The Contributions of Childbearing within Marriage and within Consensual Union to Fertility in Latin America, 1980-2010

Benoît LAPLANTE[1]

Teresa CASTRO-MARTÍN[2]

Clara CORTINA[3]

Ana Laura FOSTIK[4]

Teresa MARTÍN-GARCIA[5]

Abstract

Recent research has shown that in Latin America, over the last decades, the proportion of women in their reproductive years who live in a cohabiting, or consensual, union has been rising substantially. Research also showed that in most Latin American countries, the levels and age patterns of fertility are very similar within marriage and within consensual union. However, the relative contribution of births within marriage and within consensual union to each country's fertility remains largely unknown. Estimations based on vital statistics are impaired by the fact that they do not distinguish between unmarried mothers who live alone and those who live with a partner. We use census data from 13 Latin American countries to estimate the contribution of births within marriage and within consensual union to each country's fertility. Results show that the contribution of consensual union varies across countries, but is rising in all of them.

Context

One of the most distinctive demographic features of Latin America is its dual nuptiality regime. Marriage and consensual union have coexisted side by side in all countries of the region since the Spanish and Portuguese colonies (Quilodrán 1999, De Vos 2000, Castro Martín 2002, Rodríguez Vignoli 2004, Esteve, Lesthaeghe and López-Gay 2012). However, the prevalence of consensual unions has historically been heterogeneous in the region. Nowadays, the prevalence of consensual unions still varies from country to country, but it has risen in all of them: from about 20% of all conjugal unions among women aged 15 to 49 in Chile, up to 74% in the Dominican Republic (Castro Martín et al. 2011).

Due to its long standing presence as a form of conjugal union and to the high level of social acceptance it enjoys, childbearing and childrearing within consensual unions are common in the region. This can partly be explained by the fact that consensual unions are not only "trial mar-

[1] Institut national de la recherche scientifique, Université du Québec, Canada - Benoit.Laplante@ucs.inrs.ca
[2] Consejo Superior de Investigaciones Científicas - CSIC, España - teresa.castro@csic.es
[3] Universitat Pompeu Fabra, España - clara.cortina@upf.edu
[4] Institut national de la recherche scientifique, Université du Québec, Canada - analaura.fostik@ucs.inrs.ca
[5] Consejo Superior de Investigaciones Científicas - CSIC, España - teresa.martin@cchs.csic.es

riages" typical of younger age groups. They are also prevalent in later stages of the life course, which differentiates the region to most European countries. Moreover, childbearing within consensual unions has been increasing in recent years. The proportion of births to cohabiting parents has gone from 15% in 1970 to 39% in 2000 (Castro Martín et al. 2011). Births from lone mothers also increased during this period, from 7% to 15%, which implies that nowadays births out of wedlock are actually more common in the Latin-American region than births within marriage.

In an effort to understand the changing family context of childbearing in Latin America, Laplante, Castro-Martín, Cortina, and Martín-Garcia (2013) compared the fertility patterns of women in consensual union and marriage in 13 Latin American countries. They used census microdata from the three most recent census rounds and a methodological approach that combines the own-children method and Poisson regression in order to estimate age-specific fertility rates and total fertility rates within marriage and within consensual union. Their results show that in all these countries, fertility is slightly higher within consensual union than within marriage. The age pattern of fertility is also documented to be very similar in marriage and in consensual union. The largest difference can be observed among women aged 30 to 45. Other analyses showed that over the period considered, childbearing within a consensual union has become increasingly more common also for highly educated women in most of the countries. This is a clear indication that the similarities in reproductive behaviour between marital and nonmarital unions are not confined to the socially disadvantaged groups, but apply as well to the better off. According to these results, the authors conclude that in Latin America, at least since the 1980s, women's childbearing patterns depend on their age and on their living in a conjugal relationship, but not on the legal nature of this relationship.

The approach used by Laplante et al. (2013) provides insights about the social acceptability of childbearing within consensual unions. It has become socially accepted to do so and women apparently feel free to have children with their partner without being married, well-educated women lagging behind but following the same tendency. However, this approach does not provide any information on the contribution of fertility within consensual union to overall fertility. Vital statistics show that the proportion of children born out of wedlock has been rising in all Latin American countries and account for more than half of the births in many of them. The concomitant rise in the proportion of women living in consensual unions suggests that a large fraction of the children born to unmarried mothers are born to parents living in a consensual union. However, this inference is only indirect, and the primacy given by vital statistics to recording legal marital status over *de facto* partnership status emphasis impairs the direct estimation of the proportion of

children who are truly born to women who live alone and the proportion of children who are born to parents who live in a consensual union.

