

EFFECTS OF COHABITING LAW AND ALIMONY RIGHTS OVER FERTILITY IN THE BRAZILIAN NORTHEAST REGION

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RESUMO

Um dos aspectos mais importantes na determinação da fecundidade de um casal é a segurança que o casamento proporciona no caso de uma dissolução da união. Nesse artigo, apresentamos uma evidencia de que maiores níveis de segurança na relação levam a uma maior intenção declarada de fecundidade. Ao analisar o experimento natural proporcionado pela “Lei do concubinato”, identificamos um aumento do numero desejado de filhos pelas concubinas afetadas pela lei. Esse aumento é acompanhado por uma diminuição na probabilidade de uma concubina vir a se esterilizar. Nossos resultados continuam validos apos a vários testes de robustez.

ABSTRACT

One of the aspects of main importance for the determination of fertility is the insurance that marriage creates over a possible dissolution of the relationship. In this article, we present evidence that a greater level of insurance leads to a greater fertility. By analyzing the natural experiment given by the approval of the Cohabiting Law in December of 1994, we identify an increase on the intentions of pregnancy for poor women directly affected by the Law. This increase is accompanied from a reduction on the probability that cohabiting women make a sterilization surgery. Our results are valid under many robustness checks.

Palavras Chave : Demografia, casamentos, dissolucoes matrimoniais, estrutura familiar, fertilidade, planejamento familiar, criancas , jovens

Keywords: Demography, Marriage; Marital Dissolution; Family Structure, Fertility; Family Planning; Child Care; Children; Youth

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INTRODUCTION

“Why do people do marry outside their religion, race, age, or educational class(...)? These individuals do not appear to be ignorant of the risk. They have fewer children and in other ways act as they anticipate a higher probability of divorce.”

Gary Becker- A Treatise on the Family- 1981

One of the most important institutions in modern society is marriage. Like a health or car insurance, marriage can also be regarded as a contract. When spouses exchange alliances in the altar, making their vows, they are promising each other to take risks and pay damages. Each party is assuming that the risk that their love for their spouse dissolves, and accept to pay the legal punishments in case of divorce (Dnes, 2000).

The design of marital contract, like the right to ask for a divorce, the pension given to children and alimony transferred to the spouse can have profound influence over feminine offer of labor, its fertility rate or even over the intergenerational transmission of human capital of a society.

One of the aspects of main importance for the determination of fertility is the insurance that marriage creates over a possible dissolution the relationship. In this article, we present evidence that a greater level of insurance leads to a greater fertility. By analyzing the natural experiment given by the approval of the Cohabiting Law in December of 1994, we identify an increase on the intentions of pregnancy for women directly affected by the Law.

Without penalties for the dissolution of marriage vows, uncertainty about the future of the relationship would diminish the level of investment in marital specific capital, like care of each other, specialization on household tasks or health of children. (Becker, 1960 and 1981) Goldin and Katz (2006), for example, argue that pill diminished uncertainty about pregnancy, lowering the opportunity costs of a delay of marriage and investment on the career. Women investing on their career could send a better signal in marriage market, improving the quality of their matching

In United States, there is a long debate over the approval of the no-fault divorce laws occurred in the seventies. According to Rasul (2005), among the stock of couples at the moment of the approval of the law, divorce may increase. If only consensual divorce is allowed, the least favored partner has to make transfers to the other in order to make both accept the separation, which made divorce more difficult. By the other hand, future couples would be better matched, and the divorce would be stabilized in a lower path in the long run.

That reduction of divorce rates in the long run could favor children, once there is evidence that children of divorced parents have lower school performances than children from traditional families. According to the psychological theory, the lack of the presence of the father could generate a smaller socialization of children, as long as frequent quarrels may traumatize the children. (Ginther and Pollak, 2004). Other source of inefficiency of marriage is the lack of control of resources transferred to the custodial parent, once these transfers can be privately consumed by the recipient, which can be interpreted as a tax over the transfer. Being taxed on transfers they made to their children, parents diminish their transfers.

Empirical evidence on natural experiments changing the distribution of bargaining power within spouses is vast. (Chiappori, Fortin, Lacroix, (2002) ; Beegle ,Frankenberg and Thomas (2001) Dufflo(2000) Rangel (2003) Rasul (2002)Schultz (1990) Thomas (1990)). Although we cannot distinguish between a shift of bargaining power towards women and a insurance gain, we present a strong evidence that insurance is one of the channels increasing the desired number of children by cohabiting women.

