On the Universality of the Second Demographic Transition and the Rise of Cohabitation and Non-Marital Childbearing in Chile

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Introduction

As one of the creators of the second demographic transition theory, Lesthaeghe has made a forceful argument that the SDT in not a phenomenon restricted to Northern and Western Europe, and that this package of reproductive behaviors and values results from forces that are pervasive in the modern world. He claims that the SDT has spread to Southern Europe, Central, and Eastern Europe, the U.S., and, most recently, to some industrialized societies in East and Southeast Asia. Not all the components of the SDT have emerged in every setting —for instance, procreation within cohabitation has not emerged in Asia—, but Lesthaeghe argues that the mix of the other elements points to a SDT. Importantly, he has argued that individual value profiles are consistent with the original SDT model in every setting (Lesthaeghe 2010).

Some have raised the question as to whether there are signs that the SDT is appearing in Latin America (Cabella, Peri, and Street 2005; Quilodrán 2008; Rios Neto 2009). The SDT signals currently coming from Chile are perhaps stronger than those coming from any other country, given that fertility is below replacement, marriage has declined, and the proportion of children born outside of marriage has reached very high levels. Moreover, the economic growth and political stability the country has experienced during the last twenty years would seem to fit the necessary structural conditions for the SDT posited by Lesthaeghe.

While it is tempting to interpret the emergence of below-replacement level fertility and rapid growth in cohabitation and out-of-wedlock childbearing in Chile could as a signal that the SDT has spread far beyond Europe to the Southern cone of Latin America, we will present evidence that recent Chilean experience diverges substantially from the SDT model postulated by Lesthaeghe and and Van de Kaa. First, comparing women in different family structures, we assess whether women in nontraditional structures hold more liberal values than women in traditional

structures, as well their relative social and economic status. Second, we look at the planning status of births as an alternative explanation for the large proportion of nonmarital births in Chile. If, rather than deciding to bear children outside of marriage, unwed women are only accepting accidental pregnancies in a country in which abortion is legally prohibited and socially rejected, the scenario changes, and these women would have little in common with the autonomous and reflexive actor the SDT theory assumes.

But, if what is going on in Chile is not the SDT, then, what is it? Is it a transitory phenomenon likely to give way to either a classic FDT with the restoration of marriage and a higher level of fertility, or a classic SDT with the requisite values and late and low childbearing? Or is it likely to be a persistent state, perhaps worthy of a separate characterization or typology?

Our exposition will begin with a brief review of the trends in Chilean fertility and nuptiality, and the country's current economic and social setting. We then describe the data that the first author collected in Santiago from women who had recently delivered their first child in both private and public hospitals, as well as a typology of the different kinds of unions these new mothers were in. Then, we examine the age and education of women in the different types of family arrangements. Next, we turn to the values expressed by this sample of mothers, and the degree to which values are associated with the type of union in which a woman gave birth. Finally, we turn to the reproductive histories that led to the first birth, and the differences in age at sexual initiation and contraceptive practice as well as the reproductive goals of these first time mothers.

Chilean Context

The total fertility rate (TFR) in Chile reached a peak of 4.6 births per woman in the mid sixties, a lower peak rate than many other Latin American countries experienced. Afterwards, a steep decline began, and the TFR reached 1.9 in 2010 (Census Bureau 2010). The fertility decline

started among the most educated and highest income strata, but the gap shrunk as the transition progressed. In the early sixties, the difference in the number of children between the highest and lowest socioeconomic strata was 2.7 children; in 2000 it was only 1.1 (Larragaña 2006).

Marriage has been postponed with the mean age at marriage for women reaching 30 and 34 for men in 2008 (Gutiérrez 2008). The delay in marriage has been accompanied by an increase in cohabitation that accelerated in the nineties, especially among youth. According to census data, in 1992, 17 percent of people 18 to 24 years old were cohabiting, whereas in 2002, 46 percent were. However, when considering the population over 18, the proportion of cohabiters was only 16 percent (Salinas 2009). This figure is low compared to other Latin American countries, such as Colombia or Honduras, where about 60 percent of women of reproductive ages were cohabiting in 2005 (Castro-Martín et al. 2010). A novelty is that since the nineties cohabitation has been observed among high status groups (Herrera and Valenzuela 2006), whereas traditionally cohabitation in Chile, as well as in the rest of Latin America, has been characteristic of people with low socioeconomic status (Castro-Martín 2002). Together with the decline of marriage and the increase of cohabitation, divorce has increased since the first divorce law was implemented in 2005. Indeed, because of the backlog, in 2010, there were more weddings than divorces (Registro Civil y de Identificacion 2010).

As the overall proportion married declined in Chile, the proportion of children born outside of marriage increased dramatically from 16 percent in 1960 to 68 percent in 2010 (Registro Civil y de Identificacion 2010). Nonmarital births are proportionally higher in Chile than in Sweden (OECD n.d.), a country in which the size of the proportion of children born outside of marriage has been associated with the questioning of marriage as an institution and taken as a sign of the stability of cohabitation (R. Lesthaeghe 2010).