Given the current proportions of women living in consensual unions in Latin America and the current proportion of children who are born to unmarried mothers, having access to estimates of the proportion of children who are born to unmarried parents rather than to mothers who live alone would provide a clearer understanding of an important aspect of the current family dynamics and should be useful for policy purposes.

Objectives

In this paper, we use census data and the own-children method, as in Laplante et al. (2013), but in order to estimate two measures of the relative contribution of marriage and consensual union to fertility. Rather than focusing on the social acceptability and mainstreaming of childbearing within consensual unions, we focus on the relative importance of childbearing within consensual union regarding population replacement. To some extent, this effort implies establishing the importance of the conjugal situation in Latin America, just like the Princeton project did for the importance of the marital status in Europe, distinguishing in that case marital and no marital fertility (Coale and Watkins 1986).

Data and method

Vital statistics in many Latin American countries suffer from under-registration (Harbitz, Benítez Molina, and Arcos Axt 2010) and do not provide information on whether or not the unmarried parents are living together, so children born from a mother living in a consensual union are not reported separately from those born from a mother who does not have a co-residential partner (with some exceptions, like Costa Rica). In order to distinguish births from cohabiting mothers and lone mothers, we need to resort to census data or surveys with retrospective birth histories. Census data contain reliable information on the current conjugal situation of all individuals (Rodríguez Vignoli 2011) and provide a workable alternative to vital statistics or biographical surveys when used with the own-children method of fertility estimation.

Applying the own-children method to census data allows us to identify recent births in consensual couples and married couples. This method is an indirect technique for the estimation of fertility (Cho, Rutherford, and Choe 1986). Its original form uses the distribution of the number of chil-

dren less than five years old in the household conditional on the age of mothers aged between 15 and 49, grouped into five-year classes.

Therefore, we use data from the IPUMS collection of harmonized census microdata files from the four most recent census rounds available (Minnesota Population Center 2013). Our selection includes samples ranging from 1980 to 2010 for 13 Latin American countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, Mexico, Panama, Peru, Uruguay and Venezuela.

We use two measures of fertility: the contribution of each conjugal status to age-specific fertility rates (CASR) and the contribution of each conjugal status to cumulative fertility (CCF). The first measure, the contribution of each conjugal status to age-specific fertility rates (CASR), is computed as the product of the within conjugal status age-specific rate and the proportion of women of the same age living in a given type of conjugal status. The sum of the contributions of each conjugal status to age-specific fertility rates is the within conjugal status age-specific rate. The second measure, the contribution of each conjugal status to cumulative fertility (CCF), is the sum over age of the contributions of each conjugal status to age-specific fertility rates. The sum of the contributions of each conjugal status to cumulative fertility is the cumulative fertility. The value of the contribution of a given conjugal status to cumulative fertility at the end of the reproductive period is the contribution of this conjugal status to overall fertility. The sum of the contributions of all conjugal statuses to overall fertility is the Total Fertility Rate. Formally, these relations may be written as

$$r_t = \sum_{k=1}^{n} p_{kt} r_{kt},$$

$$R_k^A = \sum_{t=1}^{49} p_{kt} r_{kt}$$

and

$$R = \sum_{k=1}^{n} R_k^A,$$

where p_{kt} is the proportion of women living in conjugal status k at age t, r_{kt} is the age-specific fertility rate at age t for conjugal status k, r_t is the age-specific fertility rate, $R_k{}^A$ is the "weighted" total fertility rate for conjugal status k and R is the overall total fertility rate. Weighting the rates

by the proportion of women living in each conjugal status allows expressing the overall TFR as the sum of "weighted" conjugal status TFRs, which amounts to a decomposition. From this perspective, the overall TFR is the expected number of children born to a woman who would have spent her reproductive years in each conjugal status according to the actual proportion of women in each conjugal status at each age in the synthetic cohort. Similarly, the "weighted" TFR of a given conjugal status is the expected number of children born to a woman who would have spent all her reproductive years in this conjugal status according to the actual proportion of women living in this conjugal status at each age. Thus, over her artificial life course, the average woman of the synthetic cohort of a more complete version of our imagined example may have had one child while living with her spouse, one child while living in a cohabitation and, say, 0.1 children while living alone. Expressed as proportions of the overall TFR, the "weighted" TFRs may be interpreted as the proportion of fertility that can be attributed to each conjugal status. By definition, the "weighted" ASRs and TFRs are related algebraically to the overall TFR. By definition, they lead to "realistic" estimates of completed fertility. Conceptually, they assume conjugal status as dynamic. We explain below they also have a substantive interpretation closely related to our research goal. Because of this interpretation and to avoid further use of the word "weighted", we refer to the "weighted" ASR (CASR)—$p_{kt}r_{kt}$—as the contribution of a given conjugal status to the overall ASR—written c_{kt},—and to the "weighted" TFR (CTFR)—R_k^A—as the contribution of a given conjugal status to the overall TFR—written C_k. Thus,

