Does Community Property Discourage Unpartnered Births? *

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June 2006

ABSTRACT

This paper explains why some women give birth without residing with a partner in the form of marriage or cohabitation. We investigate the likelihood of an unpartnered birth as a function of individual and country characteristics, including laws regulating the division of joint property in case of divorce or separation. Based on a rational choice model of marriage that includes marriage market analysis, we predict that women who don’t plan to be primary earners are less likely to have an unpartnered birth when rules for the division of joint property are more advantageous to women. We derive more predictions regarding the effects of birth cohort, education, non-intact home, labor force participation, and religiosity. Analyses of the Family Fertility Surveys collected in the 1990s in 12 Western countries confirm most of our predictions. Our major findings are that after controlling for age, a time trend, and a number of other factors, the likelihood of an unpartnered birth is higher in countries that offer tradition-bound women less access to joint property in case of divorce or separation and among women born immediately after World War II, a generation that experienced a dramatic marriage squeeze for women.

* We appreciate the advice of Heather Joshi and the assistance of Charlotte Aussillous, Cynthia Bansak, Emanuell Comolet, Guillaume Demonchy, Martine Deville-Velloz, and Howard Yourow.
I. Introduction

In recent decades family institutions in the West have undergone radical changes, including large decreases in the proportion of children born in wedlock and a switch from marriage to cohabitation (Lesthaeghe and Moors 2000). Children born out-of-wedlock include two very different categories of children: children born to unwed couples, whose lives don’t differ much from those of children born to married couples, and children born to lone mothers who don’t reside with a partner. Not all children born to single mothers grow up without the benefit of having a father present in their lives, but that is often the case (see Mincy and Oliver 2000). Our goal is to investigate the determinants of out-of-couple births, i.e. unpartnered births.

Being raised by a single parent is often associated with lower achievement (McLanahan and Sandefur 1994, McLanahan and Sigle-Rushton 2004), such as poorer performance in school, a higher rate of depression, and higher participation in crime (Hobcraft 1998, Sigle-Rushton, Hobcraft, and Kiernan 2005). Even though divorce is the main reason why children are raised by single parents (Ermish 1991, Heuveline et al. 2003), unpartnered births contribute significantly to the prevalence of lone motherhood in many Western countries. Many countries therefore aim their policies at discouraging unpartnered births.

The existing literature indicates that the prevalence of unpartnered births is associated with mother’s teenage status (Hawkes et al. 2004), low income (Wolfe et al. 2001), poor educational achievement (Ermish 1991, Ekert-Jaffe and Solaz 2001), parental divorce (McLanahan and Bumpass 1988, Kiernan and Cherlin 1999, Furstenberg and Kiernan 2001, Lichter et al. 1992, and Lehrer 2003), religiosity (Sweet and Bumpass 1990), low gender ratios (Heer and Grossbard-Shechtman 1981, Guttentag and Secord 1983, and Willis 1999), and price and effectiveness of birth control (Akerlof, Yellen and Katz 1996, and Willis 1999). Our goal in this paper is to examine whether rules of property division at divorce play a role in explaining variation in unpartnered births. We study the effect of cross-country variation in those rules, using a sample of Western countries.

Children may often be unintended and not the product of rational choices. Nevertheless, we present a model of women’s rational choice between having a child alone or with a partner, whether in cohabitation or marriage.\(^1\) Our model assumes that single women make a choice between having children with or without a partner as a function of the financial advantages and disadvantages associated with having a child under these two sets of circumstances. We also assume that most couples who have children are tradition-bound in the sense that the women consider reducing their labor force hours after childbirth and appreciate the financial advantages of marriage or cohabitation with a man who is willing to act as the primary earner, whereas men appreciate women’s willingness to get more involved with childcare than they plan to be.\(^2\)

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\(^1\) That out-of-wedlock childbearing results in part from rational choice was also assumed in Akerlof, Yellen, and Katz (1996), Willis (1999), Wolfe et al. (2001), and Grossbard-Shechtman, Ekert-Jaffe and Lemennicier (2002).

\(^2\) Hours of work can be reduced by dropping out of the labor force, working part-time, working fewer extra hours. Tradition-bound women may also keep their hours of work unchanged but take a less demanding (full-time) job. This will also reduce their earnings.
We predict that the more the law tends to protect tradition-bound mothers in case of dissolution, the higher women’s financial advantages of giving birth in couple, and the lower the odds of an unpartnered birth. Section II develops this prediction in more detail. Our theoretical framework incorporates marriage market analysis: we assume that conditions in markets for marriage and cohabitation may also affect the financial advantages that tradition-bound women may derive from having a child in marriage or cohabitation. The generation of women born right after WWII is characterized by very low gender ratios (defined as ratios of men to women participating in the same marriage markets). We speculate that these low gender ratios may be associated with low financial benefits for tradition-bound women, making it less attractive for a woman to have a child in marriage or cohabitation. Therefore we predict higher rates of unpartnered births among women born right after WWII. We develop a number of other predictions regarding the effect of age, education, religiosity, labor force status and the combined effects of some of these variables and rules for the division of joint property in case of dissolution.

Section III presents our cross-country classification of divorce laws according to degree of protection offered to women who earn less than their partner. We posit that low levels of protection are offered to such women in common law countries (our sample includes the U.S.A., part of Canada, and New Zealand) and, to a lesser extent, in Austria, where some major assets are excluded from Community Property, relatively to countries with Community Property regimes. We also distinguish between medium and high Community Property regimes. Countries such as Norway and Sweden have a high degree of community in marital financial assets: a couple’s common assets typically also include assets obtained before the marriage. We classify Belgium, France, Germany, Italy, and Spain as countries with a medium degree of Community Property, given that Community Property in these countries only involves assets acquired during the marriage.

After presenting our data and methods (Section IV), we test our predictions using retrospective data on close to 30,000 women who gave birth to their first child between 1962 and around 1995 in 12 Western countries. The results reported in Section V indicate that, as predicted, the less a country provides financial protection to divorcing tradition-bound women, the more women are likely to have an unpartnered birth. In particular, we find that when we control for individual characteristics, (1) in countries with a high degree of Community Property—such as Sweden—women are less likely to give birth without a partner than in Belgium or France, countries that we call MC (Medium Community) and where fewer assets are included in Community Property; and (2) relative to MC countries, unpartnered births are more common in common law countries such as the United States, and Austria, where separation of assets is the norm.

We also find that even though the overall trend in the countries we covered has been towards more unpartnered births, an early cohort of women born in the years 1946-1950 has exhibited unusually high rates of unpartnered births. This finding makes sense in light of marriage market analysis. Other findings that confirm our predictions include: (1) relative to employed women the likelihood of an unpartnered birth is lower among women out of the labor force; and (2) controlling for age at birth, women with at least some college are less likely to have unpartnered births than women with a high school education. Our analyses indicate a curvilinear effect of age: teenagers and women in their thirties have a higher likelihood of having unpartnered births than women in their
twenties. Age appears to have a stronger effect on unpartnered births in countries with rules of division of joint property that are more advantageous to tradition-bound women.

II. Predicting Unpartnered Births

We assume that women make rational choices about whether to have a child alone or in couple. The more rationality can be presumed, the more the following model applies. While we assume that a sufficient degree of rationality applies to all women, we expect our rational-choice model to be more applicable when women can be expected to be more rational. It is therefore more applicable when women are more educated, less religious, and beyond teenage.

