Descriptive Finding

**Continuity and change of cohabitation in
Mexico: Same as before or different anew**

Julieta Pérez Amador

Contents

Continuity and change of cohabitation in Mexico: Same as before or different anew

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Abstract

BACKGROUND
Mexico experienced a boom in cohabitation during the 2000s, which has sparked a debate about whether the nature of cohabitation has changed along with its increasing overall rates and diffusion to diverse social groups.

OBJECTIVE
We examine continuity and change in the dynamics of cohabitation in Mexico to address whether it has largely hewed to prior patterns or taken on new forms.

METHODS
We analyze the marital histories of 99,387 female respondents in the 2009 National Survey of Demographic Dynamics using multistate event-history techniques.

RESULTS
Mexico's cohabitation boom of the 2000s was driven by cohorts born after 1975, whose cohabiting unions are less likely to transition to marriage than those formed by earlier cohorts. However, the tendency of cohabiters to marry is greater among the higher educated.

CONCLUSION
Cohabitation in Mexico used to be rare, concentrated among less-educated women, and mostly a prelude to marriage. As it became more common in the 2000s it also took on at least two distinct patterns. Among the less educated, cohabitation became a common union-formation option, shifting to a longer-term substitute for marriage. Cohabitation also grew, from a lower baseline, among the upper educated; but for them, it is usually a short stage, either transitioning to marriage or ending in separation.

CONTRIBUTION
Our findings contribute to the literature on international family change by providing an additional case study, different in geographical and cultural setting, of the global rise of cohabitation.

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1. Introduction

Cohabitation grew rapidly in many Latin American countries during the 1990s, but only moderately in Mexico, leading some to predict Mexico would catch up subsequently (Esteve, Lesthaeghe, and López-Gay 2012). The magnitude of the increase in the 2000s exceeded all expectations: nowadays, one third of young Mexican women cohabit. This boom in cohabitation raises the question of whether it has correspondingly taken on a new form (as predicted by the second demographic transition) or has simply reproduced its old pattern while becoming more common.

This study identifies continuity and change in the process of family formation in Mexico by addressing empirically whether new patterns of cohabitation emerged in the course of its explosive growth during the 2000s. However, in contrast to prior research, which characterizes 'new' and 'traditional' forms of cohabitation in Latin America based solely on who cohabits (e.g., the rural, the less educated, etc.), we focus also on the typical dynamics of cohabitation (i.e., duration and/or transition to marriage or separation), which define its role in the family-formation process. To that end, we analyze union formation as a process involving five states and seven transitions using multistate event-history techniques. Our data is from the 2009 National Demographic Survey, which allows us to compare cohorts of women entering unions before and after 1960, when cohabitation levels actually began to decline, and also during the recent boom of the 2000s.

2. Context

2.1 Levels and trends

The process of family formation in Mexico was fairly stable prior to the 2000s. Conjugal unions were formed relatively early in life and cohabitation coexisted with marriage. Contrary to trends in some Western industrialized countries since the late 1960s, cohabitation rates in Mexico declined between 1960 and 1990 because of government legalization campaigns during the 1970s. Among young women aged 25–29, cohabitation fell from 17% of all unions in 1960 to 15% in 1970, then remained stable at that level until 1990. Beginning in 1995, however, demographic surveys reported slightly higher proportions cohabiting, a trend confirmed by the 2000 census, where cohabitation accounted for 23% of all unions. More dramatically, the proportion increased to 38% by 2010. Thus, by the current decade, more than one in every three Mexican young women who enter unions choose cohabitation over marriage.

2.2 Who cohabits?

Cohabitation was traditionally concentrated overwhelmingly in the lower socioeconomic sectors of the Mexican society. For instance, primary or lower-secondary educated women were more likely to cohabit than upper-secondary or postsecondary educated women (Gómez de León 2001; Solís 2004). Similarly, women whose partners had lower occupational status were more likely to be in cohabiting unions (Ojeda 1989; Quilodrán 2001). Solís (2004) argues that although the risk of entering cohabitation rather than marriage increased moderately in the 1990s, cohabiting women were still characterized by lower levels of education and residence in rural settings in poorer regions of the country.