$$r_t = \sum_{k=1}^{n} c_{kt},$$

$$C_k = \sum_{t=15}^{49} c_{kt}$$

and

$$R = \sum_{k=1}^{n} C_k = \sum_{k=1}^{n} \sum_{t=15}^{49} c_{kt}.$$

Results are reported as figures. Given the importance of the proportion of women who live within marriage and within consensual union according to age in the computation of CASR and CCF, we first report these proportions.

Results

Figure 1 shows that in most countries for which data are available for more than one census, the proportion of women in their reproductive years living in a consensual union has increased over time. Two notable exceptions are Ecuador and Panama, where this proportion has increased little between the 1980s and the 2000s. Panama is even more of an outlier as the proportion of women was already large in 1980, actually larger than in most countries in their most recent census. In nearly all countries, the proportion of married women first increases steadily with age and then reaches a plateau. In contrast, the proportion of women living in a consensual union first increases with age, reaches its maximum, and then decreases –slightly in most countries– with age.

The most salient result from figure 2 is that in all Latin American countries for which data are available for more than one census, the contribution of marriage to age-specific fertility rates has decreased over time. In parallel, the contribution of consensual union has increased steadily. In all countries, the contribution of marriage reaches its peak at a later age than the contribution of consensual union. In some countries —Colombia, Cuba, Panama, Peru and Venezuela—, according to the most recent census, the contribution of consensual union clearly dominates fertility before age 30.

Figure 3 shows that in some countries' most recent census —Argentina, Chile, Costa Rica, Ecuador and Mexico—, the contribution of marriage to total fertility is still larger than the contribution of consensual union, although the difference between the contribution of marriage and consensual union has been decreasing steadily over recent decades. In Brazil and Uruguay's most recent census, the contributions of marriage and consensual union are similar. The contribution of consensual union is larger than that of marriage in Colombia, Cuba, Panama, Peru and Venezuela; it was already higher in Panama in the 1980 census.

Discussion

In nearly all countries, the proportion of women living in a consensual union first increases with age, reaches its maximum, and then decreases –slightly in most countries– with age. This shape of the distribution of women living in consensual union may suggest two different interpretations: consensual union may be replaced by marriage over the life course, or consensual union is more common among the younger generations than among the older ones. There is no simple way to choose one interpretation over the other, and probably both are accurate.

In all Latin American countries for which we have data, with the exception of Ecuador, the contribution of childbearing within consensual union to total fertility is clearly rising. It has already surpassed the contribution of childbearing within marriage in some countries. To the extent that living in a consensual union rather than marriage keeps getting more common among the youngest cohorts, the contribution of births within consensual union should exceed that of marriage in nearly all the countries of the region in a not so far future.

These results go in line with those previously obtained and showing that, for the same sample of Latin American countries, with few exceptions, the TFR of consensual union is not only close to, but also slightly higher than the TFR of marriage (Laplante et al. 2013).