These demographic changes were accompanied by a considerable expansion of education with 82 percent of people aged 20 to 24 completing at least 12 years of schooling in 2009 (CASEN 2009). The economy has enjoyed relatively stable growth since the mid 1980s, inflation has remained low, and poverty has diminished (MIDEPLAN 2010b). Income inequality, however, remains high, as the richest 10 percent of the population receives about 40 percent of the total income (MIDEPLAN 2010a), and labor instability has increased (Roberts and Grimson 2005). Also, even though female labor force participation has grown, the rate (43 percent of women over 14 years old) is below that found in either most Latin American or developed countries (ILO 2008).

Another element to keep in mind when studying fertility and family outcomes in Chile is the impressive power of the Catholic Church. The church blocked the approval of a divorce law until 2004, and it continues opposing changes in the current abortion legislation, recognized as among the strictest in the world¹, as well as efforts to develop proper sex education programs (Lehrer and Lehrer 2009). Blofield (2001) has argued that the influence of the Catholic Church in Chilean legislation results from the combination of the active opposition of the extreme right and the hesitation of the political left to make any legal changes on an issue that might be considered moral. She believes that the passivity of the left wing on these issues results from a perceived debt to the Church for the crucial role it played in defending human rights during Pinochet's dictatorship (1973-1990). In addition, the Christian Democrats, one of the largest political parties in the Chilean left wing, is more conservative in Chile than its European counterparts (Blofield 2001).² In this scenario, every attempt to legislate on abortion receives fierce rejection.

Data

 $^{^{\}rm 1}$ In Chile, abortion is illegal even in cases of rape and when a woman's life is at risk.

² Some would also point to the consolidation in Chile of Opus Dei and the Legionnaires of Christ among the Chilean upper class. The level of organization of these groups, the amount of resources they manage, and their access to political parties results in the right wing's fundamentalist agenda on moral topics.

This paper relies on data from a postpartum survey conducted in five hospitals in Santiago -- the capital city, where 33 percent of the population lives-- between September 2008 and January 2009. Mothers were eligible to participate if they were 18 years or older, bearing their first child, and the health of both mother and child were not compromised immediately upon delivery³. The sample of hospitals was stratified according the predominant social class of their clientele. We complement the postpartum survey interviews collected from 686 women with qualitative information coming from ten in-depth interviews with cases selected considering their marital status, age and socioeconomic status.

We classified first-time mothers into six groups according to the family arrangement in which they were living. This grouping combines relationship status and family size. In the sample, 33 percent of women are married, 40 percent are cohabiting, 16 percent hold a romantic relationship with the baby's father, but do not live together —who from now on we refer to as being in a visiting relationship- and about 10 percent are not romantically related to the baby's father anymore —who we will call single mothers. The size of the household is related to the respondents' economic resources. By living in extended households, unmarried mothers' may get economic and social support, and decrease their living expenses (Sigle-Rushton and McLanahan 2002). Nuclear households, on the other hand, are likely to be reserved for those who can afford independent living. Half of women in the sample (48.6 percent) live in households formed by three people, namely, the respondent, her partner and her baby⁴. The other half of respondents share their houses with more people often including the maternal grandparents, and constitute extended families.

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³ Though these sample exclusions could have virtually eliminate very-low weight babies, in practice women in the public hospital were willing to participate and even asked to be interviewed, still in cases when the baby's weight was extremely low, the delivery was preterm or the baby was in the newborn intense care unit.

⁴ Multiple births are counted here as one baby.

The living arrangements typology we use combines these four relationship statuses and two family sizes. Since just three women in each of the visiting and single groups said they live alone with their babies, we considered these two groups as basically extended and do not differentiate them by family size. Thus, the classification has six categories, namely, nuclear marriages, extended marriages, nuclear cohabitations, extended cohabitations, visiting, and single households. This classification allows us to compare each of the groups with each other, but also nuclear and extended settings, and married to cohabiting or not cohabiting women.

We begin the analysis by presenting the sociodemographic profiles of the respondents, and then we move to describing associations between family arrangements and the individual measures of attitudes and values. The final part of the analysis concerns the description of the reproductive histories of the respondents. Here we examine differences by type of family arrangement in age at sexual initiation, use of contraception, planning status of births, contraceptive failure, and desire to have more children. To aid in the interpretation of the results concerning values and reproductive experience, some examples from the in-depth interviews are are presented at the end of the respective sections.

Sociodemographic Profiles of First-Time Mothers in Chile

We consider women's age, educational attainment, per capita family income, and religion, with the objective of giving a sociodemographic description of the respondents according to the family arrangement they live in. Educational attainment is measured by a four-category variable, which distinguishes between women who did not complete high school, who have a high school diploma, who have at least some post-secondary studies in a technical institution or who have at least some post-secondary studies at a University. We differentiate these two types of post-secondary education because they are associated to socioeconomic status in Chile. Postsecondary

programs offered by technical educational institutions – which are similar to American community colleges—last between one and three years, granting a technical degree. They typically serve the middle and low-income population. Postsecondary programs offered by universities, last five years on average and grant a professional degree, and they tend to serve a population with higher socioeconomic status.