For the empirical exercises, we use the DHS data, containing information about sexual behavior and pregnancy intention of northeastern Brazilian women in two waves: 1991 and 1996. The description of the institutional background surrounding the approval of the Law is the theme of next section.

INSTITUTIONAL ENVIRONMENT

The concept of marriage in Brazil has always been profoundly influenced by the Catholicism. For a long time, the model of Brazilian family was the one surrounding the person of the father, who had to be linked to his wife by the sacrament of matrimony. Any other alternative form of family arrangement was supposed to be against the moral and used to be severely condemned by society.

With the new Constitution of 1988, the first great step towards the extensions of the rights to cohabiting couples has been finally taken. It recognized, for purposes of protection by the state, the stable union as a family entity. It meant that a man and a woman with a long and stable relationship, notoriously recognized by others as informally married spouses¹, could be judged by family courts, as if they were legally married. The conversion of the stable union into marriage, however, was intended to be set posteriorly by a complementary law.

This situation changed completely at the end of 1994 with the approval by the Brazilian legislators of the Law 8971, filling the gap created by the Constitution in 1988. Popularly known as the “Cohabiting Law”, it stated that any women (men) cohabiting with an unmarried, divorced, legally separated or widowed partner with whom she (he) lives for **more than five years** or have a **common offspring** could ask for alimony in case of dissolution of the relationship. Furthermore, the complainant must prove **financial necessity and** the oral testimony of merchants or neighbors used to suffice to prove the duration of the relationship.

If the extension of property rights in 1988 has been dazzled by the countless other legal changes set by the new Constitution, it has not been the case in 1994. By that time, the discussion and approval of the “Cohabiting Law” in the national congress received wide media coverage. Several announcements made in national network of television and radio stations allowed a rapid dissemination of the knowledge about the Law throughout all the country, making its effects even more powerful.

In the poorest region of the country, with many cohabiting couples and a low rate of legal feminine labor participation rate, the effects of the law are expected to be strong.

Furthermore, the Law may have affected different groups in different ways. Some couples are not legally married just because they could not afford the expenses of the marriage, while others are cohabiting only to not bear the risks of future payments and property division rules prescribed by the civil marriage. But, more importantly, besides having affected some groups in different ways, the Law did not affect some groups at all, or affected them in much more subtle and indirect ways than others, allowing us to compare those groups in a natural experimental design.

DATA

Our empirical analysis relies on the 1991's and 1996's Brazilian "Demographic and Health Surveys (DHS)". The DHS are nationally -representative household surveys with large sample sizes, covering women from 15 to 54 years old, their children under 5 and a subsample of their husbands. Its is focused on the analysis of fertility, health and nutrition of women and children in developing countries and it benefits from the large experience acquired on the two predecessor research projects initiated by the United States Agency for International Development (USAID): The World Fertility Survey (WFS) and the Contraceptive Prevalence Surveys (CPS).

Since 1984, the DHS project has collected data on more than 150 surveys in nearly 70 developing countries. In Brazil, the 1991 survey covered only the Northeast region of the country. It contains data about 6064 households, with 6223 women, 1266 husbands and 3151 children under 5. On the other hand, the 1996 survey has a national coverage, and consists on data from 13283 households, 14579 women and 5045 children fewer than 5. In order to have a comparable data set between the two years, we drop out from the 1996 data all the regions other than the Northeast.

Table 1 displays the variables used throughout this paper. The most important variable, representing the preferences for fertility of the couple, is the ideal number of children. It corresponds to the answer of the following question: "*Suppose you could start your married life all over again and you could decide how many children to have for all your entire life. How many children would you want?*" Note that this variable corresponds to preferences, wishes, not purely expectations and that the desired number

¹ The concepts of stable union and cohabitation are very similar but not identical.

of children can change at any moment of life when uncertainties are resolved and the institutional environment in which agents play suddenly changes. Finally, we stress that all interviews were made by women, specifically trained to ask those personal questions, and that same variable is also used in the literature as a measure of desired number of children (See Rasul, 2002).

Besides dropping all the observations out of the northeast region in 1996, we also make two more drops. First of all, as long as we want to analyze the intention of fertility and family planning of northeastern Brazilian women, it does not make sense to compare women without sexual activity. So we drop all women not engaged in a stable relationship: those never 'married', divorced, legally separated and widowed. At last, we drop every woman married more than once. The reason is that neither database informs the duration of the present marriage, only the time passed since the first one. Hence, women in the second or third marriage could potentially misguide the selection of those eligible by the Law, once it is required more than 5 years with the present partner.