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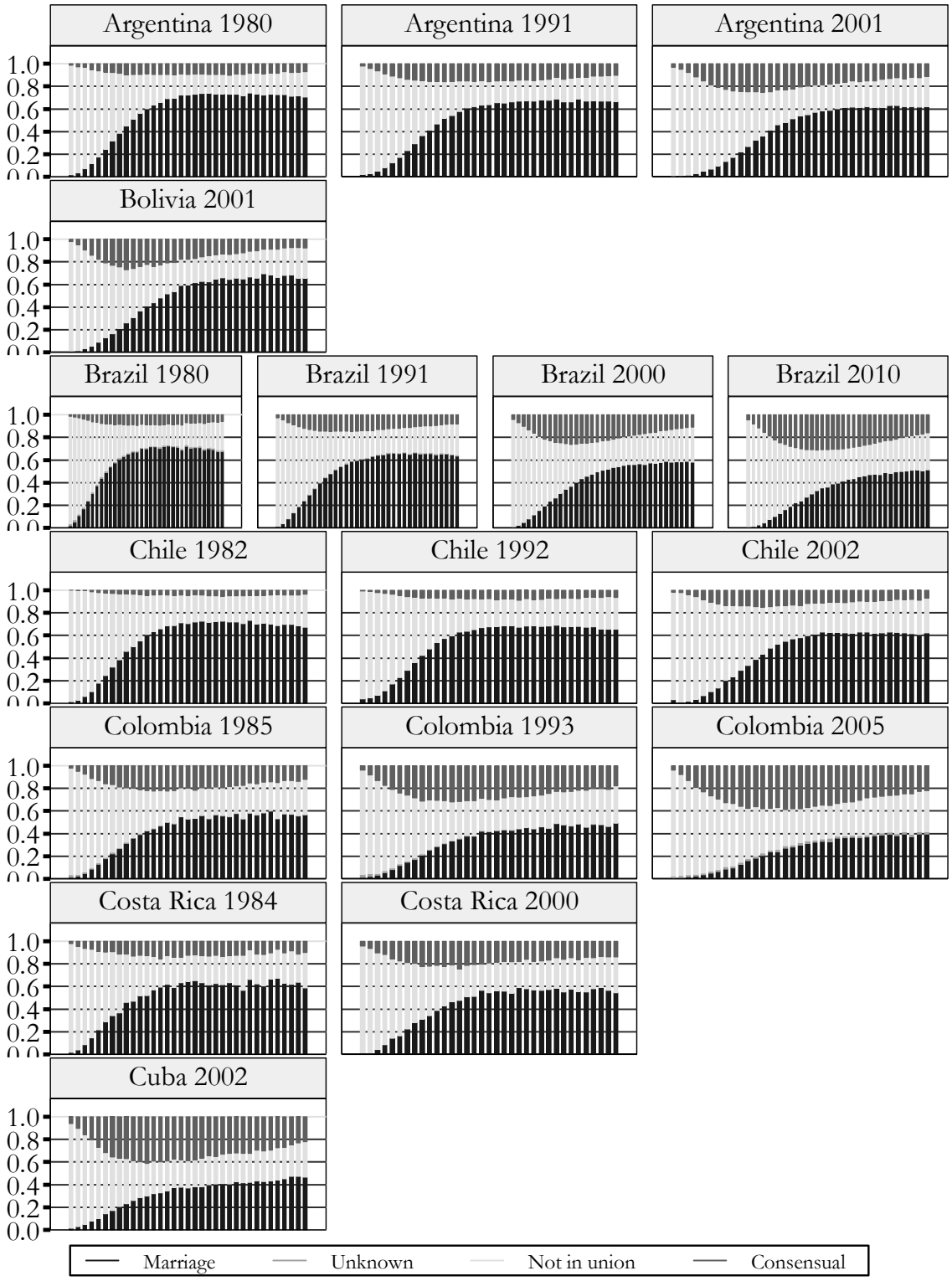
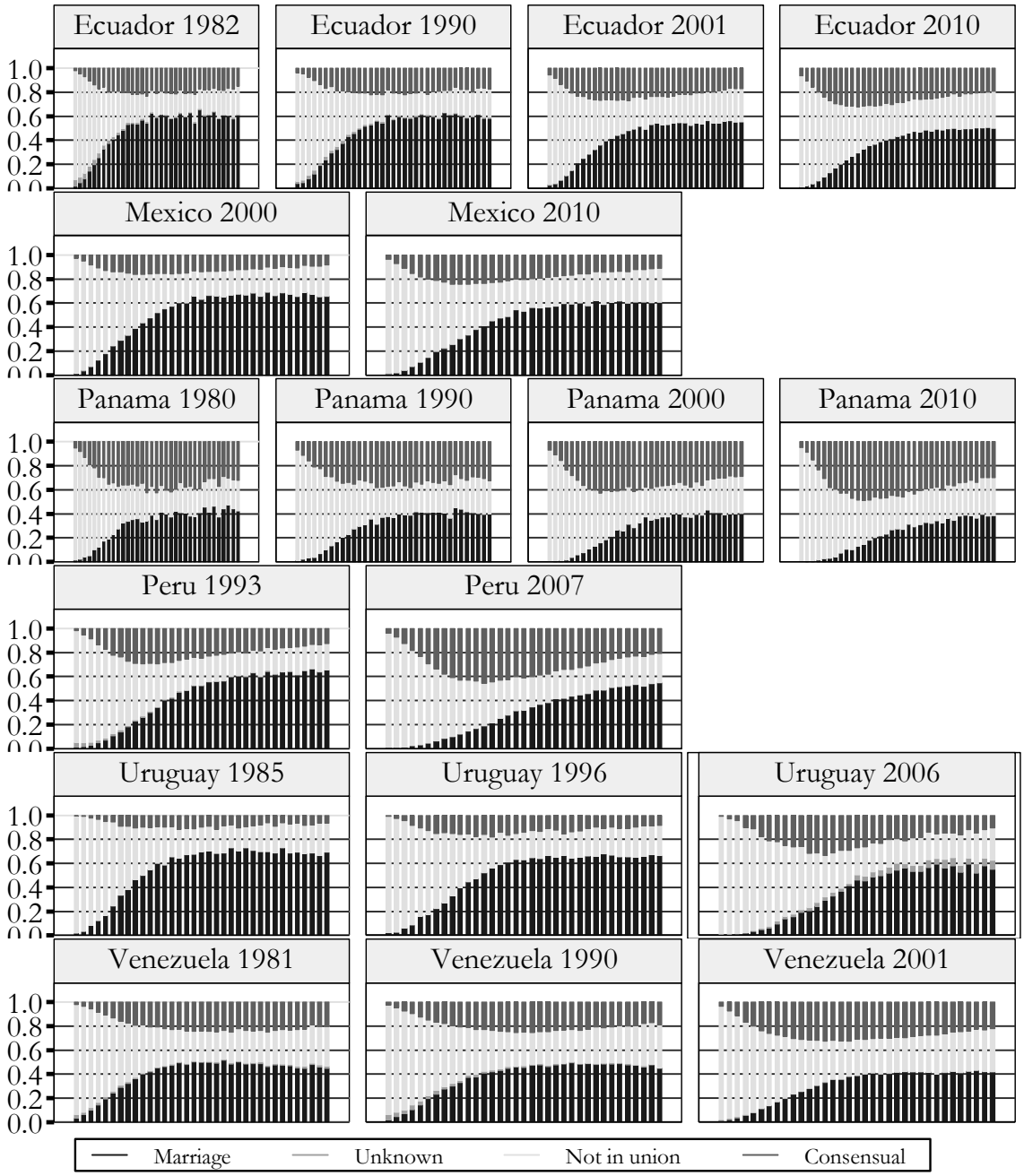
FIGURE 1 Distribution of conjugal status according to age of women aged 15-49 living in selected Latin American countries, 1980-2010.