The rational choice of a woman interested in becoming a mother involves comparing the expected net benefits of having a child alone with the expected net benefits of having a child in couple. These benefits (net of costs) can be of a financial, emotional, or spiritual nature. Here we focus on financial and material benefits.

We define \( A \) as the present value of benefits accruing to unpartnered mothers, and \( Y \) as the present value of the benefits of having a child in couple. The difference

\[
R^* = A - Y
\]

is defined as a latent variable representing the net benefit associated with having an unpartnered birth versus a child in couple; it is unobserved, but we observe \( R \), the decision to have an unpartnered birth. We assume the decision rule:

\[
\begin{align*}
R^* > 0 & \Rightarrow R = 1 \\
R^* < 0 & \Rightarrow R = 0
\end{align*}
\]

This rule implies that if the net benefits of having an unpartnered birth exceed the net benefits of having a child in couple, a woman will have an unpartnered birth; and if the net benefits of having a child in couple exceed the net benefits of having an unpartnered birth, a woman will have a child in couple. Both \( A \) and \( Y \) are a function of a woman’s earnings potential. \( A \) is a function of financial support by governments and relatives. In most of the countries covered in our study governments subsidize both single mothers and mothers in couples. Few countries offer larger government transfers to single mothers than to mothers in couple, one of these countries being the U.S.A.

\( Y \) takes account of the expected financial benefits that women can expect from being in couple, the probability of keeping a partner, and of the expected benefits in case of dissolution. We assume that it takes the form

\[
Y = f \left[ (1 - p_d) B + p_d D \right],
\]

where \( B \) are expected benefits accruing to mothers in couple while they are in couple, \( D \) is the present value of benefits accruing to mothers in case a couple dissolves, \( p_d \) is the probability of dissolution, and \( f \) is increasing so that \( f' > 0 \). Benefits \( B \) are material benefits that women obtain from their partner, net of the benefits that their partners obtain from them. The net material benefits that tradition-bound women expect

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3 This research is in the tradition of the economics of marriage pioneered by Becker (1973, 1981). Our model is based on Grossbard-Shechtman, Ekert-Jaffe, and Lemennicier (2002) and Grossbard (2005). In earlier models, Grossbard-Shechtman (1982) and Ekert-Jaffe and Sofer (1996), we modeled individuals as choosing between having a child in marriage or in cohabitation.

4 Even though it takes two to procreate, our model focuses on women’s choices: fathers’ preferences and opportunities only enter indirectly by influencing the benefits of in-couple births perceived by women.

5 However, welfare benefits are always based on income, and single mothers are likely to be poorer than married mothers.
from their partners are positive. These benefits are also expected to be a function of women’s relative bargaining power in marriage.\textsuperscript{6} \textit{Ceteris paribus}, the higher the marital benefits \(B\) and the post-divorce benefits \(D\), the higher \(Y\), and the lower the probability of an unpartnered birth. Given that we expect the present value of in-marriage benefits \(B\) to exceed the present value of benefits at divorce \(D\) \((B - D > 0)\), it follows that \(Y\) is a negative function of the probability of divorce \(p_d\). The more women are tradition-bound, the more it can be assumed that \(B\) and \(D\) are positive, and the more our arguments apply.

Combining equations 1 and 3 gives:

\[ (4) \ R^* = A - f \left[ (1 - p_d) B + p_d D \right]. \]

We obtain predictions regarding the determinants of the value of an unpartnered birth \(R^*\) by taking the partial derivatives of equation 4 according to \(B\), \(D\), and \(p_d\). These partial derivatives are:

\[ \partial R^*/\partial B = -(1 - p_d) f' < 0; \]
\[ \partial R^*/\partial D = -f' p_d < 0; \] and
\[ \partial R^*/\partial p_d = -(D - B) f' > 0. \]

Given that the value of an unpartnered birth \(R^*\) and the likelihood of an unpartnered birth \(R\) are expected to move in the same direction, we predict that the higher the benefits that women can expect during marriage \((B)\) or after divorce \((D)\), the lower the likelihood of an unpartnered birth. In contrast, the probability of divorce is expected to increase the likelihood of an unpartnered birth. Given that we don’t have good measures of \(B\), \(D\), or \(p_d\), we have to make assumptions as to how the variables we have access to are related to benefits of marriage and divorce and the probability of divorce or separation. Next, we examine the predicted effects of three kinds of observable variables on the likelihood that a woman will have an unpartnered birth: macro-societal factors, women’s individual characteristics, and interactions between macro factors and individual characteristics. Our predictions are summarized in Table 1.

**Predicted Macro Effects: Legal Factors and Gender Ratio**

To the extent that countries differ in their rules for the division of joint property in case of dissolution, tradition-bound women of similar characteristics and belonging to the same Western culture, but living in different countries, will perceive different benefits from having children in couple.\textsuperscript{7} In countries with legislation that offers tradition-bound women who separate from their partner a higher share of the combined property, the average \(D\) payment is higher. In turn, the higher the \(D\) a single woman expects in case of marriage and divorce, the higher \(Y\), and the lower the probability of an unpartnered birth.

When tradition-bound men and women form couples, the men typically earn more than the women. The more such a couple’s joint property is considered community property, the more women are likely to benefit in case of dissolution (the higher the expected \(D\)).\textsuperscript{8} We therefore predict that the higher the degree of community of joint property, the lower the probability of an unpartnered birth. As will be elaborated in Section III, countries differ in the degree to which they consider joint property as

\textsuperscript{6} This follows from market theories of marriage such as Becker (1973) and Grossbard (1984) as well as from bargaining theories such as Manser and Brown (1980), McElroy and Horney (1981), and Chiappori (1992).

\textsuperscript{7} See Grossbard-Shechtman, Ekert-Jaffe, and Lemennicier (2002).

\textsuperscript{8} As cohabiting couples are increasingly treated like married couples, these laws affect both married and cohabiting couples. We are treating births in couple without distinguishing between married and cohabiting couples.
community property and a cross-country comparison offers an opportunity to test this prediction.

Another macro factor is the gender ratio defined as the number of men divided by the number of women participating in the same markets for marriage and cohabitation (following the standard demographic definition of sex ratio, see Henry 1975). *Ceteris paribus* and according to the economic analysis of markets for marriage and cohabitation, we expect tradition-bound women facing low gender ratios to be offered less advantageous financial arrangements (lower $B$) by their potential partners than is the case with similar women facing high gender ratios (see Heer and Grossbard-Shechtman 1981 and Guttentag and Secord 1983). To the extent that in-marriage benefits $B$ and post-marriage benefits $D$ are correlated, women in low gender ratio markets may also face lower $D$ values. Consequently, we expect that when and where men are relatively scarce, and marriage is less advantageous to them, tradition-bound women will be less likely to have children in couple (i.e. a higher probability $R$) than when gender ratios are high. To the extent that a majority of couples are tradition-bound, total rates of unpartnered births and gender ratios will be inversely related.9

We recognize that each birth cohort of women experiences unique circumstances in markets for marriage and cohabitation, leading to unique preferences and opportunities. Cross-cohort differences in opportunities are in part a function of different gender ratios. Many of the countries in our sample experienced extremely rapid growth in births immediately after World War II (WWII, 1940-1945) and had low births during the war, causing an unusually low gender ratio for women born in the late 1940s and who are likely to marry men born in the early 1940s. In 2000, in many of the countries covered in our study the number of people born in the years 1946-1950 was substantially larger than the number of people born in the early 1940s: it was 28% higher in Norway, 30% in New Zealand, 31% in Belgium and the U.S.A., 43% in Finland, and 47% in France. Given that on average married men are older than married women in every single country, these large increases in post WWII births imply that women born immediately after the war experienced unusually low gender ratios. It follows that women born in these cohorts receive lower benefits $B$ and $D$ (which could be related to their higher labor force participation rates, see Grossbard-Shechtman and Granger 1998). We therefore predict that relative to rates of unpartnered births among women born at other times, and after taking account of other age and period effects, rates of unpartnered births will be higher among women born during the late 1940s.

