible.³⁷

We also obtained an indication that non-coresidential unions did not substantially affect our results in an analysis restricted to the 48 (low-income) countries with available data. The proportion of reproductive-aged women in non-coresidential unions significantly affected the proportion of children living with both biological parents, but introducing that control did little to affect our estimates of partnership context at birth in either the cross-sectional or the change over time analysis.

³⁵ We added measures of socioeconomic development (e.g., the Human Development Index, Gross Domestic Product per capita, mean years of education in the adult population, percent urban), whether the country was a former communist regime, population size, and shares of the population under age 15 and over age 65 to our analysis (see Model 2, Table 3).

³⁶ In statistical terms, having two sets of observations per country allows us to control for country-level fixed effects when estimating the relationship between partnership context of births and children's later living arrangements.

³⁷ We also tested the effect of missing data on parental death by including a dummy variable for whether living arrangements calculated from all children or just those with two living parents. This variable was not significant in either our cross-sectional or our fixed effects model.

Results: country-level analysis

Cross-sectional results

ENDARCIED INTILEEP, 5 12.01 EMP Using the most recent data for each of 100 countries, we find that higher proportions of births to single women and to cohabiting couples are both significantly associated with lower proportions of children living with both biological parents. These relationships are also shown in Figure 3.38 The share of births to single mothers has a stronger relationship with children's later living arrangements than does the share of births to cohabiting couples. Where the

Figure 3 Country-level relationship between partnership context at birth and children's later living arrangements



38 The values for living with both biological parents at age 12 in figure 3 were estimated using the observed living arrangements at various ages and adjusting using the coefficients on age and age squared in the model.

share of births to single mothers is a percentage point higher, the share of children living with both biological particle is 0.90 percentage points lower. Where the share of births to cohabiting couples is a percentage point higher, the share of children living with both biological parents is 0.15 percentage points lower (Table 3, Model 1). Figure 3 also presents cohabiting births and children's living arrangements separately for Northern Europe, as this is the one region where there is little relationship.

The overall significant relationships persist even when controlling for measures of: socioeconomic development;³⁹ whether the country was a former communist regime; population size; and shares of the population under age 15 and over age 65 (see Table 3 Model 2). The only one of these variables that was statistically significant was the Human Development Index: in countries with higher levels of human development, more children live with both biological parents. This is not surprising given the low levels of development in Africa and the high levels of child fosterage in (particularly West) Africa. With the controls, the estimated relationship between births to single parents and living arrangements is somewhat larger, and the relationship between births to cohabiting parents and living arrangements is about one-third smaller (-0.10).

Change over time results

When we use two observations per country and can therefore control for country-specific fixed effects, we cannot incorporate any other country-level control variables.⁴⁰ Nonetheless, our change over time models provide a more exacting test of the relationship between partnership context at birth and children's later living arrangements because everything that is common to the two time points within each country is effectively controlled. Our analysis also

Table 3Estimated effect of partnership context at birth on percent livingwith both biological parents across 100 countries

	MODEL I	MODEL 2
Percent born to single mother Percent born to cohabiting couple	-0.90 *** -0.15 **	-0.93 *** -0.10 *
Child's age	-3.44 *	-0.55
Child's age squared	0.17	-0.04
Human Development Index		55.53 *
Gross National Product per capita		0.08
Mean years of education		-0.36
Percent urban		-0.14
Former communist regime		2.31
Population size		0.00
Population share < 15		-0.04
Population share > 65		-0.47
Constant	97.61 ***	67.10 ***

* p < 0.05; ** p < 0.01; *** p < 0.001

³⁹ I.e., the Human Development Index, Gross Domestic Product per capita, mean years of education in the adult population, and percent urban.

⁴⁰ The set of dummy variables for country uses up all of the available degrees of freedom.

			-34.84 ***
Percent born to single mother	0.20	West Africa	
Percent born to cohabiting couple	-0.27 *	Benin	-34.84 ***
Child's age	-1.34	Burkina Faso	-46.59
Child's age squared	-0.01	Côte d'Ivoire Ghana	-74.73 *** -112.70 ***
Northern Europe		Gnana Guinea	-69.01 ***
Estonia	-93.93 ***	Mali	-37.51 ***
Great Britain	-99.77 ***	Niger	-44.66 ***
lceland	-63.62 ***	Nigeria	-9.86
Lithuania	-96.29 ***	Senegal	-102.10 ***
Norway	-92.03 ***	Sierra Leone	-51.90 ***
Western Europe		East Africa	
Austria	-90.82 ***	Burundi	-84.68 ***
Belgium	-95.48 ***	Ethiopia	-32.43 ***
France	-92.43 *** -89.72 ***	Kenya	-106.95 ***
Netherlands	-89.72	Malawi Mozambique	-104.61 *** -70.45 ***
Eastern Europe Bulgaria	-56.98 ***	Rwanda	12.60
Hungary	-96.12 ***	Tanzania	-86.42 ***
Moldova	-71.62 ***	Тодо	-75.17 ***
Poland	-89.67 ***	Uganda	-102.07 ***
Romania	-73.40 ***	Zambia	-111.10 ***
Russia	-74.42 ***	Zimbabwe	-87.39 ***
Ukraine	-20.16 *	Middle Africa	
Southern Europe		Cameroon	-76.23 ***
Italy	-86.23 ***	Central African Republic	15.16
Portugal	18.25	Chad Descriptions (store Courses	-31.62 *** 107.51 ***
Serbia Spain	60.91 *** -88.10 ***	Republic of the Congo Southern Africa	107.51
United States	-116.86 ***	Lesotho	-43.89 **
Asia	110.00	Madagascar	-22.60 *
Armenia (reference)		Namibia	-147.77 ***
Cambodia	37.34 ***	South Africa	-137.58 ***
Kazakhstan	24.81 **		
Kyrgyz Republic	-69.88 ***	Constant	177.57 ***
Mongolia	-67.17 ***		
Uzbekistan	68.53 ***		
South America			
Bolivia Colombia	6.64 -92.98 ***		
Ecuador	-92.98 -65.48 ***		
Peru	-92.07 ***		
Uruguay	92.39 ***		
ntral America and the Caribbean			
Cuba	5.66		
Dominican Republic	-106.60 ***		
Guatemala	-65.36 ***		
Haiti	-68.55 ***		
Honduras	-57.29 ***		
Mexico Panama	-68.42 *** -91.11 ***		