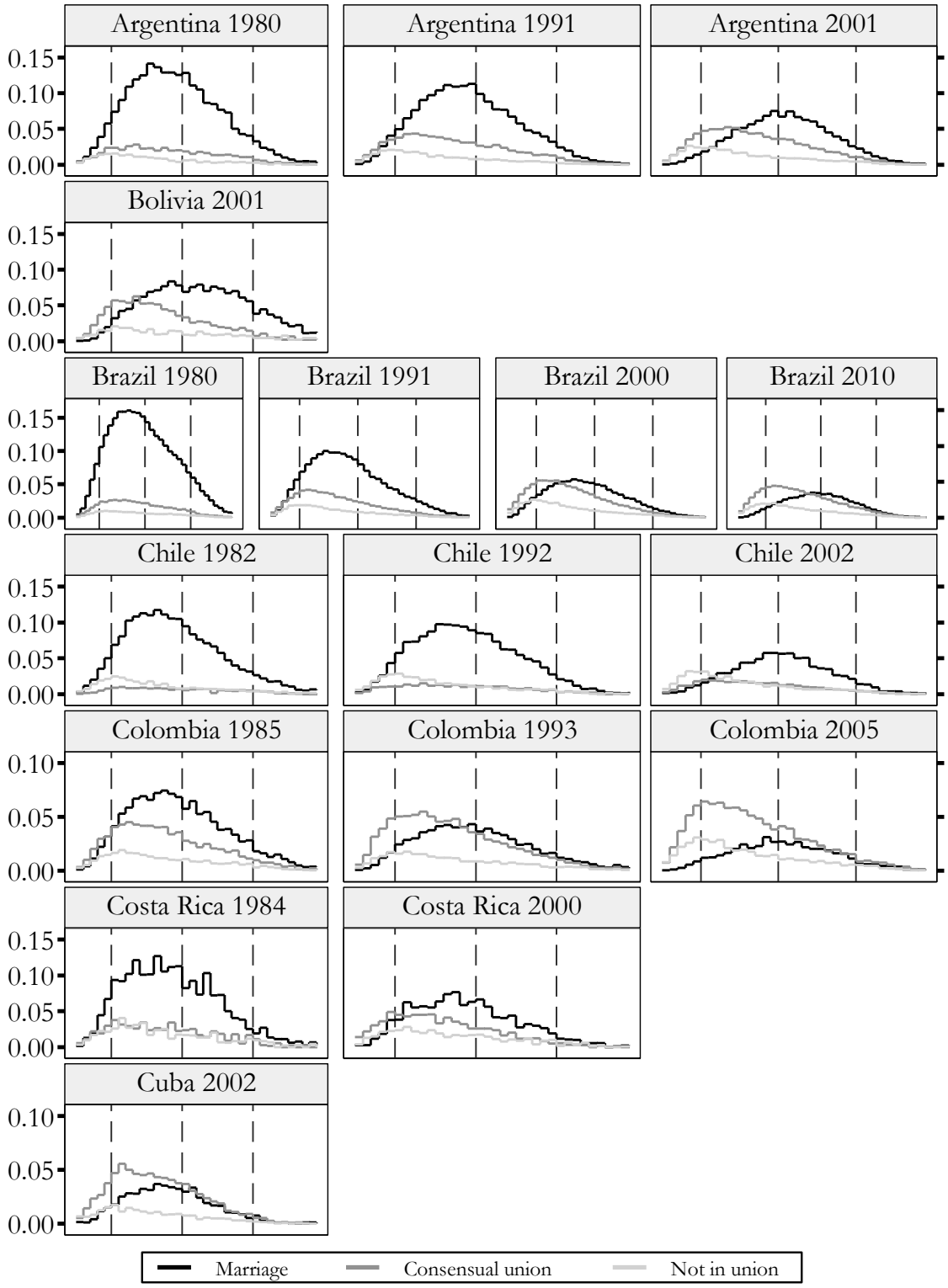
Source: Census microdata, IPUMS-International.