**Predicted Effects of Individual Women’s Characteristics**

*Mother’s age.* The younger the woman, the more she is likely to make irrational decisions regarding pregnancy and motherhood, the less she is likely to be influenced by cost/benefit calculations, and therefore, the higher the probability of an unpartnered birth.$^{10}$ To the extent that she is rational, cost/benefit analysis may also lead a teenage woman to be more likely to have an unpartnered birth. Relative to comparable women in their twenties, teenage women interested in forming a couple with a provider are likely to receive lower offers of $B$ in markets for dating and marriage, given that they are typically less mature and fit for parenting. Furthermore, the men who may be their partners may

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9 We are not aware of any country where a majority of women in heterosexual couples earn more than their partner.

10 Nevertheless, even the childbearing decisions of teenagers seem to indicate some rationality, as shown by Wolfe et al (2001).
also be teenagers and are likely to have lower accumulated assets. Teenagers can also expect lower $D$ in case of separation or divorce. Finally, teenagers are expected to perceive lower present values of benefits $B$ and $D$ to the extent that they have a higher divorce probability and higher discount rates. For all these reasons, and in light of the findings reported in the literature mentioned above, *teen-age mothers are expected to have more unpartnered births than mothers in their twenties.*

Women at the other extremity of the age scale are also likely to be less desirable to men (i.e. to receive lower offers of $B$), and therefore to have a higher probability of unpartnered birth. That probability is also expected to increase with age due to older women’s increased ability to support a child without the help of a partner. However, being older (which we measure as older than 29) can be an advantage in markets for marriage and cohabitation to the extent that older women are more likely to be mature partners in parenting and are less likely to divorce. With these possible effects of age pulling in different directions, we don’t have a clear prediction regarding the net effect of older age on $R$.

*Growing up with divorced parents* in a non-intact ($NI$) family is expected to affect total material benefits from marriage $Y$ (and unpartnered births $R$) via the effects of $NI$ on $B$, the probability of divorce $p_d$, and $D$. We differentiate equation 4 according to $NI$, which gives:

$$\frac{\partial R^*}{\partial NI} = \frac{\partial R^*}{\partial p_d} \frac{\partial p_d}{\partial NI} + \frac{\partial R^*}{\partial B} \frac{\partial B}{\partial NI} + \frac{\partial R^*}{\partial D} \frac{\partial D}{\partial NI}$$

In turn, this expression is equal to

$$\left(5\right) \frac{\partial R^*}{\partial NI} = -f'(D - B) \frac{\partial p_d}{\partial NI} - f'(1 - p_d) \frac{\partial B}{\partial NI} - f' p_d \frac{\partial D}{\partial NI}$$

The first term in equation 5, $\frac{\partial p_d}{\partial NI} > 0$, states that women who grew up in non-intact families are more likely to divorce or separate. The existing literature offers plenty of evidence documenting that this is the case (see Kiernan and Cherlin 1999). Given that we have assumed that $(B - D) > 0$ the first term in equation 5 is positive. As for the second term, we expect that women who grew up as children of divorce may also be considered less attractive in the eyes of men participating in the same markets for marriage and cohabitation, leading to lower benefits in marriage $B$, i.e. $\frac{\partial B}{\partial NI} < 0$. The second term in equation 5 is thus also positive. The third term is about the effect of growing up in a non-intact home on $D$, the expected financial settlement in case of divorce. To the extent that $B$ and $D$ move in the same direction (the higher a tradition-bound woman’s material benefits during marriage, the more generous her divorce settlement), the third term in 5 is also expected to be positive. *We thus expect that growing up with divorced parents (in a non-intact family) will be associated with higher levels of unpartnered births.* This prediction is in line with previous findings that women raised in $NI$ families are more likely to have children out-of-wedlock (see e.g.

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11 Mincy, Grossbard and Huang (2005) find that women from intact families who had children out-of-wedlock are more likely to marry their father’s child. To the extent that women prefer marriage to other co-parenting partnerships, marriage can be seen as an aspect of $B$. 

The existing literature indicates that mother’s low education is associated with a higher likelihood of an unpartnered birth \( R \) (see Ermish 1991 and Ekert-Jaffe and Solaz 2001). We predict that this will also be the case in our study. The correlation between low education and \( R \) may be explained as follows: (1) having a child without a partner often curtails women’s educational careers (see Klepinger, Lundberg and Plotnick 1999) and is associated with higher poverty rates (cf Lam 1988); (2) women who expect to have low education levels are less likely to be hurt by lone motherhood (see Ermisch 1991); (3) low education may indicate that women are less likely to follow a rational calculus; and (4) among those who are tradition-bound, men may prefer being in couple with more educated partners and therefore offer lower benefits \( B \) to women with low education.

Most of these arguments don’t imply a linear effect of education. On the one hand, women with higher education earn more and are more able to support a child alone, they may be more independent, and less tradition-bound. Men may avoid partnering with women more educated than they are. On the other hand, men may find more educated women more desirable to the extent that they make better partners in parenting and better companions. After all, there must be reasons why associative mating by education prevails. More educated women may have lower discount rates and place more emphasis on having their children grow up with a father.\(^{12}\) In sum, the predicted effect of higher education (relative to an average education) is not clear.

**Occupation.** If women are out of the labor force this may be an indication that they are getting higher benefits in marriage \( B \), enabling them to withdraw from the labor force (see Grossbard-Shechtman and Granger 1998). They may also have a lower divorce probability \( p_d \) and may expect higher \( D \) payments in case of divorce. Furthermore, they may have fewer employment possibilities and it may be more difficult for them to raise a child alone. For all these reasons we expect that women out of the labor force are less likely to have a child without a partner.\(^{13}\)

Unfortunately, our data don’t include comparable information on income and therefore don’t permit us to test for income effects on unpartnered births.\(^{14}\)

**Religiosity.** A woman’s religiosity may affect her propensity to have an unpartnered birth to the extent that religious women are less likely to have (1) premarital relations (they place a higher value on marriage and most religions specifically prohibit premarital relations); and (2) abortions. The first reason leads to a negative association between religiosity and unpartnered births, whereas the second reason leads to a positive association. Which of these effects dominates may vary with the surrounding cultural and legal environment. Therefore we don’t have a clear prediction regarding the effect of this variable.\(^{15}\)

\(^{12}\) It is also true that there may be fewer tradition-bound women among highly educated women than among women with low education, and most of our arguments apply solely to tradition-bound women who expect to obtain financial transfer during marriage (cohabitation) or in case of dissolution.

\(^{13}\) Note that labor force status and couple formation may be determined simultaneously.

\(^{14}\) Wolfe et al. (2001) showed that unpartnered births are more likely in low-income populations.