Table 2 shows some descriptive statistics of that final data. As we expected, cohabiting women are younger and less educated on average than married ones. We can point out two reasons for the smaller age of the cohabiting women. First of all, there is a cohort effect on these average statistics, since cohabitation was not well seen by the elderly, who used to marry with a greater probability than today. Moreover, cohabitation can be seen as a stage of trial or updating of information before marriage.

There is also a plausible explanation for the small average of years of schooling. Marriage is not free of expenses. Many people feel ashamed to marry without inviting friends and relatives, and offering them a party. Religious marriages also require a bridal dress, a men's suit, flowers and sometimes even the rent of the church. If it is not enough, there are little bureaucracy and some not so cheap taxes for making a simple civil marriage. Less educated and poorer couples are less prone to afford these expenses.

EMPIRICAL STRATEGY

The passage of the Cohabiting Law is our exogenous source of identification of the relationship between the level of insurance against the impoverishment caused by

separation and women fertility. Theory (Becker,1981) predicts that a greater level of insurance would correspond to higher levels of investments in fertility. Our main goal, therefore, is to estimate the average impact of the Law over the decisions of fertility for those women who are directly affected by it. The problem is that we cannot observe how a cohabiting women affected by the law would behave if the Law had not been set. However, as long as there are some group of women, (the married ones, for instance) for whom the Law is ineffective, we can compare the behavior of this group and use the differences in differences approach to estimate at this effect.

The idea behind the differences in differences method is to compare the difference between the outcome of the treatment and control group after the passage of the Law, with the same outcome before the passage. The identification hypothesis is that any other exogenous chock but the passage of the Law would have influenced both groups in the same way.

Treatment and Comparison Groups

The formal prerequisites necessities for the applicability of the Law were at least one of either: a) having more than five years of union with the present partner .b) Having a son with the present partner. Additionally, once filled these conditions, the complainant should necessarily c) demonstrate to have financial necessity in order to receive the alimony.

Therefore, we can classify each woman in our data according with the applicability of the Law. Those who observe both prerequisites (a) + (b), those who observe only one of these and those not subject to the cohabiting Law. Its classification is shown in the table below:

		Time of Union	
		Less than 5 years	More than 5 years
Comon	Offspring	A	B
	Without	C	D

These groups, of course, are not homogeneous. The effect of the Law over the decisions of family planning of each woman, hence, may differ from group to group. Cohabiting women in group B, for example, have become legally married with the passage of the cohabiting Law, but women from group C are affected by other ways,

once they don't get married automatically. In order to investigate those different effects we make four differences in differences (DID) exercises. The treatment groups are constructed from specific subgroups of cohabiting women and the control from the same subgroups of the legally married ones. The first type of exercises is made by contrasting cohabiting women with a common offspring with the present partner or who is living with him for than five years (Groups A+B+C) against legally married women with the same characteristics. The composition of treatment and control groups at each type of exercise is explained in table X.

	Treatment group			Control group	
Type 1	Cohabiting	A+B+D	x	Legally Married	A+B+D
Type 2	Cohabiting	A	x	Legally Married	A
Type 3	Cohabiting	B	x	Legally Married	B
Type 4	Cohabiting	C	x	Legally Married	C

We must note that it has been impossible to analyze the group D because of its small number of observations.

Exercises Type 1.

Type 1 comprises those who were directly affected by the Cohabiting Law. It mixture both those who are not legally married because couldn't afford the costs of marriage as those who are in a trial marriage. The distinction is important in the sense that, for the first, the law can have solved market inefficiency, like credit rationing, by lowering the price of marriage to zero. By the other hand, for the last, the law is increasing the price of the trial.

Exercises Type2.

Type 2 is composed by all those who have a child by have less than 5 years of union. Women in that group are younger than the rest. Besides not shown here, they are on average 23 years old. The vast majority of them have only one child and almost all have less than three children and roughly 84% of them had their children before having completed the first year of union.

Becker (1981) suggests that participants in the marriage markets have limited information about traits of their mates prior to marriage. As long as the best way to learn about someone else is being together for some time, the improvement of contraceptive

methods has made trial marriages especially attractive for the younger generations. According to Becker, there is evidence that divorce rates are highest early in marriage and decline steeply after the fourth or fifth year of marriage. Although some traits can be readily inferred from religion, education, appearance and family background, others can only be accessed after few years of marriage, like personality conflicts and sexual incompatibility.