FIGURE 1 Distribution of conjugal status according to age of women aged 15-49 living in selected Latin American countries, 1980-2010 (Continued).



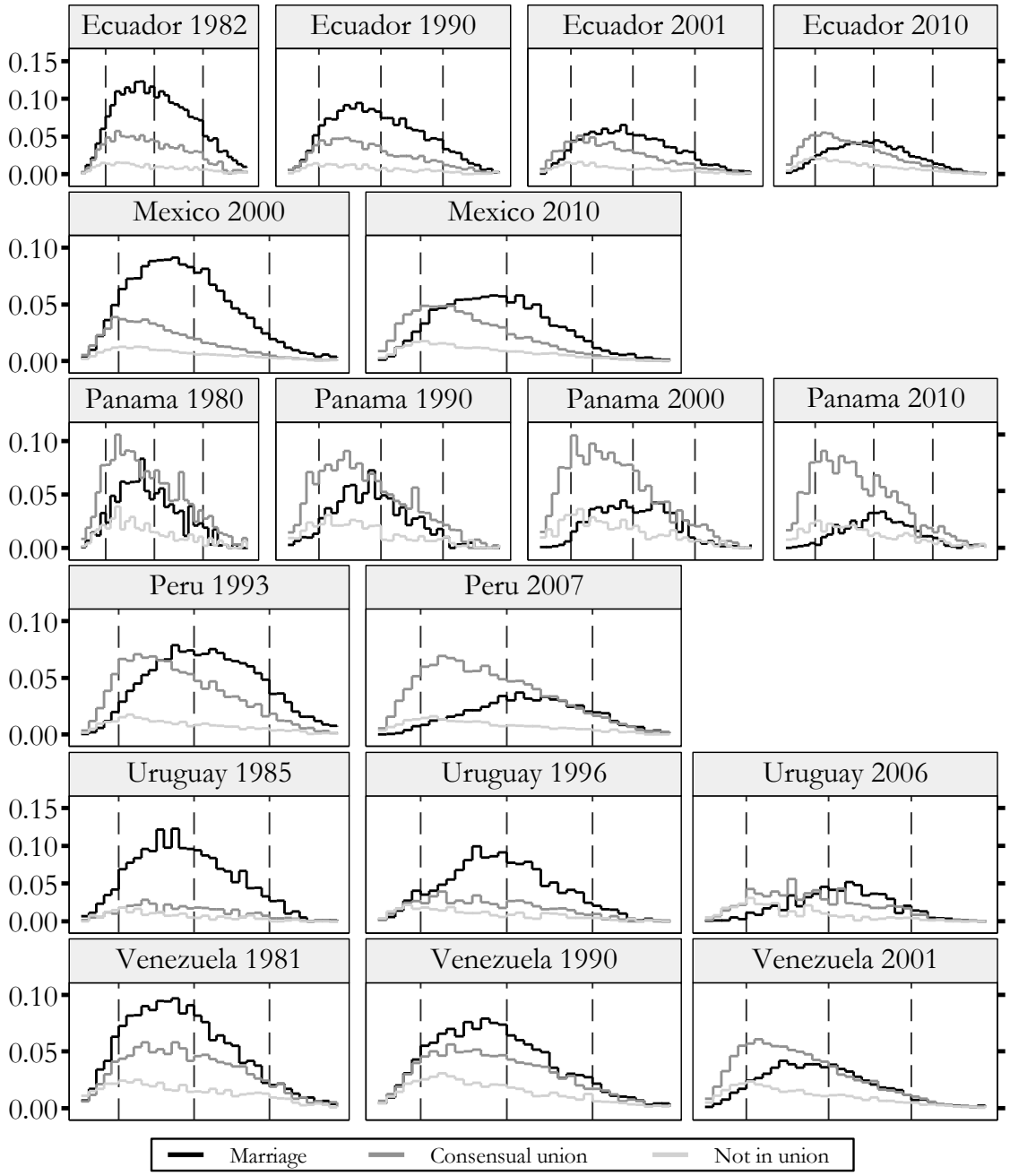
Source: Census microdata, IPUMS-International.