During the 2000s, however, cohabitation spread throughout the educational spectrum, becoming common even among college-educated women (Pérez Amador and Esteve 2012). It also became habitual in cities and highly developed regions of the country. The diffusion of cohabitation to higher status groups and urbanized settings fuels debate on whether it has taken on a new form related to changing values predicted by the second demographic transition (Esteve, Lesthaeghe, and López-Gay 2012; Quilodrán 2003) or rather to increasing economic uncertainty among all segments of the population (Solís and Ferraris 2014; García and Rojas 2004).

2.3 The dynamics and nature of cohabitation

Generally, cohabiting unions are formed earlier than marriages, often as an initial step in the family-formation process. Survey data from 1976 indicates that 25% of all unions started as cohabitations, of which 50% became marriages (Ojeda 1989; Quilodrán 2001). Equivalent estimations for 1997 are 37% and 43%, respectively. These estimates, however, combine the marital experience of various birth cohorts and women of different socioeconomic backgrounds. One study suggests that after controlling for basic demographics, women born in the 1960s have a risk of cohabiting 37% higher than those born in the 1950s (Pérez Amador 2008). They are also somewhat more likely to exit cohabitation (mostly through marriage) than their older counterparts. Women born in the early 1970s are more likely to have cohabitation in their marital history than women born earlier (Solís and Puga 2009).

Cohabiting unions dissolve at higher rates than marriages, and this disparity appears to have increased as cohabitation has become more widespread. Among women 15 to 54 years old in 1997, the lifetime crude probability of dissolution of cohabitation was 0.17 compared with 0.10 of marriage; among women 15 to 49 years old in 2003, the cumulative probability of dissolution after five years of union was 0.22 for

cohabitation, 0.07 for civil marriages, and 0.02 for civil and religious marriages (Ojeda and González 2008).

These results are, however, only suggestive, and it remains a key question whether the increasing incidence of cohabitation comes in tandem with changes in its dynamic. Discussions of the possible relevance of increased cohabitation in Mexico for second demographic transition theory have focused almost exclusively on its overall incidence and apparent spread to the highly educated (Esteve, Lesthaeghe, and López-Gay 2012; Quilodrán 2003), but if it is evolving from a stepping stone to marriage into more of a substitute to marriage or a trial marriage, that is clearly relevant for assessing the validity of second demographic transition theory, which maintains not only that cohabitation is becoming more common but also that it has begun to replace (that is, substitute for) marriage. We address precisely this issue by examining rates of transition from cohabitation to marriage and dissolution (and, correspondingly, rates of remaining in a cohabiting union) for different cohorts. We do so using a multistate transition framework that provides a holistic description of where cohabitation fits in the family-formation process and whether that role has changed over time.

3. Methods

We use data from the 2009 National Survey of Demographic Dynamics (ENADID), which provides retrospective marital histories of women aged 15–54. Sample size is 100,515; however, 1.2% of cases have missing information on at least one of the events/transitions under study, leaving a valid sample of 99,387 cases. We estimate multistate event-history models using CTM (Yi, Honore, and Walker 1987). The multistate representation of family formation and dissolution is illustrated in Figure 1. Each of the seven hazards associated with flows into and out of the five states is represented parametrically as a function of individual (fixed or time-varying) characteristics and a quadratic transformation of duration in state (in years):

$$\mu_{ij}(t|X) = \exp(\alpha + \gamma_1 t + \gamma_2 t^2 + \beta X)$$

In this equation, μ_{ij} are the risks of transiting from state i to state j, and X is a vector of covariates. The latter includes educational attainment (primary, lower secondary, upper secondary, and postsecondary), size of locality (rural, urban, and metropolitan) at the time of survey, and a time-varying dummy variable indicative of having made the transition to motherhood. These variables, examined in previous analyses of Mexican cohabitation, serve as proxies for socioeconomic status and contextual environment. As discussed above, cohabitation should be more common among less-educated and rural

women. Motherhood status should be positively associated with the risk of entering cohabitation (Pérez Amador 2008; Solís and Ferraris 2014). To differentiate the dynamics of old and new forms of cohabitation, we include dummy variables for birth cohorts to allow the baseline hazards to vary by cohort (1955–1964, 1965–1974, 1975–1984, and 1985–1994). These cohorts are optimal, based on preliminary analysis, and they are consistent with previous literature suggesting that Mexican women born in and after 1975 are the motor of recent family change (Rosero-Bixby, Castro-Martín, and Martín-García 2009). We estimated our model separately by cohort, but we found no evidence that the coefficients differed across cohorts, so we only report estimates from the pooled data.