We include family income instead of personal income because some women may not have earnings --for instance, if they are full-time students, have never worked or stopped working because of the pregnancy. We categorized the per capita family income into three groups: less than \$100,000 Chilean pesos a month, between \$100,000 and \$500,000 and more than \$500,000 Chilean pesos a month. As of March 4th, 2011, the monetary equivalents for \$100,000 and \$500,000 Chilean pesos were US\$ 211, and US\$ 1,056, respectively.

We include religious affiliation and religiosity level, which is measured by a scale that adds the frequency which with the respondents go to Church (1 = "never", 2 = "less than once a year", 3 = "once a year", 4 = "a few times a year", 5 = "one a month", 6 = "once a week", and 7 = "several times a week") and the importance of religion in their lives (1 = "not important at all", 2 = "nor very important", 3 = "it has some importance", 4 = "very important", and 5 = "it is the most important thing in my life"). The scale ranges from two to twelve.

Table 1 provides a description of the sample with regards to demographic and socioeconomic variables. The first row of Table 1 shows that the sample is composed by 25 percent of married women in nuclear households, 20 percent of cohabiters in nuclear settings and 20 percent of cohabiters in extended households. Extended marriages and single households are the least common arrangements, with less than 10 percent each. Most respondents, then, either live or hold a romantic relationship with their baby's fathers. Thus, differently from the stereotype of unmarried mothers as abandoned women, most of unmarried mothers in this sample are not

alone. That opens the possibility that the baby's fathers will be around for mothers and babies, at least in the near future.

Differences in age, education and income according to family arrangements are impressive. Married women are the oldest women in the sample, with about half of them being over 30 years old. Quite the opposite, just eight percent of cohabiters in extended households, visiting and single mothers are over 30 years old, and more than 70 percent of them are under 25 years. The age distribution of cohabiters in nuclear households resembles more that of married women than the distribution of other unmarried women. This similarity may mean that nuclear cohabitation is a stable union, where couples consolidate, and probably accumulate some assets, before planning the first child. Extended cohabitation, on the contrary, may be a response to the pregnancy, one of the new parents moving to the house of the other in order to raise the child together. These young women are likely to have not planned the pregnancy, and to live in an extended setting --probably their parents' houses-- to get financial support and help taking care of the child. The postponement of childbirth, which is characteristics of the SDT, then, is just happening among married women and cohabiters in nuclear households.

Table 1: Sample Percentage Description by Family Arrangements

	Family	Family Arrangements ^b							
	NM	EM	NC	EC	V	S	Total		
Family Arrangements %	25.5	8.2	19.8	20.6	16.0	9.9	100.0		
Age (n=686) ^a									
18-19	1.7	8.9	9.6	29.8	37.3	33.8	18.5		
20-24	9.7	21.4	35.3	46.8	41.8	39.7	31.5		
25-29	36.6	23.2	25.7	15.6	15.5	22.1	24.2		
30-34	38.9	35.7	20.6	5.7	1.8	4.4	18.8		
35-45	13.1	10.7	8.8	2.1	3.6	0.0	7.0		
Mean age	30.2	28.2	26.7	22.7	22.6	22.7	25.8		
(st. dv.)	(4.5)	(5.5)	(5.8)	(4.0)	(4.7)	(3.8)	(5.7)		

Educational Attainment (n=686)^a

	Sec. Incomplete	1.1	8.9	8.1	21.3	22.73	26.5	13.3	
	Sec. Complete	8.0	26.8	33.1	41.1	39.09	44.1	29.8	
	Post Sec. Technical	16.0	21.4	24.3	25.5	20	17.7	20.9	
	Post Sec. University	74.9	42.9	34.6	12.1	18.18	11.8	36.1	
M	Monthly per capita family income (n=681) ^a								
	Less than \$US 200	6.3	33.9	33.1	71.7	72.7	76.1	44.8	
	\$US 200- \$US 1,000	30.5	44.6	47.8	26.8	24.6	22.4	32.6	
	More than \$US 1,000	63.2	21.4	19.1	1.5	2.7	1.5	22.6	
Re	ligious Affiliation (n=686) ^a								
	Catholic	77.7	58.9	55.9	44.7	66.4	57.4	61.2	
	Evangelical, Protestant, other	13.1	26.8	22.8	31.9	13.6	29.4	21.7	
	None, Atheist, Agnostic	9.1	14.3	21.3	23.4	20.0	13.2	17.1	
M	ean of Religiosity Scale ^a	7.5	7.1	6.5	5.9	6.2	6.4	6.6	
	(st.dev)	(2.4)	(2.4)	(2.6)	(2.5)	(2.1)	(2.5)	(2.5)	

^a Differences by family arrangements are significant at the .001 level

Married women in nuclear households appear also as the most educated and highest income group. The second panel of Table 1 shows that 75 percent of married women in nuclear households have reached at least college education, a percentage that is still relatively high among married women in extended households and nuclear cohabiters, but it is less than 20 percent among women in the other three arrangements. Thus, besides being the youngest, women in extended cohabitations, visiting, and single households are the least educated⁵. The comparison between women in nuclear and extended settings favors the former, both in marriages and cohabitations.