FIGURE 2 Estimates of the contribution of conjugal status to age-specific fertility rates of women aged 15-49 living in selected Latin American countries, 1980-2010.



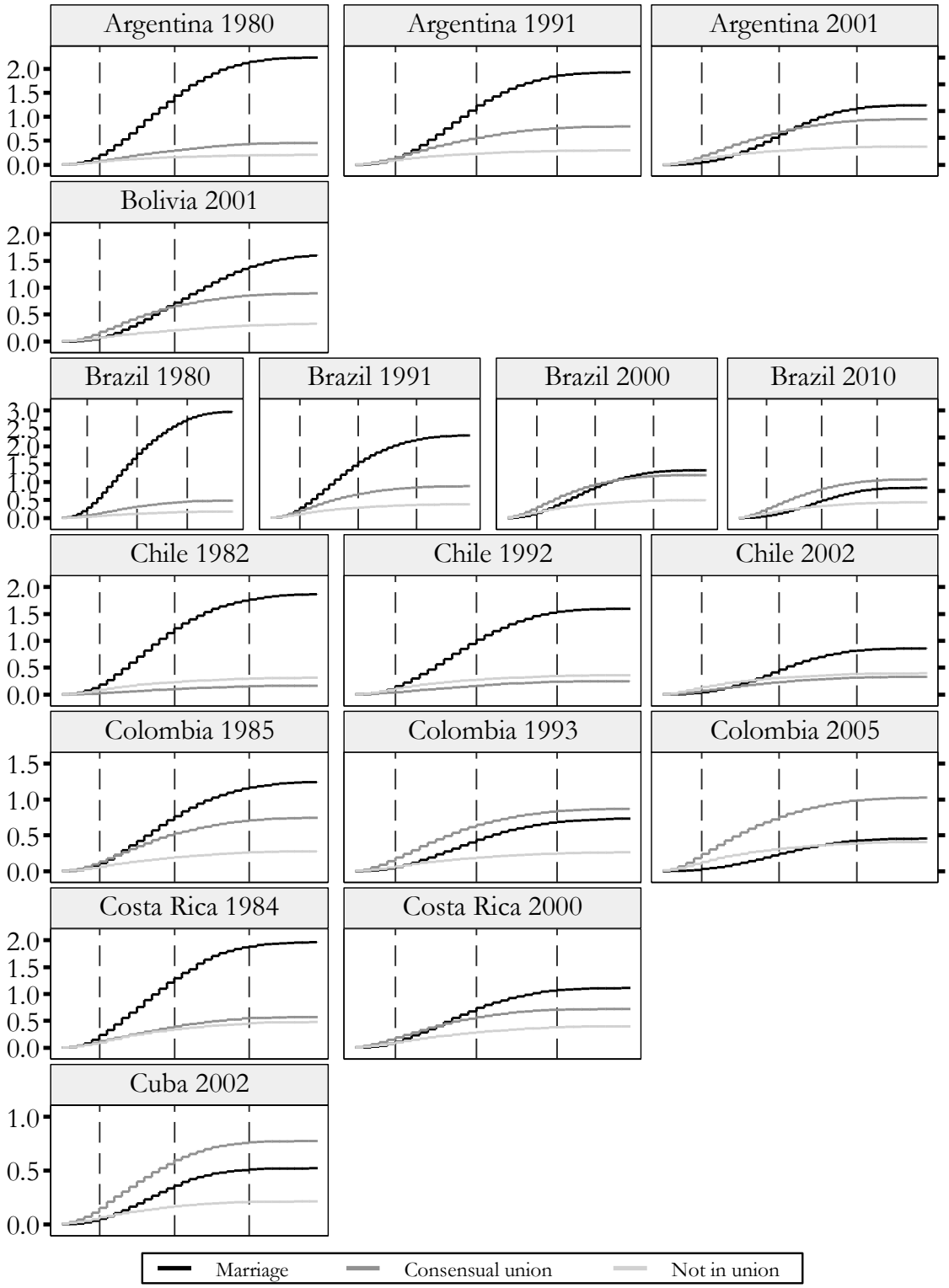
Source: Census microdata, IPUMS-International.