If women from type 2 have less than five years of marriage, they may be more uncertain about their husbands and the continuation of the relationship. About a quarter of them still live with relatives. Probably, cohabiting women of this type are still updating their information about their partner.

Exercises Type 3

People attaining this type of exercise are much better informed about their partner than the previous ones. They have spent at least 5 years together. This means that for this a cohabiting woman from this group is engaged in a stable relationship, not in a trial marriage any more. Therefore, it is not reasonable to suppose that she is not legally married because of imperfect information. If roughly 28% of women of type 2 live with relatives, only 5% of women from type 3 are in the same situation. The average age for legally married women of this type is 35 and the average for the cohabiting ones is 32. If the probability of being legally marriage increases with age and the time of union, it is reasonable to ask why 12% of women of this type are not legally married, if they live *de facto* as a married couple. The answer is that cohabiting women of type3 are slightly poorer on average than married ones. Only 43% percent of them have refrigerator at home, against 55% from their legally married counterparts. Eleven percent of them are the head of their households and a bit more than 30% cannot read, against a rate of 4% and 24%, respectively, from the legally married ones.

At very poor households, food expenditure may constitute a huge share of per capita income. Although we cannot state that the share of food in the budget declines as income rises, as due to elasticity of substitution of quality of meal, (See Deaton, 1997, chapter 4) we can ascertain that the price of a office civil marriage in terms of opportunity costs of food is higher for poorer households. Furthermore, in a scenario of credit constraints, this effect is reinforced.

EMPIRICAL RESULTS

We estimate the average effect of the Cohabiting Law on the treatment by the differences in differences method

The first column of table 3 shows estimates of this model when cohabiting women from type1 constitute the treatment group and their legally married counterparts are the comparison group. No covariate is added in this stage. Cohabiting women increase slightly their desired number of children when compared with legally married ones, but the estimated coefficient is not statistically significant at 10%.

However, when we include their husbands' desire in the regression, the coefficient becomes significant at 5% for the rural area. The effect of Law, therefore, is an average increase of 0.77 children in the desire of a rural cohabiting woman, but this result must be more carefully interpreted. As we can see in the bottom of the table, cohabiting women desires less one child than a legally married one, and the time trend implies a common fall of this number. What happens, in reality, is a reduction of the gap between the two groups.

Columns 7 and 9 of Table 3 displays the effect of the Cohabiting Law after having controlled for their husbands' desire, individual and household socio-economic characteristics, fertility history, knowledge of contraceptive methods and presence in labor market. The estimated effect of the Law is an increase of roughly one child for each cohabiting women, specifically of 9.8 (significant at 1%), 8.9 (significant at 5%) and 1.0 (significant at 1%) child for types 1, 2 and 3, respectively.

Actually, what the law does is to equalize the desired number of children of cohabiting and legally married women. That was, in essence, the spirit surrounding the creation of the law, which was to transform stable unions into legal marriages. By decreasing the price of marriage to zero, the Cohabiting Law suddenly insured women against the risk of raising a child without enough money. Note that this equalization is also significant for the second type of regressions, but its coefficient is the lower between the three.

We stress that this variable corresponds to preferences. The question asks specifically for the desired number of children if the women could come back to past to decide the number of children she would have throughout all her life. Once the institutional environment in which she plays has changed, it is reasonable to think that her incentives to choose her ideal number of children would have changed accordingly.

If the desire has increased for the cohabiting women, it is reasonable to expect that they are going to change their contraceptive behavior. Consequently, they can diminish the use of contraceptives in order to get pregnant. To test this prediction, we regress an indicator of whether the woman has been sterilized by surgery on the same covariates shown before in a specification similar to the previous one.

The results of this regression are shown in table 4. The probability that a cohabiting woman had been sterilized in the past decreased in 16% for type 1, 8% for group 2 and 14% for type 3 in the rural area. Once cohabiting women now wants to have more children than in the past, they can postpone the moment of the surgery of sterilization until they reach the desired number of children. Meanwhile, non permanent contraceptive methods can be used, like pill, condom or abstinence of sex.

The design of the Law restricts the effects to the rural region. Remember that, in order to ask for the alimony, women have to prove financial necessity. Women employed in a formal job have no right to ask for the alimony. Hence, if rural area concentrates more feminine informal jobs than urban region or if the feminine participation in the labor market at country is smaller than in the city, it is reasonable that the effects of the cohabiting Law will be concentrated in the rural area. Moreover, the incidence of cohabiting unions that had not translated into formal marriages because of financial constrains might be bigger at rural area. As we have information about the presence of labor market of women in our data, we can test the hypothesis that the concentration of the effects of the Law in the rural area is due to women labor.