\(^{15}\) The existing evidence is mixed. Within a given country, evidence for the U.S. shows that religious practice is negatively correlated with adolescent sexual activity (Thornton and Camburn 1989, Murry 1992, and Kirby 1999) and premarital relations, regardless of age (Beck et al 1991). However, the cross-country correlation is not clear: the most religious country in our sample (the U.S., see Table 3) has relatively high
The number of siblings is likely to affect unpartnered births to the extent that it captures a tradition-bound woman’s desire for a large family or is associated with her value in markets for marriage and cohabitation: it is possible that women born in a larger family of origin are more likely to know how to take care of children, leading tradition-bound men to offer higher expected benefits \( B \). However, to the extent that parents with more children invest less in each child, a woman with more siblings may have less human capital and therefore obtain lower benefits \( B \) in markets for marriage and cohabitation. Depending on which of these forces prevail, number of siblings will have a positive or negative effect on the likelihood of an unpartnered birth \( R \).

Next, we derive predictions regarding the combined effect of legal regime and a number of individual characteristics of women.

Interaction of Rule of Division of Joint Property (RDJP) and Teenager. The more women are rational and the lower their discount rate, the more we expect an effect of legal regime on the probability of an unpartnered birth. Teenagers are less rational and have a higher discount rate. We therefore predict that legal regime will have less impact on unpartnered births among teenagers than among women in their twenties. This implies that the sign of this interaction term will be of the opposite sign as that of the main effect of RDJP.

Interaction of RDJP and Non-Intact (NI) Family of Origin. On the one hand, women whose parents had divorced, and who consequently face a higher divorce probability, will have more appreciation for RDJP rules protecting them in case of dissolution. In this case, the interaction term ‘divorced parents and community property’ will go in the same direction as the main effect of RDJP on \( R \). On the other hand, tradition-bound men may consider women with divorced parents as less attractive and therefore women from \( NI \) homes may obtain lower \( B \) and \( D \) benefits in markets for marriage and cohabitation. They will then stand to gain less from better protection in RDJP rules. This would lead this interaction term to go in the opposite direction than the main effect. The net predicted effect is not clear.

Interaction of RDJP and Religiosity. To the extent that religiosity reduces \( R \) by discouraging premarital relations, we expect more religious women to be more responsive to financial incentives that discourage unpartnered births such as favorable RDJPs. In this case both religiosity and the interaction between a high degree of community and religiosity will have negative effects on \( R \).\textsuperscript{16} To the extent that religiosity encourages \( R \) due to the lower abortion rates of religious women, the effect of religiosity on \( R \) and the effect of the interaction between favorable RDJP and religiosity on \( R \) are both expected to be positive. Either way, the simple effect of religiosity on unpartnered births and the combined effect of religiosity and favorable RDJP are predicted to go in the same direction.

III. Cross-Country Differences in Law

For each country in our sample we examined the Rules for Division of Joint Property at divorce (RDJP, see Vogel 2002). The first two columns in Table 2 list type of rule for division of property at divorce for the countries in our sample. The table starts

\textsuperscript{16} Alternatively, religious and legal institutions may be intertwined, and countries that offer less financial protection to women at divorce may also have religious organizations that offer less support to women trying to avoid premarital relations.
with the countries and provinces that appear to offer the least protection to mothers separating from a partner who took on the role of primary earner.

Where countries recognize more than one rule we chose the most commonly used RDJP. In three of our countries (Canada, Spain, and the U.S.) the rules used vary across states or provinces. Where countries recognize more than one rule we chose the most commonly used RDJP. In three of our countries (Canada, Spain, and the U.S.) the rules used vary across states or provinces. Our data allowed us to separate Canadian provinces by RDJP, but we were not able to do so for the U.S.A. and Spain. Furthermore, RDJP can vary over time. In the 1970s and 1980s, a number of countries, states, and provinces adopted or extended the scope of Community Property rules. For instance, in 1985 the Canadian province of Ontario instituted rules similar to the Acquired Assets rules of division that had traditionally prevailed in Quebec, after a transition period from 1978 to 1985. A similar transition occurred in New Zealand in 1976. Around the same time, Italy (in 1975) and most of Spain (in 1981, after a transition period that started in 1978) instituted a rule of equal division of Acquired Assets.

We created three categories capturing the degree of protection offered to women who consider having a child in couple with a man who acts as the principal earner: low degree of community in a couple’s property (Low Community or LC), medium degree of community in joint property (Medium Community or MC), and high degree of community in a couple's property (High Community or HC).

Countries with a low degree of community in joint property (LC). These include

- three Common Law countries (New Zealand before 1977, Canada’s Common Law provinces, and the U.S.)\(^\text{19}\) Even though some states in the U.S.A. follow Common Law and others follow restricted Community Property rules, the U.S.A. as a whole offers limited protection to tradition-bound women, given that it is easy for husbands/providers to move to Common Law states providing lower protection to divorcing tradition-bound women than is the case with Community Property states.\(^\text{20}\)
- Austria, where individuals maintain various separate assets at marriage. Goods for personal or professional use (such as an office or assets in owned factories) are excluded from a couple’s assets.

Countries with a medium degree of community in joint property (MC). These are countries that have limited Community Property: they consider assets as owned by a couple if the assets were acquired after marriage. In our sample they include France and Belgium (Flanders only), the former West Germany, Finland, Quebec, the Canadian province of Ontario since 1985, and Italy and Spain after they legalized divorce.

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\(^{17}\) Note that in Spain Low Community with Separate Assets holds in Biscaye and Estrémadure, whereas extensive Community Property is found in the Baleares.

\(^{18}\) Most of the countries in our sample offer similar benefits to partners who live together without marriage. Research has shown that even though it is more common for cohabitating women to earn more than their partner, a majority of both married and cohabiting women earn less than their partners.

\(^{19}\) The three Common Law countries in our sample (U.S., Canada, and New Zealand) have laws based on British law.

\(^{20}\) Unfortunately, our data set does not give us a breakdown of the U.S. sample by state, so we can’t include two sets of states for the U.S.
Countries with a high degree of Community Property (HC). These are countries that have an extensive form of Community Property. In our sample, this includes Norway and Sweden, where most assets are considered as belonging to a couple, even if they were acquired prior to couple formation. However, it is common for heirs to stipulate that their inheritances will not be covered in Community Property.

A fourth category that we distinguished are: **Countries with no divorce.** While limiting individual freedom, rules that prohibited divorce offered some form of financial protection to tradition-bound women. This includes Italy and Spain before they legalized divorce in 1975 and 1981 respectively.

In the previous section we predicted that the more favorable the RDJP is to women, the lower the probability of an unpartnered birth. It follows that we expect unpartnered births to be more common in countries and provinces that don’t have Community Property laws, such as the Common Law countries. We also expect that unpartnered births will be less common in HC countries such as Norway and Sweden than in MC countries such as France.

Simple correlations provide some support to our predictions. Our data indicate an inverse relationship between unpartnered births and a country’s degree of community in RDJPs. It can be seen from Table 2 that countries with a division of property based on common law (which we categorized as LC, low degree of community) exhibit among the highest rates of unpartnered births. Austria, another LC country, has a high percentage of unpartnered births as well. In contrast, Sweden, a HC country, has a low percentage of unpartnered births. Low percentages of unpartnered births are also found in countries that traditionally made divorce illegal--Italy and Spain—and later switched to a MC rule. New Zealand exhibited a rate as high as 15% before the Matrimonial Property Act of 1976 was passed, instituting Community Property; unpartnered births for the period 1976-1995 then fell to 9%. The correlation is not perfect. For instance, Norway, a HC country, has a relatively high percentage of unpartnered births.