Figure 1:   Multistate representation of marital-union formation and dissolution
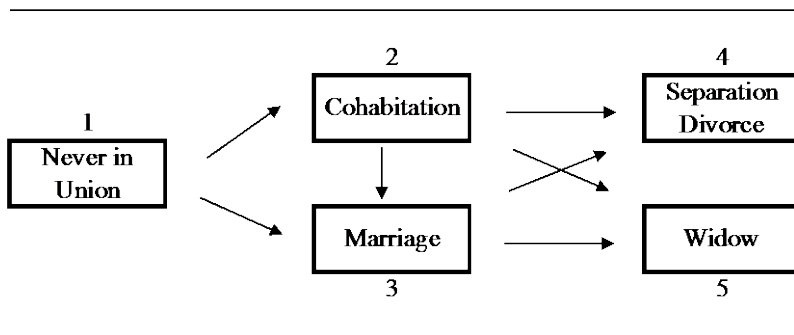
4. Results

4.1 Transition matrix

Table 1 shows the unconditional (raw) transition matrix among states depicted in Figure 1. Frequencies are displayed in the first row of each cell. The diagonal contains instances of state immobility, that is to say, women who did not experience a transition out of a given state by the time of the survey. States 4 and 5 are absorbent by definition. 33,242 respondents stayed single; 11,031 of the 24,386 moving to state 2 remained there; 40,987 of the 41,759 entering marriage stayed married, and so on. The upper-off-diagonal cells represent moves between states during the observation period: from being single, 24,386 respondents moved to cohabitation and 41,759 to marriage; from

cohabitation, 7,758 moved to marriage, 5,136 to separation, and 461 to widowhood. In total, we observed 88,030 interstate transitions.

Table 1: **Transition matrix**

	State of Destination				
State of Origin	1	2	3	4	5
	Never in Union	Cohabitation	Marriage	Sep./ Div.	Widow
Never in Union	33242 [a]	24386 [a]	41759 [a]		
	23.65 [b]	18.33 [d]	19.58 [d]		
	0.334 [c]	0.245 [c]	0.420 [c]		
Cohabitation		11031 [a]	7758 [a]	5136 [a]	461 [a]
		10.80 [b]	3.37 [d]	6.01 [d]	11.94 [d]
		0.452 [c]	0.318 [c]	0.211 [c]	0.019 [c]
Marriage			40987 [a]	6918 [a]	1612 [a]
			17.43 [b]	10.46 [d]	15.10 [d]
			0.828 [c]	0.140 [c]	0.033 [c]
Sep. / Div.				12054 [a]	
				11.33 [b]	
				1.000 [c]	
Widow					2073 [a]
					11.76 [b]
					1.000 [c]

Note: (a) number of cases; (b) mean duration in the state; (c) crude probability; (d) mean duration at transition.
Source: ENADID 2009. Women 15-54 years old (N = 99,387).

Crude probabilities (unadjusted for competing risks) of transitioning from one state to another are obtained by dividing cell frequencies by row totals in the transition matrix. Single women have lower likelihood of cohabiting than getting married (0.245 and 0.420, respectively). Cohabiting women have a higher likelihood of marrying than separating (0.318 and 0.211); they are, however, more likely to stay cohabiting than to leave cohabitation (i.e., 0.452). Regarding stability, cohabitations dissolve at higher rates than marriages (0.211 and 0.140). These results accord with previous literature showing that single women have a higher risk of marrying than cohabiting and that the

former type of union has a lower risk of separating (or divorcing) than the latter (Ojeda and González 2008; Pérez Amador 2008; Solís and Ferraris 2014). However, that cohabiters are now less likely to legalize than to remain cohabiting is a departure from the earlier pattern. We further investigate this result by analyzing the transition matrix by cohort.