As we can see in table 5, if we decompose the interaction by a dummie that indicates whether women works at home or away, we see that the effect is present only when women works at home, even after having controlled for rural and urban area. The overall effect of the law is an increase of 9.3 desired child per women, significant at 1%.

No effect appear for women of type 2, and the effects for women of type 3 are much stronger: 1.4 child per women (significant at 1%) of type 3.

ROBUSTNESS CHECKS

Theory predicts that a change in the cost of marriage or the divorce payoff could affect the marriage markets, and lead to a change of composition of married and cohabiting groups (Drewianka, 2006). Divorce among cohabiting women should increase, as long as many women who were indifferent between separation and divorce now face divorce more attractive. Additionally, new couples could be better matched, and divorce rates would tend to fall in the long run, after some initial pick up.

The biggest problem arises from a possible change in composition driven by non observed variables. In that case, our estimates would be inconsistent. In order to circumvent this problem, we follow two approaches:

- a) Compare observable characteristics of the groups and test if there has been any change on them from 1991 to 1996.
- b) Estimate the compositional change by a multinomial logit model, drop out observations with high probability of changing marital status and run all the previous regressions again.
- c) Estimate the effects for groups not directly affected by the law

Comparisons of Distributions:

Although legally married and cohabiting women have different characteristics, these do not change systematically over the two years. Graphics 1 and 2 show the age and education profiles of each group in both years. The visual verification that distributions don't change between the two years is confirmed by T-tests of means and Kolmogorov-Smirnov tests of equality of distribution, witch points no change on distributions between years.²

Compositional Changes Estimation

We estimate the effect of the law over the decision of each marital status to choose by running a multinomial logit model of choice of marital status, which can be: Cohabitation, Legal Marriage or Divorce and compare women with more than 5 years of union and women with less than 5 years of union. Our treatment group, therefore, is composed by every woman with more than 5 years of union, and our comparison group is comprised of women with less than 5 years of union. We compare the difference of probability of attaining each marital status between the two groups before the Law with the same difference after its implementation

Table 6 presents the differences of differences effects of the cohabiting Law over the desire of cohabiting women when we drop observation with probability of changing marital state higher than 20%. The magnitudes of coefficients rise, which indicates works against our results. The cohabitants' change of desire for children cannot, thus, be attributed to a change in the composition.

We repeat the same procedure for women sterilization. Again, although coefficients have not increased, results are robust to changes in the composition of treatment and comparison groups. These results are displayed in the bottom of table 6

Other groups

Now we compare groups not directly affected by the cohabiting Law. It is reasonable to suppose that no effect should be encountered for them. Cohabiting women with less than 5 years of union and without a child with the present partner are not subject to the law. Hence, they should not change their ideal number of children. We thus run the same specification of differences in differences with cohabiting women of type 4 against legally married women from the same group. As table 7 shows, the law is ineffective for this group.

Finally, we compare cohabiting women with more than 7 and 8 years of marriage as treatment against cohabiting women with 5 or 6 years of union. If the Law affects equally the two groups, the coefficient of the interaction must be zero. As table 7 shows, no coefficient is statistically significantly different of zero, although the magnitude of the

² Table with the tests have been omitted by reason of space. They can be sent by e-mail request.

coefficient is not zero. Unfortunately, the small number of observations available weakens this test.

CONCLUSION

In the end of 1994, Brazilian congress approved the Cohabiting Law extending the right of alimony for separated spouses not legally married. The approval of the Law received a massive coverage of the media, and changed the desired number of children of cohabiting women. Having equalized the status of a stable cohabiting relationship to the status of a civil marriage, cohabiting women also equalized the ideal number of children to the one of legally married women. If before the Law they desired less one child than married women, now their desire is the same.

He link this equalization to the to the lack of insurance of the state of nature in witch a separated women lonely takes care of a child but receives no alimony. When the insurance guarantied to civil marriage has been extended to cohabitation, cohabiting couples passed to desire 1 more children.

This change can have enhanced efficiency on the choice of number of sons if couples were choosing cohabitation because of costs associated with bureaucracy and ceremony of a marriage. The groups of women for each the Law was effective shows that , indeed, this must have been the case.

The same effect, however, could have been caused by other channels. With the same natural experiment, Rangel (2005) argues that the Cohabiting Law has shifted the bargaining power within the household towards women. According to Rasul (2002), when bargains are subject to renegotiation and women have the majority custodial rights, strengthening their bargaining power can lead to an increase of fertility.