The next panel of Table 1 details the income distribution (monthly family income, percapita). Differences are again marked, indicating that poverty is quite likely among cohabiters in

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^b NM=nuclear marriage, EM=extended marriage, NC=nuclear cohabitation, EC=extended cohabitation, V=visiting, S=single

⁵ To be sure, their youth may be one of the reasons why their educational attainment is low, since they could still be attending to school. But that seems not to be the main reason, because just 11 percent of cohabiters in extended houses, and 17 percent of visiting and single mothers are still attending to school (data not shown).

extended houses, visiting and single mothers; and that married women in nuclear households have an income that is much higher than women in all the other groups. The income of nuclear cohabiters and married women in extended households is in between the income of nuclear married women and the set of three youngest and least educated women.

In terms of religion, most of the survey participants are Catholic, and married women in nuclear settings register the highest percentage of Catholics. There are more Catholics in nuclear than in extended households, and more Protestants in extended than in nuclear settings.

Cohabiters are the group in which the greatest number of people does not recognize a religious affiliation, which is consistent with the Northern European view of cohabiters as people who question traditional institutions, such as marriage. Even though the differences in religiosity according to family arrangements are statistically significant, they are not of an important magnitude.

A gradient of socioeconomic wellbeing merges out of this description. Married women in nuclear households are the oldest, most educated and highest income people in the sample. They are followed by nuclear cohabiters. Married women in extended households, who are a small group, resemble the education and income of nuclear cohabiters. The set of extended cohabiters, visiting and single mothers are the youngest, and most deprived women in the sample.

Attitudes and Values

The postpartum survey measured values and attitudes in two dimensions, family and tolerance. In the family dimension, respondents were asked to compare marriage with cohabitation and singlehood, and to give their opinion about divorce and children. The questions inquired about levels of agreement (strongly agree, agree, disagree, and strongly disagree) with the following statements:

It is better for a couple to get married than to just live together

- All in all, there are more advantages to being single than to being married
- Marriage is an outdated institution
- If couples are not happy together anymore, they should separate
- It is better for children if their parents are married
- When there are children in the family, parents should stay together even if they don't get along

Respondents were also asked how often (always, most of the times, often, a few times, never) they found divorce justifiable.

We measured tolerance towards several non-mainstream behaviors and towards life and death decisions. We asked women how often they justify homosexuality, and what a couple should be allowed to do in a romantic relationship at age 18 ("just kisses", "kisses and hugs", "any type of physical contact that does not involve having sex", "having sex", or "no physical contact at all"). Two questions dealt with tolerance for deviations from strict marital morality, asking how often the respondent found prostitution and casual sex justifiable. Finally, the questions dealing with matters of life and death asked how often the respondent found abortion, suicide and euthanasia justifiable.

We dichotomized all the variables for presentation. Questions measuring level of agreement were recoded, so that agreement with the most conservative positions equals 1, and disagreement equals zero. Questions measuring the frequency with which the respondent justifies a determined behavior were recoded in the same way, giving the value of 1 to "a few times and never" versus "always, most of the times, often". The exception is the question about justification of a man beating his wife, for which the coding is reversed. The question about what type of contact should be allowed at age 18 was recoded giving "having sex" the value of 0, and all other answers the value of 1.

Family

Figure 1 displays the distribution of the attitudes towards family issues, according to the family arrangement the respondent lives in. Most of the differences between groups are statistically significant. When evaluating marriage, marital status makes an important difference: about 80 percent of married women think marriage is better than cohabitation, a percentage that decreases to between 50 and 30 percent among unmarried women. Likewise, married women are much more likely to think being married offers more advantages than being single. Women who live in extended households see more advantages in singlehood than those living in nuclear households, probably because of the privacy the latter setting offers.

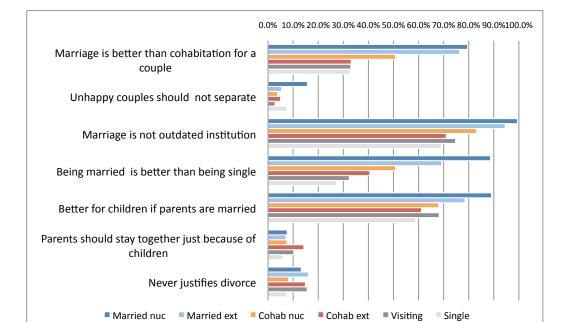


Figure 1 Family Attitudes by Family Arrangement^a

Visiting

^a All differences in proportions by family arrangements are significant at the .001 level (one way ANOVA), except for disagreement with parents should stay together just because of children and justification of divorce, that are not significant.