**IV. Data and Methods**

**Demographic Data.** Our demographic data were drawn from the common core of the Family Fertility Surveys (FFS), a project that was coordinated by the Population Activities Unit (PAU) of the U.N. Economic Commission for Europe (UNECE). This project’s objective was to construct a standardized, comparable database in order to put family formation in a multidimensional biographical perspective and to unveil interactions between individuals’ educational, occupational, residential, and familial characteristics (Festy and Prioux 2002). In the mid-1990s retrospective data were collected for women aged 15-59 in 24 industrial countries of the UNECE.\(^{21}\) We selected a sample of women who had their first birth in the years 1963-1992.\(^{22}\) For countries that experienced changes in RDJP during this period, we dropped years of transition between legal regimes. For instance, we dropped observations for the transition period 1978-1984 in Ontario, Canada.

We selected 12 Western countries (or parts thereof) that had all or some of the data crucial to our study, including mother’s year of birth and whether a woman was married or cohabited during the nine months preceding the birth of her first child:

\(^{21}\) The age range and years of survey varied slightly across countries.

\(^{22}\) Most unpartnered births are first births. Given our sample sizes, further order unpartnered births are too rare to justify separate estimations. Furthermore, to model higher parity births is more complicated, given the number of possible paths that women may take after a first birth.
Austria, Belgium (Flanders), Canada, Finland, France, (the former West) Germany, Italy, New Zealand, Norway, Spain, Sweden, and the United States.

Three related variables that influence the probability of an unpartnered birth are period, mother’s age at birth, and mother’s birth cohort. Due to collinearity--mother’s (single year) birth cohort is the difference between child’s year of birth and age of the mother at birth--we have to choose two of them. We opted for mother’s age and child’s year of birth, an indicator of time trend.

We include mother’s age at birth and the square of age, centered at its sample mean (23 years). We also include one categorical value of age (older than 29). During the period covered here, the trend for most European countries was a substantial increase in unmarried cohabitation and unpartnered births. A mother’s cohort effect on the probability of an unpartnered birth can thus be inferred from the difference between child’s year of birth and mother’s age at birth.

We also test for non-linearity of the cohort effect by including a dummy ‘mother born in the years 1946-1950’. This cohort, born right after World War II, was part of a dramatically rapid baby-boom. Therefore, marriage market analysis leads us to expect particularly low values of $B$, in-marriage benefits, for the majority of that cohort’s women expecting a husband taking on the role of primary earner.

Interactions between age dummies and RDJP were introduced to test whether legal regime affects unpartnered births differently depending on women’s age.

For ten of the twelve countries, information is included on whether a woman’s parents were divorced when she was 15 years old. We interpret this variable as exogeneous to a woman’s decision to have a child without the presence of a partner. For nine of the twelve countries individual histories made it possible to calculate a woman’s occupation and education nine months prior to giving birth to her first child. Our education variables consist of two dummies: at least some college education or a college degree, and more than college. Our education variable takes account of age at completion of education, the highest grade attended, the current age at first birth and an external

We tried to introduce categorical values and a quadratic term for the trend, but these did not improve the estimates.

We thus conceive of the function of unpartnered births and age as fitting a parabolic curve, with higher values of unpartnered births at both extremity of the age scale: teens and over 29. We chose the quadratic model after experimenting with a number of alternative models, including a model with all categorical values of mother’s age at child’s birth –under 18, 19-20, etc.--and a spline model. The quadratic form is more parcimonious and fits the data better according to the AIC and Schwarz criteria. The quadratic form is also consistent with the fact that women as childbearers may obtain lower $B$ benefits in marriage when they are teenagers and when they are closer to the end of their fertile state (see Grossbard-Shechtman 1993 Chapters 4 and 10).

Some have described these trends as part of the second demographic transition (see Lesthaege and Moors 2000).

Defined as continuous year of birth.

Controlling for mother’s age at birth, the earlier the child is born, the earlier the cohort the mother belongs to.

We experimented with singling out a number of other birth cohorts, but only the cohort born in the years 1946-50 seems to behave very differently from the other cohorts.

This information was not available for Norway and New Zealand.

We also interpret this variable as an exogenous indicator of expected divorce rate.

This information was not available for Canada, France and New Zealand. Calculating these at pregnancy enables us to avoid some of the endogeneity between education and fertility decisions.
source of distribution of age at school completion to assure that our educational attainment categories are measured in an equivalent way, in spite of the diverse educational systems (see also Dourleijn et al. 2002). 32 The three categories are: school completion when younger than 19 with a maximum of high school level, school completion at ages 19-23 with (some) college level attended, and school completed after age 23 or graduate education. These same 9 countries also provide a complete individual history of women’s successive jobs and job interruptions, enabling us to calculate mother’s employment status prior to pregnancy. For another nine countries, information is available on individual religiosity defined as attendance to religious services at least once a month. 33 The seven countries with information on all variables are Austria, Finland, (the former West) Germany, Italy, Spain, Sweden, and the United States.

We estimated the basic model described above for the whole sample of twelve countries and for three sub-samples: a/ the ten countries for which we have information on divorce; b/ the eight countries for which we have information on both divorce and religion (excludes Belgium, France, New Zealand, and Norway); and c/ the seven countries for which we can estimate a full model (also excludes Canada).

Table 3 presents means and variances for the variables used in the empirical model. We present these means for each country included in the sample, and then for women from all twelve countries and for the sample of women from seven countries on which we have full information. The table highlights cross-country disparities in age, educational system, and occupational status.

Methods. We estimated weighted logit regressions of the likelihood of an unpartnered birth, where weights take account of the different sizes of each country’s samples and sampling methods. The logit method is most appropriate when considering a two-way choice between giving birth with or without a partner, given that women were having a child. 35 Our models include both macro and individual characteristic. We corrected the estimated variances associated with macro variables given that they are mechanically smaller than the variances of individual characteristics (Moulton 1990). The following models were estimated:

1/ a basic model of the likelihood of an unpartnered birth, $R$. The dependent variable is the logit of $R$. The explanatory variables are dummies for country’s legal system, child’s year of birth, mother’s year of birth, a dummy for mother born in 1946-1950, age, centered age square, a dummy for mother older than 29, and four interaction terms between mother age dummies and legal system dummies. Table 4 reports this basic model for twelve countries, ten countries, and seven countries (columns 1 to 3).

2/ an augmented model including information on whether a woman’s parents had divorced and an interaction term between parental divorce and legal regime. This is a

32 It was difficult to use a continuous education variable given the cross-country differences in education systems. In particular, it is difficult to establish whether a respondent has completed high school or not. For instance, in the USA it is illegal to drop out of school before age 18. In contrast, in Austria, Italy and Spain, there is a large population of respondents who completed school by age 16, especially among older cohort.

33 This information was not available or not comparable for Belgium, France, and New Zealand.

34 We estimated numerous models for various sample and variable specifications, to check whether these disparities would invalidate our results.

35 It would not have been an appropriate method if we were modeling both annual risk of having a first birth and mother’s status, as is the case in Ermish (1991) and Ekert and al. (2002).
ten-country model given that information on divorce is available for ten countries (col. 4 in Table 4).