Table 2: **Transition matrix – crude probabilities of transition between states by cohort**

State of origin	Birth cohort	State of destination				
		1	2	3	4	5
		Never in union	Cohabitation	Marriage	Sep./ Div.	Widow
Never in Union	1955–1964	0.09	0.23	0.68		
	1965–1974	0.12	0.27	0.61		
	1975–1984	0.27	0.32	0.42		
Cohabitation	1955–1964		0.25	0.44	0.27	0.05
	1965–1974		0.36	0.38	0.24	0.02
	1975–1984		0.48	0.31	0.21	0.01
Marriage	1955–1964			0.77	0.17	0.06
	1965–1974			0.82	0.15	0.03
	1975–1984			0.88	0.12	0.01
Sep. / Div.	1955–1964				1.00	
	1965–1974				1.00	
	1975–1984				1.00	
Widow	1955–1964					1.00
	1965–1974					1.00
	1975–1984					1.00

Source: ENADID 2009. Women 25–54 years old (N = 69,212).

Table 2 shows the crude transition probabilities by cohort. Because the youngest cohorts are more affected by censoring than older cohorts, we do not include women younger than 25. We also focus on comparing transitions into rather than out of cohabitation and marriage. Although the youngest members of cohort 1975–1984 have only turned 25, the likelihood of cohabiting evidently increased across cohorts. The

youngest cohort is more likely to stay single, but even if single women at the time of the survey were to marry, we would still observe the trend of growing cohabitation. The probability of staying in cohabitation also increased, while that of legalization decreased. We cannot conclude much about the tendency of union dissolution because this transition occurs later in life, and thus is more affected by censoring. Thus far, our results show increasing likelihoods of both entering into and staying in cohabitation.

4.2 Multivariate analysis

Table 3 presents results from the multistate event-history model of union formation and dissolution. The transitions to widowhood (not shown) were also included in the estimation as a source of censoring. Holding education, locality size, and motherhood status constant, the estimated cohort effects follow a clear pattern: the risk of entering cohabitation increased and the risk of entering marriage decreased across cohorts. Women of recent cohorts are delaying marriage while initiating union formation via cohabitation at higher rates than previous cohorts. For instance, women born in 1975–1984 have a risk of marriage that is 40% lower than the risk of marriage for women born in 1955–1964 (1-exp[–0.502]=0.40), and a risk of cohabiting that is 64% higher (exp[0.495] –1=0.64). The risk of cohabiting increases monotonically across cohorts; however, we see accelerated change from the 1965–1974 to the 1975–1984 cohorts. The latter cohort was in the marriage market at the beginning of the century and thus drove the cohabitation boom observed between the 2000 and 2010 censuses.

The results also show a systematic decrease in the risk of marriage across cohorts of cohabiting women. Relative to women born a decade before, cohabiting women born in 1975–1984 have a 20% lower risk of marriage. The risk of marriage among cohabiting women born after the mid-eighties fell even more rapidly, but this result should be confirmed by future studies observing this cohort at older ages.

Finally, the results indicate younger cohorts of cohabiters are more likely to separate than their older peers. Relative to women born in 1955–1965, the risk of dissolution is 4% higher for those born in 1965–1974 and 24% higher for those born in 1975–1984. This is further evidence that women born in or after 1975 are the drivers of a considerable change in family-formation patterns.

Despite the increasing likelihood of cohabitation among younger (more-educated) cohorts, education has a strong negative effect on the risk of entering cohabitation; the association is similar for marriage, but stronger for cohabitation. Among cohabiting women, the highly educated are more likely to either marry or separate than their less-educated peers. This effect, which is stronger for legalizing than for separating, means that cohabitations tend to be more stable for less-educated women. Therefore, education

continues to play an important role in explaining not only cohabitation entry but also, and perhaps more importantly, its nature and dynamics.

Table 3: **Multistate hazard model of union formation and dissolution, parameter estimates for selected demographics, Mexican women, 2009**