The difference between the bargaining and the insurance channel is very tenuous, and not mutually exclusive. Effects of a purely bargaining shift should not; however, increase the desire of both men and women in trial marriages if they accorded to not sign a contract of marriage. Presumably, both effects are brought about by the cohabiting Law. This paper enriches the literature of fertility by showing evidence that insurance against risk may also be an important element on the determination of fertility, especially when dealing with poor households. This result seems to be relevant for policy makers and can give support to the design of marital contracts legislation.

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APPENDIX

Table 1

LEFT HAND VARIABLES:	
Ideal number of Children-----	-----
Women Sterilization-----	----- (Yes/ no)
RIGHT HAND VARIABLES	
DESIRE CONTROLS	
Husband's desire as reported by women _____	(more, less or same number of children)
Wife's desire as reported by husband _____	(more, less or same number of children)
SÓCIO ECONOMIC CONTROLS	
Region of Residence _____	(Rural/ Urban)
Hás Radio _____	(Yes/No)
Hás TV _____	(Yes/No)
Hás Refrigerator _____	(Yes/No)
Knows how to read _____	(Yes/No)
Education in years of study _____	(Years)
Watches TV every week _____	(Yes/No)
Sex of head of household _____	(Male/Female)
Years of union _____	(Years)
Age _____	(Months)
Square of Age _____	(Months^2)
FERTILITY CONTROLS	
Number of sons Born alive _____	_____
Number of birth in the last 5 years _____	_____
Knowledge of contraceptive methods _____	(Yes/No)
Knowledge of ovulatory cycle _____	(Yes/No)
Pregnant during survey _____	(Yes/No)
Frequency of Intercourse _____	(Days)
Percentage of single women by distric _____	(%)

Table 2

Descriptive Statistics

	All 1,991 Women in data	Legally married		Cohabiting	
		Number of times married			
		More than 1	Once	More than 1	Once
Age	28,608 <i>0,127</i>	35,459 <i>0,581</i>	33,143 <i>0,171</i>	33,240 <i>0,505</i>	27,294 <i>0,435</i>
Urban Percentage	69,717 <i>0,006</i>	71,94% <i>0,032</i>	62,41% <i>0,010</i>	71,95% <i>0,029</i>	72,14% <i>0,025</i>
Years of Study	5,193 <i>0,054</i>	3,719 <i>0,284</i>	4,844 <i>0,087</i>	3,305 <i>0,218</i>	3,954 <i>0,193</i>
Children born	2,418 <i>0,039</i>	4,133 <i>0,200</i>	3,861 <i>0,063</i>	4,142 <i>0,182</i>	2,644 <i>0,141</i>
Ideal Number of Children	2,579 <i>0,023</i>	2,893 <i>0,174</i>	2,938 <i>0,040</i>	2,504 <i>0,141</i>	2,248 <i>0,097</i>
Number of Observations	6.116	200	2.626	260	334
1996					
Age	28,940 <i>0,144</i>	36,313 <i>0,824</i>	33,858 <i>0,199</i>	32,495 <i>0,476</i>	27,556 <i>0,348</i>
Urban Percentage	72,004 <i>0,007</i>	80,81% <i>0,040</i>	67,95% <i>0,011</i>	64,60% <i>0,028</i>	64,56% <i>0,021</i>
Years of Study	5,594 <i>0,057</i>	4,697 <i>0,432</i>	5,483 <i>0,098</i>	3,687 <i>0,210</i>	4,094 <i>0,142</i>
Children born	2,201 <i>0,038</i>	3,990 <i>0,280</i>	3,372 <i>0,063</i>	3,863 <i>0,154</i>	2,475 <i>0,100</i>
Ideal Number of Children	2,266 <i>0,024</i>	2,303 <i>0,262</i>	2,582 <i>0,043</i>	2,299 <i>0,120</i>	2,036 <i>0,072</i>
Number of Observations	4.694	100	1.796	295	527