3/ an augmented model that includes whether a woman’s parents had divorced, the mother’s level of religiosity, an interaction term between parental divorce and legal regime, and an interaction term between religiosity and legal regime. This is an eight-country model given that information on both divorce and religion is available for eight countries (col. 5 in Table 4).

4/ an augmented model that includes all variables included in the eight-country model plus education dummies, family size, and work and study status dummies. This seven-country model was estimated for the seven countries for which information is available on all the variables (col. 6 in Table 4).

V. Regression Results

Table 4 reports the results of our logit regressions estimated for four samples of Western women: a 12-country sample composed of 29,780 women, a 10-country sample composed of 25,450 women, an eight-country sample composed of 23,467 women, and a seven-country sample composed of 21,215 women. Note that results in bold have the highest level of significance.

Effect of Rule of Division of Joint Property (RDJP). We find evidence for our major prediction: the lower the degree of community in a country’s divorce laws, the higher women’s likelihood of having an unpartnered birth. In all our regressions (even those not shown in Table 4) we find that women living in countries with medium levels of Community Property (MC) have a lower likelihood of giving birth without a partner than women in countries with low levels of Community Property (LC), and the positive sign of LC is highly significant, statistically, in all our regressions. Furthermore, it appears from our seven-country, eight-country and ten-country models that women in countries with a high degree of community in joint property (HC) have a significantly lower percent of unpartnered births than women in countries with MC (medium levels of Community Property). Most unlikely to give birth without a partner were women in countries where divorce was illegal, a finding significant at the highest level. It appears from Table 4 that RDJP effects are robust to the introduction of individual economic and social characteristics, an exception being the effect of HC in our twelve-country model. Overall, only slight changes in the RDJP dummies occur, and they seem to be due principally to changes in the identity of the countries included in the sample.

Effect of cohort, trend, and age. We predicted that women born right after WWII, at a time of rapid increases in number of births after a period of low births, will have a higher likelihood of unpartnered births (due the particularly unfavorable marriage market conditions that tradition-bound women of this cohort have faced). All our models confirm that women born in the years 1946-50 are more likely to have an unpartnered birth than women born at other times, and this finding takes the highest level of significance. This post-WWII baby-boomer effect is striking, for it contrasts with the continuous upward trend in unpartnered births (the coefficient of trend is positive at about 0.015 a year and is highly significant in most of the models in Table 4).

We find that relatively to birth patterns for women in their twenties, unpartnered births are more common among women who are younger than 20 (including teenagers) and older than 29. These findings are significant in all our models, at the highest level of significance. They are represented both by a quadratic term, a function of the age at birth minus 23, and by a dummy indicating whether a woman is older than 29. This last term
balances the negative coefficient of age at birth that would have led to a smaller increase in unpartnered births at older ages. It appears that between ages 20 and 29 the benefits of age exceed the disadvantages of age, but after age 29 the negative effects of age on marriage prospects (possibly a function of fecundity) appear to dominate.

Both findings of a positive effect of child’s birth year and a negative effect of mother’s age at birth have implications for cohort effects. Controlling for mother’s age at birth, the later the child is born, the younger the cohort the mother belongs to, so later cohorts have a higher $R$. Furthermore, controlling for child’s birth year, for the entire period we study (1961-1995), younger women (who also belong to younger cohorts) appear to be more likely to have an unpartnered birth. This could reflect a decreasing stigma associated with an unpartnered birth. Against this trend, the high rates of unpartnered births of older post-WWII baby-boomers are a striking exception. If there has been a decrease in the stigma associated with an unpartnered birth, it only seems to apply for cohorts born after 1950.

We had also predicted that RDJC will have less impact on unpartnered births among teenagers than among more mature women. We find that indeed, relative to the main effects of RDJP, interactions between ‘Younger than 20’ and two RDJC dummies (HC and No divorce) go in the opposite direction of the main effects of RDJC. The interaction term with HC is positive at the highest level of significance, with a magnitude that exceeds that of the main effect to such an extent that in HC countries the likelihood of an unpartnered birth among teenagers is even higher than that found in MC countries (but it is smaller than the rate of unpartnered births among teenagers in LC countries). In countries where divorce is prohibited teenagers’ likelihood of having an unpartnered birth remains lower than that of women in their twenties.

It can be seen from Table 4 that the effect of ‘older than 29’ on an unpartnered birth is larger in a MC country than in a LC country (the sign of the interaction with LC is negative). That the interaction goes in the opposite direction of the main effect indicates that the higher protection offered by a more advantageous RDJP means less to women having a first birth past age 29 than to women doing so in their twenties. This finding is consistent with a worsened marriage market position for tradition-bound women past age 30 (leading to lower benefits from marriage $B$ and value of divorce settlement $D$) and with higher proportions of older women bypassing traditional gender roles and supporting a child without living with a partner. It is even possible that for women receiving no positive benefit $B$ during marriage, higher degrees of community property are a drawback, for in this case they protect men more than women.

**Divorced Parents.** The models in columns 4 to 6 support our prediction that parental divorce is associated with a higher likelihood of an unpartnered birth. We find a negative impact of non-intact family background on the behavioral influence of Low

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36 Significance for the interaction term with ‘No divorce’ is at the 5% or 7% level, depending on whether we controlled for religiosity or not.
37 This result achieves the highest level of significance in all our models.
38 This finding obtains the highest level of significance for the ten-country and the eight-country models (column 4 and 5) and reaches a 5% level of significance in the seven-country model (column 6). The lower level of significance for the 7-countries sample seems to be caused by the exclusion of Canada. Canada experienced rapid increases in divorce rate towards the end of our sample years. It is possible that therefore information on parental divorce is not as a good an indicator of women’s divorce prospects in Canada than in other countries included in the sample.
Community in our ten-country and eight-country models (columns 4 and 5), but this result depends on the sample and is not highly significant. We thus find that three groups of women with characteristics that are not considered appealing in markets for marriage and cohabitation (from the perspective of potential husbands/providers) have a higher likelihood of unpartnered birth: teenagers, women past age 30, and children of divorce. In the case of teenagers and children of divorce this marriage market effect (leading to lower $D$ in case of divorce) seems to dominate the possible effect of a higher predicted divorce probability $p_d$, resulting in a lower impact of RDJP rules.

It appears from the full seven-country model in column 7 of Table 4 that unpartnered births are most likely to occur among women who completed their studies before age 19 and don’t have more than a high school education. This confirms our unambiguous prediction regarding the association between low education and unpartnered births $R$. We also find that any education beyond high school is associated with a lower $R$ at the highest significance level and that the impact of a post-graduate education is not significantly different from that of a college education. This is consistent with the fact that in the U.S.A. more educated women are more likely to be married (see Rose 2005). We predicted a positive association between participation in the labor force and unpartnered birth. It is confirmed (col. 6). The model in column 6 also shows that women who were students before giving birth are more likely to have a child alone and that women with 1 to 3 siblings are less likely to be mothers without a partner than women who either have no siblings or came from a family of five or more children.

It is apparent from both the eight-country model in column 5 and the seven-country model in column 6 that observant women (attending a religious service at least once a week) are less likely to have an unpartnered birth. This indicates that for this group of countries, the discouraging effect of religion on extra-marital relations dominates the effect of religion on $R$ via prohibition of abortions. However, this effect does not hold for LC countries, according to both the eight-country model (column 5) and the seven-country model (column 6): the interaction term with LC is positive and of a magnitude similar to that of the main effect. This confirms the prediction that religiosity would have less of an effect on unpartnered births in LC countries.