FIGURE 2 Estimates of the contribution of conjugal status to age-specific fertility rates of women aged 15-49 living in selected Latin American countries, 1980-2010 (Continued).



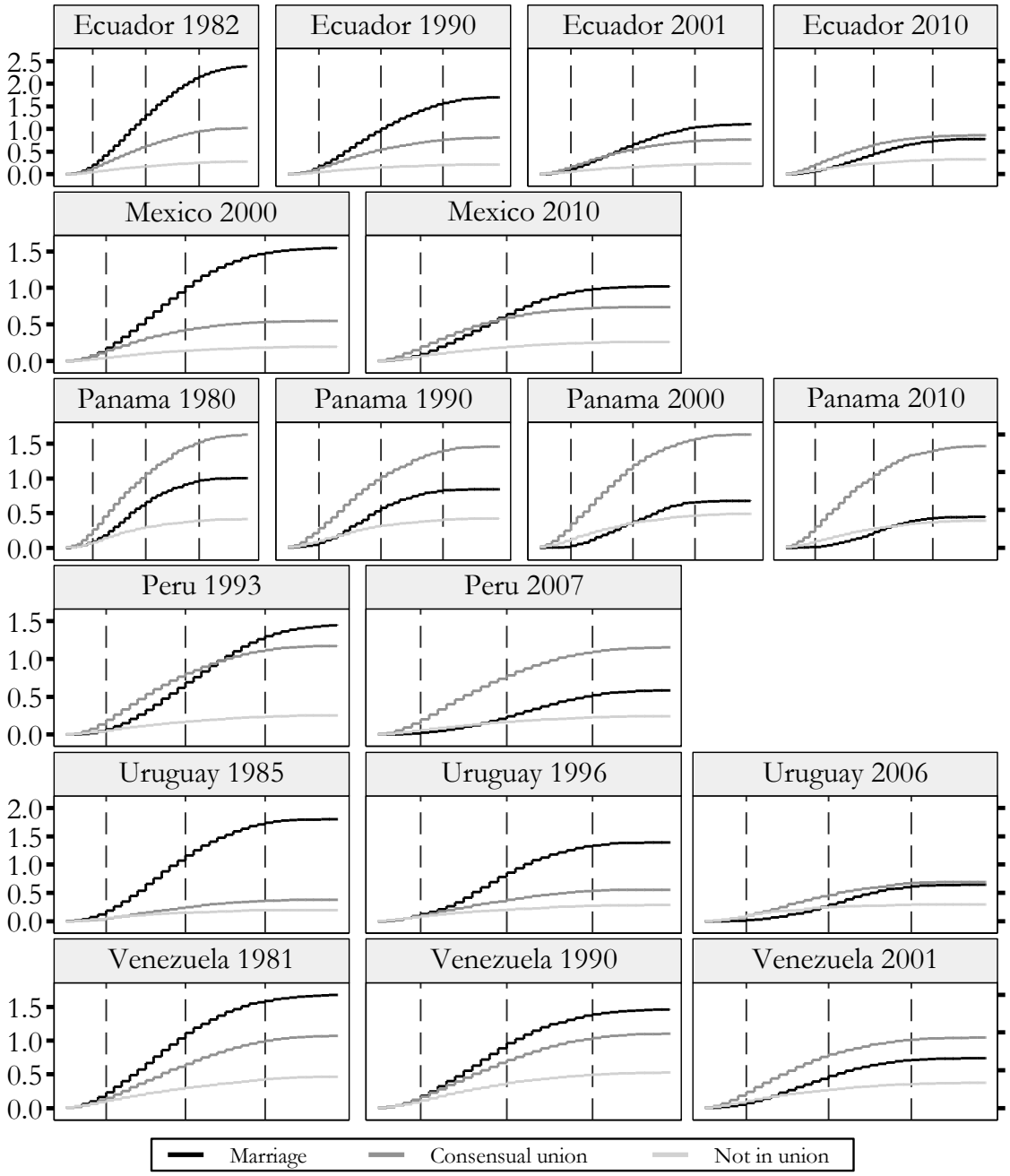
Source: Census microdata, IPUMS-International.

FIGURE 3 Estimates of the contribution of conjugal status to total fertility rates of women aged 15-49 living in selected Latin American countries, 1980-2010.



Source: Census microdata, IPUMS-International.

FIGURE 3 Estimates of the contribution of conjugal status to total fertility rates of women aged 15-49 living in selected Latin American countries, 1980-2010 (Continued).



Source: Census microdata, IPUMS-International.