Similar differences in the appraisal of marriage are found when asking whether marriage is an outdated institution. Almost none of the married women in nuclear settings and only five percent of married women in extended households thought marriage outdated. Unmarried women are more likely to agree that marriage is an outdated institution. However, the proportion of women thinking that marriage in an outdated institution does not exceeds 30 percent, which means that most unmarried women value marriage too.

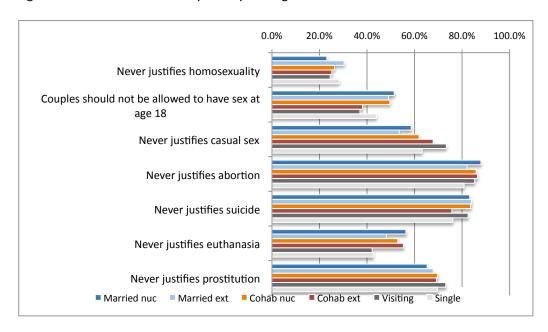
Differences in the evaluation of divorce are less marked than differences in the evaluation of marriage. In general, the respondents approve of divorce. More than 80 percent of women in all groups think that unhappy couples should separate, that divorce is justifiable, and that parents who do not get along should not stay together just because of the children. Even though women accept the idea of divorce, the majority thinks it is better for children if their parents are married. Married women in nuclear households are the most likely to hold that view, followed by married women in extended households, cohabiters in nuclear households, and visiting mothers.

Cohabiters in extended households and single mothers are less likely to think marriage is better for children, but the proportion that agrees with that statement is still high (about 60 percent).

Tolerance

Questions about the justification of unconventional sex behaviors, the violation of marital ethics, and controversial life and death decisions are included under this rubric. The results are displayed in Figure 2.





There are no significant differences according to family arrangements in this dimension. Regarding unconventional sexual behavior, about 75 percent of the respondents found homosexuality justifiable. About half of the women think young couples should not be allowed to have sex at age 18. The views of the respondents in different living arrangements are very similar in matters of life and death and the violation of marital ethics. About a third of women in each group, or less, found prostitution justifiable, and between 25 and 40 percent found casual sex justifiable. More radically, the approval of abortion is low in all groups with over 80 percent of women believing that abortion is never justifiable. The justification of suicide is in the same range. About half of the respondents found euthanasia justifiable.

Just as Perelli-Harris et al (2010) did not find much evidence that nonmarital childbearing in Europe is driven by a post-materialist shift in values, our results suggest that more liberal values are not predominant among women who give birth outside of marriage in Chile. First time mothers in our sample are not as liberal as one would expect if values were the explanation for the high proportion of nonmarital births. The mothers we interviewed hold liberal views on some

topics, but pretty have conservative ideas about others. Single and cohabiting women seem liberal when evaluating marriage, as compared to cohabitation and singlehood, and when evaluating divorce. However, they do not reject marriage per se, since less than 30 percent of the sample thinks marriage is an outdated institution, and 70 percent thinks it is better for children if their parents are married. Thus, what initially appears as a dislike for marriage by single and cohabiting women may well be just a way to justify their current marital status. Conservative attitudes emerge in matters of sex, and life and death. Just half of the sample thinks a couple should be allowed to have sex at age 18, and a little more than a third justifies casual sex. The approval of abortion is remarkably low, consistent with results from other surveys in Chile^{7.}

The idea that what initially appears as lower preference for marriage among unmarried women is just a way to self-justify their marital status is consistent with unmarried women's expectations of a wedding happening in the future. The postpartum survey asked women whether they had talked to their partners about getting married. It turned out that most unmarried women in a relationship planned to marry the baby's father, even though there are large differences according to the family arrangement they live in: 87 percent of cohabiters in nuclear households, 77 percent of cohabiters in extended households, and 40 percent of women in a visiting relationship have talked to their baby's father about getting married. The fact that this last group of women was less likely to be planning to get married is probably related to their young age, and the fact that they live with their parents. Having their parents' support, it is likely that visiting mothers prioritize finishing their education and starting a career instead of marrying⁸.

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⁷ In the *Encuesta Bicentenario 2010*, a nationally representative household survey, only six percept of the respondents agreed that women should be allowed to have an abortion under any circumstance, whereas 42 agreed it should be allowed in some circumstances and 52 percent mentioned it should not be allowed in any circumstance

⁸ However, and not shown here, about half of women in a visiting relationship have talked to their partners about starting to live together, which reduce the proportion having no co-residential plans to about 10 percent (14 women).