**Models’ Robustness.** In addition to the models reported in Table 4, we estimated many more models to test our major prediction, namely that rules of division of property at divorce are associated with unpartnered births. Wondering whether our RDJP variables

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39 Women out of the labor force are also more likely to be married rather than cohabiting (see Ekert-Jaffe and Sofer 1996).
40 We have a number of possible explanations for this: students may be more willing to challenge norms; students tend to have a lower income and therefore are more likely to qualify for government benefits if they have a child without a partner; students are more likely to receive help from their parents; or couples including a student are more unstable.
41 This may indicate either that women with no siblings or from a very large family are more interested in having a child without a partner or that women with such background are considered as less attractive potential co-parents by men willing to act as primary earners (leading to lower offers of $B$). In addition, very large families or one child families can be proxies for lower social class.
42 Interestingly, if we don’t include the interaction between religiosity and LC, the effect of religiosity disappears.
43 A possible interpretation for this finding: to the extent that religiosity reduces $R$ by discouraging premarital relations, we expect observant tradition-bound women, who have more control over their premarital relations, to respond more to the financial incentives offered in MC countries but not in LC countries.
(the LC and HC dummies) were picking up other national characteristics, we estimated models that included other country-level variables that are correlated with our RDJP dummies. Given the small number of countries in our sample, we had to be careful not to include too many country-level variables at once.\(^{44}\) We estimated regressions including country-level divorce rate and country-level religiosity as estimated from our data (Low Community countries such as the U.S.A. and parts of Canada also have high divorce rates). We also experimented with is a dummy capturing whether a country has a catholic majority and with dummies for the year a country legalized abortions. In most of these estimations the RDJP variables continued to have an effect on \(R\) similar to the one reported in Table 4.\(^{45}\) This effect dominated the effects of some related variables, in magnitude and level of significance.\(^{46}\)

VI. Conclusions

The main purpose of this paper was to examine whether rules of division of couples’ joint property (RDJP) affect the likelihood that women have unpartnered births. Based on a simple model assuming that women are rational, we predicted that women who are secondary earners or don’t participate in the labour force, i.e. tradition-bound women, would find having a child in couple less attractive if they live in countries with rules offering less advantageous conditions to divorcing tradition-bound women. Hence the prediction that in such countries there will be a higher likelihood of unpartnered birth.

We argue that common law countries and countries with separation of assets (which we classify as LC countries) typically offer tradition-bound women less advantageous RDJP relative to countries with Community Property (MC and HC) countries. Therefore we expect that there will be a higher likelihood of unpartnered birth in LC countries than in Community Property countries. We also expect more unpartnered births.

\(^{44}\) Furthermore, multi-level analysis modeling two levels (country and individual, see Goldstein 2003) gives the same estimates of direct effects: testing for random covariates indicated that all the coefficients are the same, except for the constant term that has a significant variance- this fact is consistent with an effect of RDJP. Furthermore, the interaction term “RDJP and Older than 29” is not significant in a multi-level analysis.

\(^{45}\) At the 5% significance level when the sample became too small for supporting the amount of variables.

\(^{46}\) One model that we estimated included average country-level parental divorce rate (calculated from our data about women’s parental divorce) in addition to the variables in Table 4. This variable had a significantly negative effect on the likelihood of an unpartnered birth, reflecting the relatively high divorce rate of Sweden, the only high Community Property country included in our eight-country model. In this regression, the effect of country-level parental divorce replaced the effect of high degree of Community Property. The LC effects documented in Table 4, including interaction terms, continued to hold, and most of our other results appeared to be robust. This model’s log likelihood ratio was higher than the one we obtained in Table 4 (column 6). We also estimated a model similar to the model in column 6, but including country-level religiosity level (as estimated from our data for each country), dummies for low and high Community Property, and replacing the interaction terms reported in column 6 with interactions between personal characteristics and country-level religiosity. The higher the country-level religiosity, the higher the likelihood of an unpartnered birth. This result is probably dominated by the influence of the U.S., a country with particularly high religiosity that we categorized as having a low level of Community Property. We continue to obtain a large and significantly positive effect of Low Community Property (LC), reflecting the high likelihood of an unpartnered birth in Austria, another one of the eight countries included in that model. This model yielded a lower log likelihood ratio. The interaction terms between age and national religiosity have the same signs as the interaction terms between age and degree of Community Property that we reported above. However, whereas the interaction term between LC and parental divorce was negative in columns 4 and 5 of Table 4, the interaction term between religiosity and parental divorce was statistically insignificant.
births in countries where Community Property includes a lower proportion of assets (MC relative to HC countries).

Our analyses of first births to women from twelve industrialized Western countries show that in accordance with our predictions, in countries with RDJP that are more advantageous to tradition-bound women the likelihood of an unpartnered birth is lower. Women living in countries with medium levels of Community Property (MC) have a lower likelihood of giving birth without a partner than women in countries with low levels of Community Property (LC) and women in countries with a high degree of community in joint property (HC) have a significantly lower percent of unpartnered births than women in countries with MC (medium levels of Community Property). These findings hold for a number of samples and are robust to many different model specifications.

We also find that the effect of RDJP depends on three individual characteristics of mothers included in our study: age, non-intact family of origin, and religious observance. We find that RDJPs have less impact on unpartnered births among teenagers, women past age 29, and women growing up in a non-intact home but more impact on women who are religiously observant.

This study also reproduces some well-known results: teenagers and women who grew up in broken homes have higher rates of unpartnered births. What is less evident is our finding that women past their twenties are also more likely to have a child without a partner. Unpartnered births appear to concentrate among women with low education: women with at least some college are less likely to have unpartnered births than women with a high school education. Relative to employed women the likelihood of an unpartnered birth is lower among women out-of-the labor force and higher among women who are enrolled in school.

As noticed by many researchers before us, the overall trend in the countries we covered has been towards more unpartnered births. We find that one particular 5-year cohort is an exception to this trend: the women born right after WWII, in the years 1946-1950. Based on marriage market analysis, we predicted that the generation born right after WWII--a generation characterized by very low gender ratios--would diverge from this trend.

Our research can be viewed as a first step in examining the tie between unpartnered births and laws regulating division of joint property in case of divorce or separation. This line of research could benefit from further work both at the theoretical and empirical level. Our study is based on a small number of countries and the magnitude of the coefficients depends on the countries included in the sample and our legal classification. We recommend that future cross-country comparisons include more variables, more countries, and more detailed analyses of legal differences, and that analyses similar to ours be performed for individual countries, such as the U.S.A and Canada, where various legal regimes with different RDJP coexist.