Transition	Never in union Cohabitation 1 --> 2		Never in union Marriage 1 --> 3		Cohabitation Marriage 2 --> 3		Cohabitation Separation 2 --> 4		Marriage Sep.Div. 3 --> 4	
Birth cohort (Reference: 1955–1964)										
1965–1974	0.226	**	−0.150	**	−0.112	**	0.046		0.273	**
	(0.019)		(0.011)		(0.031)		(0.040)		(0.030)	
1975–1984	0.495	**	−0.502	**	−0.224	**	0.215	**	0.737	**
	(0.018)		(0.013)		(0.032)		(0.041)		(0.036)	
1985–1994	0.651	**	−1.224	**	−0.602	**	0.324	**	1.175	**
	(0.021)		(0.021)		(0.043)		(0.052)		(0.071)	
Highest educational level attended (Reference: Primary)										
Lower secondary	−0.303	**	−0.014		0.161	**	0.147	**	0.164	**
	(0.015)		(0.012)		(0.028)		(0.033)		(0.033)	
Upper secondary	−1.003	**	−0.296	**	0.262	**	0.120	**	0.308	**
	(0.019)		(0.014)		(0.034)		(0.042)		(0.034)	
Postsecondary	−1.848	**	−0.754	**	0.414	**	0.068		0.402	**
	(0.025)		(0.017)		(0.040)		(0.057)		(0.037)	
Transition to motherhood (*tv*)	0.016		−0.901	**	−0.808	**	−0.445	**	−0.215	**
	(0.021)		(0.022)		(0.027)		(0.036)		(0.041)	

Table 3: (Continued)

Transition	Never in union Cohabitation 1 --> 2		Never in union Marriage 1 --> 3		Cohabitation Marriage 2 --> 3		Cohabitation Separation 2 --> 4		Marriage Sep.Div. 3 --> 4	
Size of the locality of residency (Reference: < 2 500 inhabitants)										
2 500 – 99 999	0.002		−0.076	**	0.026		0.258	**	0.580	**
	(0.017)		(0.014)		(0.032)		(0.042)		(0.046)	
100 000 +	−0.091	**	−0.122	**	−0.111	**	0.434	**	0.891	**
	(0.016)		(0.013)		(0.031)		(0.039)		(0.043)	
Intercept	−10.602	**	−11.530	**	−1.953	**	−3.599	**	−5.995	**
	(0.064)		(0.060)		(0.035)		(0.050)		(0.058)	
Gamma 1	0.768	**	0.950	**	−0.188	**	−0.018	**	0.065	**
	(0.006)		(0.006)		(0.007)		(0.007)		(0.006)	
Gamma 2	−0.034	**	−0.041	**	0.007	**	0.000		−0.004	**
	(0.000)		(0.0003)		(0.001)		(0.001)		(0.000)	
Negative Log Likelihood	358,903									
N	99,387									
Degrees of freedom	50									

Note: *p<0.05 **p<0.01. Standard errors in parentheses.
Source: ENADID 2009. Women 15 to 54 years old (N = 99, 387).

5. Conclusion

The recent upsurge of cohabitation in Mexico has raised the issue of whether its patterns have changed along with its rise. Most studies analyzing cohorts of women born before 1975 found little change in terms of who cohabits and the role of such unions as environments for childbearing and -rearing (Castro Martin 2002; Solís 2004). In contrast, our results show that cohabiting unions that boomed during the 2000s (driven by cohorts born after 1975) exhibit a different pattern. Even after controlling for the compositional change across cohorts in education and other demographic variables,

cohabitations formed by younger cohorts are less likely to transition to marriage and more likely to dissolve than those formed by previous ones.

Therefore, in its older pattern, occurring mostly among (less-educated) Mexican women born before 1975, cohabitation was a stage in the marriage process, with a high probability of being legalized. That is not the case for the newer pattern, where cohabiting unions are more likely to be a persist state or to break up. Among the less educated, cohabitation has become a common choice of union formation; but it seems an alternative rather than a prelude to marriage. Thus, as in other countries such as the United States (Oppenheimer 2003) and Japan (Raymo, Iwasawa, and Bumpass 2009), contemporary Mexican cohabitation may function as an alternative to marriage for those with lower socioeconomic status, a pattern that follows international trends in increasing socioeconomic disparities in family behavior (McLanahan 2004) and increasing economic uncertainty surrounding the transition to adulthood in modern societies (Mills, Blossfeld, and Klijzing 2005). Cohabitation has also increased for more-educated women, but for them, it appears to resemble a 'trial marriage' pattern, with higher probabilities of transitioning to marriage or ending in separation. Taken together, these findings suggest that as cohabitation has spread throughout the educational spectrum, it has followed different dynamics for different educational levels. Clearly, more evidence is needed to confirm both the coexistence of different models of cohabitation and its changing dynamics and nature given that the cohabitation boom in Mexico has emerged only in the 2000s. Nonetheless, our results suggest major changes to what was until recently a very stable nuptiality regime.

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