Putting together the attitudes and values results with the marital intentions of women in this sample suggests that instead of the ideological rejection of marriage, there are other reasons why unmarried first-time mothers remain unmarried at the time of birth. During the in-depth interviews we conducted, women brought to the table the priority they give to goals other than marriage in the short-term, the need for time for their relationship to mature. The other goals that unmarried women prioritize are related to getting more education, housing, and to consumption—which would hardly seem to fit the post-material aspirations Lesthaeghe considers to be a critical of engine driving the SDT.

For example, Marcela is a 20-year-old cohabiter who stopped attending to college at the end of the pregnancy. She lives with her baby and her partner, and says "...money is important. I don't want to ever have to ask for money from my husband or my parents to buy meat, so I think I need to get my degree and work before thinking about marriage". In a similar way, Jessica, a 19-year-old cohabiter who lives with her baby, her boyfriend, and his parents, says "I think I'd like to marry about age 30...I want to work first, for sure, and I don't want another child, not until I'm at least 30, because there are other things I have to do, work, get my own house".

Nicole, a 23 years old woman in a visiting relationship mentions how the family support facilitates not to quit to those goals that women probably had before getting pregnant, "I have my parents, I have my house, I know that I that I have my house, so, one year from here, I don't plan to leave. It may be three, five years. I'm not in a hurry, because sometimes you do things so rushed, that things don't work. I'm not worried about that, I'm worried about getting my degree. I mean, I also want to have my own house, and if I can get married, I will, but slowly, I don't want to do everything at once". Older women are more likely to be done with education, but they emphasize consumption goals, "we want to buy a house, and finding a house is not easy. Right now we are able to afford something in neighborhoods that are away from my family and my

work...I don't want to move so far...My plan is to use the money we have now, apply for a credit, and get something closer" says Andrea a 30 years-old cohabiter who lives with her partner, her baby, her parents, and her sister. These examples suggest that, in the values sphere, marriage has not disappeared as a goal for women, but that it has rather lost priority.

Reproductive Histories

The postpartum survey asked about a number of topics related to the respondent's sexual activity, contraception, and pregnancy. These recent mothers were asked about age at first sex, ever use of different contraceptive methods, as well the last method used and why they stopped using it.

Participants who had ever used a contraceptive method were asked to choose one of the following reasons for stopping use of their last method:

- I got pregnant
- I wanted to get pregnant
- My husband/partner did not approve of my using the method
- Side effects
- Access problems
- It was uncomfortable to use
- I was having sex sporadically
- Price
- Divorce/separation
- My body rejected it
- Other reason

To construct an indicator of the planning status of her birth, we used the second alternative in this list. When women reported they stopped using contraception because they wanted to get pregnant, we considered the birth as planned, whereas when any of the other reasons are given

for stopping, the birth is classified as unplanned. Because this indicator uses a question we only asked to contraceptive users, we cannot use it to describe nonusers. This measure is not a conventional indicator of fertility intentions, but rather a way to separate out women who made a conscious effort to get pregnant.⁹

We use the question about the date of last contraceptive use to build a measure of contraceptive failure, together with the delivery date and the length of the pregnancy (in weeks). We first computed the time since last contraception (difference between delivery date and date of last contraceptive use), and converted it to weeks. Then we compared that difference with the length of the pregnancy (which is indicative of the date of conception). If the number of weeks since last use of contraception is equal to or lower than the length of the pregnancy, we consider that there was contraceptive failure, because the respondent continued using contraception after conception --for example, she may have continued using condoms or pills before finding out about the pregnancy. Respondents were also asked about the contraceptive method they planned to use in the future. The last measure we consider in the reproductive health domain is the respondent's desire to have more children.

Information about the reproductive histories of first-time others in different family arrangements is included in Table 2. As seen in the first row of the table, women in the sample had their first sexual experience about age 18-19. This age is in the range of sexual initiation cited in other studies for Western and Latin American countries (Castro-Martín 2005; Bozon, Goyet, and Barrientos 2009). Married women start having sex at an older age than unmarried women, though the difference is small. The group of cohabiters in extended households, visiting and single

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⁹ A similar indicator of birth planning was used in a recent US study (Hayford and Guzzo 2010). Our measure refers to births rather than pregnancies, since it does not include abortions. This indicator would have limited applicability in societies where nonmarital sex, and therefore nonmarital contraceptive use, is scarce. But the postpartum survey data indicates that is not the case for Chile.

mothers, who share a fragile socioeconomic profile, began having sex at the earliest age.