References


<table>
<thead>
<tr>
<th>Variable</th>
<th>Effect on Unpartnered Birth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aggregate Variables:</strong></td>
<td></td>
</tr>
<tr>
<td>Rule for Division of Joint Property (RDJP)</td>
<td></td>
</tr>
<tr>
<td>Low degree of Community Property (LC)</td>
<td>+</td>
</tr>
<tr>
<td>High degree of Community Property (HC)</td>
<td>-</td>
</tr>
<tr>
<td>Cohort of 1946-1950</td>
<td>+</td>
</tr>
<tr>
<td><strong>Mother’s Personal Characteristics:</strong></td>
<td></td>
</tr>
<tr>
<td>Teenage mother</td>
<td>+</td>
</tr>
<tr>
<td>Mother comes from a Non-Intact (NI) family</td>
<td>+</td>
</tr>
<tr>
<td>Mother has low education</td>
<td>+</td>
</tr>
<tr>
<td>Mother has high education</td>
<td>-</td>
</tr>
<tr>
<td>Mother out of labor force</td>
<td>-</td>
</tr>
<tr>
<td><strong>Interactions with RDJP</strong></td>
<td></td>
</tr>
<tr>
<td>Teenager in LC country</td>
<td>-</td>
</tr>
<tr>
<td>Teenager in HC country</td>
<td>+</td>
</tr>
<tr>
<td>Non-intact family in LC country</td>
<td>?</td>
</tr>
<tr>
<td>Observant of religion in LC country</td>
<td>Sign in opposite direction than the main effect of religious observance</td>
</tr>
<tr>
<td>Observant of religion in HC country</td>
<td>Sign same as the sign of the main effect of religious observance</td>
</tr>
</tbody>
</table>

Table 2. Unpartnered First Births and Rule for Division of Marital Property

<table>
<thead>
<tr>
<th>Country and Year of Survey</th>
<th>Rule for Division of Marital Property</th>
<th>Degree of Community</th>
<th>Percent of Unpartnered First Births f</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand 1995</td>
<td>Common Law g</td>
<td>LOW</td>
<td>11</td>
</tr>
<tr>
<td>USA 1995</td>
<td>Common Law</td>
<td>LOW</td>
<td>15</td>
</tr>
<tr>
<td>Canada a 1995</td>
<td>Common Law</td>
<td>LOW</td>
<td>19</td>
</tr>
<tr>
<td>Quebec + Ontario b 1995</td>
<td>Acquired Assets c</td>
<td>MEDIUM</td>
<td>11</td>
</tr>
<tr>
<td>Austria 1995</td>
<td>Separation of Assets/Some Acquired Assets</td>
<td>LOW</td>
<td>20</td>
</tr>
<tr>
<td>Germany 1992</td>
<td>Separation of Assets/Acquired Assets</td>
<td>MEDIUM</td>
<td>11</td>
</tr>
<tr>
<td>Belgium (Flanders) 1992</td>
<td>Acquired Assets c</td>
<td>MEDIUM</td>
<td>3</td>
</tr>
<tr>
<td>France 1994</td>
<td>Acquired Assets c</td>
<td>MEDIUM</td>
<td>7</td>
</tr>
<tr>
<td>Finland 1990</td>
<td>Acquired Assets /Unrestricted Community d</td>
<td>MEDIUM</td>
<td>10</td>
</tr>
<tr>
<td>Norway 1989</td>
<td>Unrestricted Community d</td>
<td>HIGH</td>
<td>13</td>
</tr>
<tr>
<td>Sweden 1993</td>
<td>Unrestricted Community d</td>
<td>HIGH</td>
<td>8</td>
</tr>
<tr>
<td>Italy 1995/6</td>
<td>No divorce/ Acquired Assets e</td>
<td>No divorce/MEDIUM</td>
<td>4</td>
</tr>
<tr>
<td>Spain 1995</td>
<td>No divorce/ Acquired Assets e</td>
<td>No divorce/MEDIUM</td>
<td>4</td>
</tr>
</tbody>
</table>

a) Excludes Quebec and Ontario after 1978.
b) Ontario: for births after 1985
c) Community property only for assets acquired during the marriage
d) Community property is unrestricted: includes assets acquired before and after marriage
e) Acquired Assets from 1975 in Italy and from 1981 in Spain.
g) Some Acquired Assets from 1976
Table 3. Women’s Characteristics Prior to their First Child’s Birth

<table>
<thead>
<tr>
<th></th>
<th>Austria</th>
<th>New Zealand</th>
<th>USA</th>
<th>Canada</th>
<th>Belgium: Flanders</th>
<th>France</th>
<th>West Germany</th>
<th>Italy</th>
<th>Spain</th>
<th>Finland</th>
<th>Norway</th>
<th>Sweden</th>
<th>All 12 Countries</th>
<th>Total 7 Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample size</strong></td>
<td>2923</td>
<td>1873</td>
<td>6274</td>
<td>2252</td>
<td>1983</td>
<td>2111</td>
<td>1352</td>
<td>2826</td>
<td>2486</td>
<td>3038</td>
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<td>In School (%)</td>
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<td>Out of Labour Force (%)</td>
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Table 4. Proportion of Out-of-Couple Births: Pooled Logit Regressions.

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<tr>
<th>Variables</th>
<th>Basic model</th>
<th>Model including socio-economic variables</th>
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<tr>
<td></td>
<td>12 countries (1)</td>
<td>10 countries (2)</td>
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<tr>
<td>Intercept</td>
<td>0.88** (0.48)</td>
<td>1.002** (0.52)</td>
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<td><strong>Macro Factors</strong></td>
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<td>Rule for Division of Joint Property (RDJP)</td>
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<td>Low Community Property (LC)</td>
<td>0.669 (0.149)</td>
<td>0.7490 (0.15)</td>
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<tr>
<td>High (HC)</td>
<td>-0.031 (0.078)</td>
<td>-0.291** (0.21)</td>
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<tr>
<td>Divorce Prohibited</td>
<td>-1.110 (0.283)</td>
<td>-1.1493 (0.282)</td>
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<td><strong>Cohort and Period</strong></td>
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<tr>
<td>Mother Born in 1946-52</td>
<td>0.493 (0.12)</td>
<td>0.5650 (0.12)</td>
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<td>Trend : Child’s Year of Birth</td>
<td>0.019 (0.007)</td>
<td>0.0170 (0.006)</td>
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<td><strong>Women’s Characteristics</strong></td>
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<td>Age at First Birth and Interactions with RDJP</td>
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<tr>
<td>Age</td>
<td>-0.2381 (0.015)</td>
<td>-0.2304 (0.016)</td>
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<tr>
<td>(Age-23) Square</td>
<td>0.0136 (.0011)</td>
<td>0.0125 (.0012)</td>
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<td>Older than 29</td>
<td>0.541 (0.208)</td>
<td>0.6948 (0.214)</td>
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<td>Younger than 20 in a HC Country</td>
<td>0.595 (0.066)</td>
<td>0.7257 (0.077)</td>
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<tr>
<td>Younger than 20 and Divorce Prohibited</td>
<td>0.413* (0.252)</td>
<td>0.491** (0.252)</td>
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<td>Older than 29 in a LC Country</td>
<td>0.495 (0.13)</td>
<td>-0.5840 (0.11)</td>
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<td>Non-intact Family of Origin</td>
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<td>Religious Observance and RDJP</td>
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<td><strong>Number of Siblings Between 1 and 3</strong></td>
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<td>Out of Labour Force and not in School</td>
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<td>Likelihood Ratio</td>
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</table>

Column 1: all Countries in Table 1; Columns 2 and 4: column 1 except Norway and New Zealand; Columns 3 and 6: column 2 except Canada, Belgium and France; Column 5: column 2 except Belgium and France. Bold= significant at 1% level, **: significant at 5%, *: significant at 10%.

In the full model, the reference group consists of non-observant women coming from intact families, living in a Medium Community property country, born after 1951, working in the labour force, and who had at most a high school degree before pregnancy.