accounts for change over varying time periods (e.g., 11 years between observations of partnership context at birth a 8 years between observations of living arrangements) by standardizing them to represent 10-year change.

ENRICED INTERES COLOMA Here we find that a rise in the share of births to single women does not predict greater instability in children's lives, but when the share of births to cohabiting couples within a country increases by one percentage point, the percentage later living with both biological parents drops by 0.27 percentage points. In other words, growth in cohabitation predicts growth in family instability (Table 4) more strongly than levels of cohabitation predict family instability (Table 3).

Conclusion

Using both individual-level and country-level data, we have shown that births to cohabiting unions contribute to instability in children's family lives. Individual children born in cohabiting unions experience more union transitions before age 12 than children born in marital unions regardless of the mother's educational attainment. There is much variation between countries in the amount of instability, but there are few exceptions to the pattern: children born to marital unions have the best chance of stability across various cultures, legal systems, welfare regimes, and levels of cohabitation.

The largest absolute stability gap between children born to cohabiting vs. marital unions is among children whose mothers have high levels of education in the United States: 49 percent of children born to cohabiting couples experience parental union dissolution as compared to 18 percent of children born to married couples. At other education levels, the United States is more similar to Europe in the size of the stability gap. Overall, the stability gap does not vary much by maternal education levels, and in the countries where it does, sometimes marriage matters more for children of the less educated, and sometimes it matters more for children of the more educated. There is considerable country-specific variation in the way that union type conditions stability, but marriage is associated with an advantage at all education levels in most countries. Only in Bulgaria did children of mothers with moderate education experience fewer transitions if they were born to cohabiting rather than married couples. There are no countries where marriage is not associated with a stability advantage for at least one of the maternal education levels.

Our country-level analysis showed that across the globe, there is a negative association between the share of all births that are to cohabiting couples and the proportion of 12-year-olds living with both biological parents. Further, a rising share of births to cohabitation predicted fewer children still being reared by both biological parents at age 12. Within countries, the growth of cohabitation is associated with a rise in family instability. The primary exception to this pattern is that the growth of cohabitation in Northern Europe is not related to more family instability.

We also confirmed, unsurprisingly, that children born to single mothers have the least stable family lives. At the individual level, children born to single mothers were about nine times as likely as children born to cohabiting couples to experience at least one maternal union transition by age 12. At the country level, the association between the share of births to single women and children's later living arrangements was also about nine times greater than the association between cohabiting births and children's living arrangements. Further, at the individual level where we were able to measure multiple union transitions, children born to single mothers were about four times as likely to undergo two or more transitions than children born to cohabiting couples. Even though nonmarital childbearing is generally associated with a stability disadvantage, the disadvantage is markedly attenuated if the child's parents were partnered at the time of childbirth.

Some of our findings are not unexpected. Work published over 15 years ago based on Fertility and Family Surveys from nine European countries also showed a cross-country stability advantage to marriage over cohabitation (measured by whether the biological parents were still in union when the child turned five).⁴² Other work using similar data and more countries in the West also found that rising proportions of cohabiting births shifted childrearing to single mothers because there were more union transitions following cohabiting births than marital ones.⁴³ Children born to marriages have also been shown to have more stable family lives in Chile.⁴⁴

On the other hand, this is the first study to show across a broad range of countries that the stability advantage to marriage exists at all levels of maternal education. If children born within marriage were advantaged primarily because better-educated mothers are more likely to have children within marriage, overall contrasts associated with partnership context at birth should have been muted within education categories. Instead, the overall stability gap was fairly consistent across educational levels.

Further, we have established that cohabitation continues to confer a stability disadvantage on individual children even as cohabitation has become more normative. We find no evidence supporting the idea that in societies where cohabiting births are more common, marriage and cohabitation come to resemble each other in terms of stability for children. There is much cross-national variation in the size of the stability gap, but it is not conditioned by the prevalence of cohabitation. While growth in cohabitation tends to close the socioeconomic gap between cohabiting and married couples,⁴⁵ it does not close the stability gap for their children. In other words, marriage seems to be associated with more family stability for children across much of the globe.

Marriage seems to be associated with more family stability for children across much of the globe.

⁴² P. Heuveline, J. M. Timberlake, and F. F. Furstenberg, "Shifting Childrearing to Single Mothers: Results from 17 Western Countries," *Population and Development Review* 29, no. 1 (2003); P. Heuveline and J. M. Timberlake, "Changes in Nonmarital Cohabitation and the Family Structure Experiences of Children Across 17 Countries," *Sociological Studies of Children and Youth*, Special International Volume 10 (2005).

43 Viviana Salinas, "Changes in Cohabitation After the Birth of the First Child in Chile," Population Research and Policy Review 35, no. 3 (2016).

⁴⁴ J. P. M. Soons and M. Kalmijn (2009); see also: K. Musick and K. Michelmore (2016) who found only small socioeconomic differences according to union status in Austria, France, Norway, and Sweden.