Table 2: Percentage Distribution of Contraceptive Users and Unplanned Births by Family

Arrangements^a

	Family Arrangements ^b						
	NM	EM	NC	EC	V	S	Total
Age at first sex (n=685) ^a							
Mean	20.9	19.4	18.6	17.4	17.8	17.1	18.7
(St. Dev.)	(4.2)	(4.0)	(2.8.0)	(2.1.0)	(3.1.0)	(2.5.0)	(3.5.0)
Unplanned birth (n=582) a	26.8%	26.7%	39.5%	58.6%	79.1%	81.3%	47.9%
Contraceptive user (ever) (n=686) ^a	96.0%	80.4%	88.2%	83.0%	78.2%	70.6%	85.1%
Failure (<i>n=575</i>) ^a	12.6%	18.2%	19.3%	28.4%	31.0%	42.2%	22.6%
Want more children (n=686) ^a	86.9%	80.4%	68.4%	63.1%	54.5%	41.2%	68.1%
Method planed future (n=616) ^a							
Pills	54.4%	54.7%	54.0%	38.6%	39.4%	30.7%	46.8%
IUD	8.9%	11.3%	18.6%	37.7%	33.0%	35.5%	22.7%
Other	19.5%	15.1%	14.5%	12.3%	17.0%	12.9%	15.8%
DK	7.1%	9.4%	10.5%	8.8%	9.6%	14.5%	9.4%
None	10.1%	9.4%	2.4%	2.6%	1.1%	6.5%	5.4%

^a Differences by family arrangements are significant at the .001 level

Regarding the planning status of births, Table 2 indicates that 48 percent of women did not plan their pregnancies. Even though this figure includes only contraceptive users, it is consistent with a recent survey conducted by UNESCO, UNICEF and JUNJI (*Junta Nacional de Jardines Infantiles*, National Board of Daycare Centers)¹¹, which indicates that half of births are unplanned in the country (Jaque 2010). The lowest frequency of unplanned births is found among

^b NM=nuclear marriage, EM=extended marriage, NC=nuclear cohabitation, EC=extended cohabitation, V=visiting, S=single

 $^{^{11}}$ The survey is representative of urban households with children aged 5 to 11 years old.

married women in nuclear households, reaching 27 percent, and the highest frequency appears among single mothers, reaching about 80 percent. Whereas the proportion of unplanned births does not differ between married women living in nuclear and extended households, it does among cohabiters—about 40 percent of the pregnancies of cohabiters in unclear households were unplanned, compared to 60 percent of the births of cohabiters in extended households.

Most women in the sample --85 percent-- have used contraceptives at some point in their lives. As seen in Table 2, the proportion of users is higher among married women in nuclear households, reaching 96 percent, and goes down to 70 percent in the group of single mothers. Cohabiters in nuclear households, rather than married women in extended households, are the second group most likely to have used contraceptives. Both for married and for cohabiting women, the proportion of users is higher in nuclear than in extended settings.

Table 2 next reports levels of contraceptive failure. The value of the measure we use is not extremely high in the whole subsample of users, where it equals 23 percent. Failure is infrequent among married women in nuclear households (13 percent); it is higher and similar between married women in extended households and cohabiters in nuclear households (around 19 percent), and it increases greatly in the other groups, reaching about 30 percent among cohabiters in extended households and visiting mothers, and 42 percent among single mothers.

Regarding the desire to have more children in the future, summarized in the fifth panel of Table 2, almost 70 percent of the respondents said they want to have another child. However, there is ample variability in this desire according to the family arrangement in which first-time mothers live. Married women in nuclear households register the highest value --87 percent of them are willing to have another baby-- whereas single mothers are the least likely to want another child—just 41 percent does. The proportion wanting another baby is slightly higher in nuclear than extended households, both for married women and cohabiters. The

socioeconomically fragile group of cohabiters in extended households, visiting and single mothers are dissimilar from each other in this respect: whereas 63 percent of cohabiters in extended households reported wanting another child, only 55 percent of visiting mothers and 41 percent of single mothers did so.

The last piece of information in Table 2 concerns the contraceptive method the respondents plan to use in the future. The pill is the preferred method in four of the six family arrangements. Among cohabiters in extended households, about the same proportions of women are planning to use the pill or an IUD, and among single mothers the IUD appears to be the most preferred method. It is worth noting how the IUD gains salience as a contraceptive strategy after the first birth among the group of women in the three most vulnerable family arrangements (cohabiters in extended households, visiting, and single mothers). Many of the women who are planning to use an IUD were pill or condom users as their last contraceptive method —(data not shown), so it may be that they see the IUD as a method that is more efficient than the last method they used.¹²

The large proportion of unplanned births, together with the relatively high proportion of women who are contraceptive users, suggest women who get inadvertently pregnant are probably failing to use contraceptives properly. During the in-depth interviews, some women described the errors in their contraceptive use that resulted in their current deliveries. Marcela, the 20-year-old cohabiter in a nuclear household, explains "I didn't get pregnant by being silly or not careful; I always took good care of myself, taking my pill every day. But one day a friend from college and I went together to visit her gynecologist, and she got an injection. I decided to get one too, right there. But nobody explained to me that the first month you have to use some extra method, because the protection is not 100 percent the month you change. And one month later, I was

 12 These women are likely to use public or private health insurance to cover the cost of the IUD.

pregnant". Claudia is a 32-year-old cohabiter, who lives with her partner and her mom, at her mother's house also made a mistake, "of course, I was taking the pill, but I stopped, because we traveled, and I forgot to take my pills with me. Everything got out of schedule, so I stopped. I said, okay, I'm going to stop taking this box until I get my period back, and then I can start again, on schedule. But my period never came. I was waiting to get my period to start on the pill again".