Averages of each variable in bold. Standard Deviations in Italics

Table 3

Ideal Number of Children (Women)									
<i>Linear Probability Model -OLS</i>									
<i>Effects Decomposed by Rural and Urban Region</i>									
Treatment Group: Cohabiting Women of each type									
Control Group: Legally Married Women of each type									
	<i>Type 1</i>					<i>Type 2</i>		<i>Type 3</i>	
Urban Region Interaction	0.188 (0.232)	0.063 (0.682)	0.075 (0.648)	0.085 (0.610)	0.089 (0.592)	-0.040 (0.834)	-0.128 (0.541)	0.225 (0.305)	0.190 (0.470)
Rural Region Interaction	0.333 (0.432)	0.768** (0.018)	0.856** (0.012)	0.823** (0.013)	0.980*** (0.002)	0.713* (0.050)	0.895** (0.045)	0.262 (0.630)	1.051*** (0.006)
Year Dummie	-0.401*** (0.000)	-0.212** (0.032)	-0.254*** (0.007)	-0.237*** (0.010)	-0.248*** (0.007)	-0.271*** (0.004)	-0.229** (0.017)	-0.497*** (0.000)	-0.233** (0.026)
Urban Region Dummie	-0.490*** (0.000)	-0.635*** (0.000)	-0.538*** (0.000)	-0.546*** (0.000)	-0.547*** (0.000)	-0.244* (0.098)	-0.139 (0.422)	-0.719*** (0.000)	-0.641*** (0.000)
Rural Region Dummie	-0.219 (0.350)	-1.167*** (0.000)	-1.155*** (0.000)	-1.153*** (0.000)	-1.232*** (0.000)	-0.496 (0.105)	-0.742** (0.035)	-0.423 (0.131)	-1.312*** (0.000)
Desire Controls	No	Yes	Yes	Yes	Yes	No	Yes	No	Yes
Socio-Economic Controls	No	No	Yes	Yes	Yes	No	Yes	No	Yes
Fertility Controls	No	No	No	Yes	Yes	No	Yes	No	Yes
Labor Controls	No	No	No	No	Yes	No	Yes	No	Yes
Observations	4835	3385	3370	3370	3322	855	750	3875	2486
Adjusted R-squared	0.035	0.044	0.084	0.089	0.092	0.043	0.098	0.032	0.076

Robust P-Values in Parentheses
* Significant at 10%; ** Significant at 5%; *** Significant at 1%

NOTE 1: Interactions have not been statistically significant for type4
Desire Controls : Husband's Ideal Number of Children
Socio Economic Controls: Has Radio, Has Television ,Years of study, Knows how to read, Watches TV every week, Sex of Household Head , Years of Union, Age and Square of Age
Fertility Controls: Children born alive, Births in the last 5 years, Knowledge of Contraceptive Methods and Knowledge of Ovulatory Cycle
Labor Controls: Works or not
NOTE 2: We always control for the presence of the husband , other man, other woman or children at the moment of the interview.

Table 4

Women Sterilization								
Dummie indicating whether women is sterilized by surgery								
Treatment Group: Cohabiting Women of each type								
Control Group: Legally Married Women of each type								
<i>Linear probability Model -OLS</i>								
	<i>Type 1</i>				<i>Type 2</i>		<i>Type 3</i>	
<i>Interaction decomposition</i>	No	Region decomposition			No	Region	No	Region
Rural region Interaction		-0.209***	-0.191***	-0.165***		-0.078**		-0.140**
Urban Region interaction	-0.168*** (0.000)	-0.166*** (0.000)	-0.167*** (0.000)	-0.169*** (0.000)	757 0.155	(0.028) 0.013	-0.108*** (0.006)	(0.018) -0.091* (0.059)
Desire Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Socio-Economic Controls	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Fertility Controls	Yes	No	No	Yes	Yes	Yes	Yes	Yes
Labor Controls	Yes	No	No	Yes	Yes	Yes	Yes	Yes
Observações	3370	3385	3385	3370	757	757	2527	2527
R2 Ajustado	0.388	0.328	0.353	0.388	0.164	0.164	0.424	0.424

Robust P-values in Parentheses
* Significant at 10%; ** Significant at 5%; *** Significant at 1%

Desire control : Husbands desire for children
Socio economic Controls : Region of residence (Urban or Rural), radio, TV, education in single years, Literacy (can read:), watches tv every week, sex of household head, years since first marriage, age and square of age
Pregnancy Controls: Births in the last five years, knowledge of contraceptive methods, knowledge of ovulatory cycle, currently pregnant
Labor Control: Works or not
Note: We always control by the presence of other people in the moment of the interview