The interviewees referred the shock they felt when they found out they were unexpectedly pregnant, often regretting the pain they would cause to their parents. Marcela, mentioned above, said "it was terrible when I discovered I was pregnant! I lived with my parents up to that point...It was hard, because my boyfriend and I had been dating just for three months. Almost no time! I was in shock. A thousand images came to my mind: college, my parents. I felt so anxious". Nicole, the 23-year-old visiting mother, describes her reaction after reading the positive result in her pregnancy test, "God, I cried. I thought, I'm an only child. My dad and mom had given me everything they possibly could. I was getting a degree, my dad works really hard to pay for my studies, and I got pregnant...I couldn't stop thinking about them...about the way they would feel, they have sacrificed so much for me to be a professional, to have what they didn't have. And I got pregnant before getting there, I thought it was going to be very sad for them". Daisy, a 19-year-old single mother who lives with her mother, her younger brother, and nonrelatives, plus her baby, says "I didn't want to be pregnant. It was terrible, in many ways. I was five months along when I knew for sure. Of course, up to that point I was in denial... I sat down, I had the test done, and it was positive...It was awful. Of course, I had to tell my mom...I thought she was going to kick me out of the house...that she was going to be mad at me. I was expecting she would tell me off, this and that. But she didn't say a word. But it was obvious she was disappointed. Extremely disappointed".

Neither Daisy, facing her mother's negative reaction and the end of the relationship with the baby's father, nor any of the other interviewees gave any indication that they thought about ending their unplanned pregnancies, which is consistent with the large proportion of women who never found abortion justifiable in the survey (86 percent). Daisy explains "I'm anti-abortion and that stuff. If you screw up, you have to put up with it...when I told my boyfriend he asked me 'What are you going to do?', like implying I was going to do something to the baby, and I said 'No, what, are you nuts? I'll have the baby'. You can't go around making babies and after...So no, it never crossed my mind".

Discussion

In this paper, we set out to question whether the rise of nonmarital childbearing and the increase in cohabitation in Chile were phenomena that could properly be interpreted as indicators the SDT. We used a relatively small postpartum survey of first-time mothers that permitted us to assess not only values and socioeconomic status, but also the reproductive context leading up to the pregnancy. Of course, with a cross-secitonal survey, we were unable to explore the recursive nature of the association between values and family structures (Surkyn and Ron Lesthaeghe 2004). However, the steep differentials we found in two of the dimensions we examined provided a surprisingly firm basis for some initial conclusions.

In the first place, there was a very strong gradient in the sociodemographic characteristics of women in different family arrangements at the time of their first birth. We found profound differences by age and socioeconomic status, with the former indicating that the postponement of childbirth that the SDT characteristically entails occurs principally among *married* women, and to a lesser extent, among cohabiters in nuclear households.

With respect to values, we did not find women in the nontraditional family arrangements, i.e. unmarried women, to be particularly liberal. Unmarried women showed a lower preference for marriage than married women when asked directly, but we believe such statements were mostly a way to justify their current marital status, rather than an indisputable declaration of principles. Moreover, most unmarried and single mothers were considering getting married to their partners, even though for many of them a wedding was not a goal they wanted to pursue in the short term. Often other priorities, associated with quite material needs, were more important for them.

When looking at values and attitudes beyond marriage, relatively conservative positions tended to dominate among women in all family arrangements. Even though more liberal views appear in some areas, for instance, in the acceptance of divorce and homosexuality, in other areas conservatism is clear, as indicated by the rejection of abortion or the large proportion of people who think it is better for children if their parents are married. Most importantly, besides the preference for marriage, there are not significant differences between unmarried and married women in terms of values and attitudes, making it hard to believe that women in nontraditional family arrangements are guiding their behavior by liberal values.

While values do not appear to be the main impetus for cohabitation and nonmarital childbearing, accidental pregnancies seem to have played a large role. We found that many of the nonmarital births we observed in Chile were unplanned, often resulting from contraceptive mishaps. Lesthaeghe (R. Lesthaeghe 2010) has stated that unplanned nonmarital fertility among single young women, usually caused by the lack of knowledge or the inappropriate use of contraceptives, is an indicator of an incomplete first demographic transition, and that only

planned nonmarital fertility among older cohabiting couples should be considered an indicator of the SDT.

Some of the elements we observe now in Chile may go away in the future. Hopefully, women may improve their use of contraceptives, and the proportion of unplanned births may subsequently decrease. Values may slowly change to, maybe going in the direction proposed by the SDT. But that does not change the fact that the demographic indicators of the SDT prevailed before the change in values, which probably mean that the demographic changes in Chile, and maybe in other countries of Latin America too, are part of a different fertility regime, which may have some, but not all the features of the SDT, and which is not moved by exactly the same engine.

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