Table 5

Ideal Number of Children								
<i>Effects are decomposed to presence at home</i>								
Treatment Group: Cohabiting women-----Control Group: Legally married women								
<i>LinearProbability Model - OLS</i>								
	<i>Type 1</i>		<i>Type 2</i>		<i>Type 3</i>		<i>Type 4</i>	
Women works at home	0.629** (0.014)	0.930*** (0.004)	-0.443 (0.136)	-0.510 (0.108)	0.910*** (0.008)	1.401*** (0.000)	0.312 (0.351)	0.279 (0.406)
Women works away	0.147 (0.476)	0.113 (0.500)	0.242 (0.284)	0.214 (0.346)	-0.002 (0.995)	0.015 (0.954)	0.038 (0.885)	0.007 (0.980)
Desire controls	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Socio -economic controls	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Fertility controls	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Rural/ Urban controls	No	Yes	No	Yes	No	Yes	No	Yes
Labor controls	No	Yes	No	No	No	Yes	No	No
Observations	4764	3322	750	750	3813	2486	332	332
Adusted R-squared	0.029	0.092	0.083	0.089	0.025	0.078	0.180	0.184

Robusts p-values in parentheses
* Significant at 10%; ** Significant at 5%; *** Significant at 1%

Desire Controls : Husband's Ideal Number of Children
Socio Economic Controls: Has Radio, Has Television ,Years of study, Knows how to read, Watches TV every week,
Sex of Household Head , Years of Union, Age and Square of Age
Fertility Controls: Children born alive, Births in the last 5 years, Knowledge of Contraceptive Methods and of Ovulatory Cycle
Labor Controls: Works or not
NOTE 2: We always control for the presence of the husband , other men, other women or children at the interview

Table6

Robustness Check:						
Dropping observations with high probability of changing marital status						
Treatment Group: Cohabiting Women /// Control Group: Legally Married Women						
<i>Linear Probability Model- Ordinary Least Squares</i>						
<i>Difference of probability of being married</i>	<i>Type 1</i>		<i>Type 2</i>		<i>Type 3</i>	
	A	B	A	B	A	B
IDEAL NUMBER OF CHILDREN						
Urban Interaction	0.086 (0.605)	0.156 (0.573)	-0.097 (0.646)	0.346 (0.359)	0.183 (0.482)	0.123 (0.758)
Rural Interaction	0.984*** (0.002)	1.772*** (0.007)	0.864** (0.037)	0.943** (0.022)	1.042*** (0.007)	1.808** (0.010)
WOMEN STERILIZATION						
Urban Interaction	-0.165*** (0.001)	-0.108*** (0.007)	-0.078** (0.028)	-0.064* (0.085)	0.140** (0.018)	-0.095** (0.041)
Rural Interaction	-0.169*** (0.000)	-0.123*** (0.000)	0.013 (0.794)	0.013 (0.743)	-0.091* (0.059)	-0.088** (0.019)
Desire controls	Yes		yes		yes	
Socio economic controls	Yes		yes		yes	
Pregnancy controls	Yes		yes		yes	
Labor controls	Yes		yes		yes	
Observations	3679	2140	816	286	2761	1854
Adusted R-squared	0.080	0.100	0.087	0.162	0.065	0.083

Differences in probabilities are:
 A: -8 < Δ Prob (married) < +8
 B: -0.2 < Δ Prob (married) < 0.2

Note: Controls are the same as used before
P-Values in Parentheses * significant at 10% ** Significant at 5% *** Significant at 1%

Table 7

Robustness Check								
<i>Subsample</i>	Treatment: Not Legally Married Control: Legally Married				Treatment: Women with 7 or 8 Years of Union Control: Women with 5 or 6 Years of Union			
	<i>Group 4: Women with LESS than 5 years AND WITHOUT a Child</i>				<i>Group 5: Living Together between 5 and 8 years of Union</i>			
<i>Effects decomposition</i>	<i>No</i>	<i>No</i>	<i>Region</i>	<i>Region</i>	<i>No</i>	<i>No</i>	<i>Region</i>	<i>Region</i>
interaction	0.164 (0.484)	-0.003 (0.989)	-0.205 (0.707)	-0.205 (0.707)	-0.273 (0.574)	0.228 (0.736)	0.358 (0.661)	1.064 (0.261)
Urban interaction			0.380 (0.504)	0.380 (0.504)			-1.001 (0.212)	-1.325 (0.108)
Desire controls	No	Yes	No	Yes	No	Yes	No	Yes
Socio economic controls	No	Yes	No	Yes	No	Yes	No	Yes
Pregnancy controls	No	Yes	No	Yes	No	Yes	No	Yes
Observations	372	335	372	335	184	151	184	151
Adjusted R-squared	0.023	0.148	0.033	0.150	0.023	0.238	0.038	0.262

Robust p values in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%

Desire Controls : Husband's Ideal Number of Children

Socio Economic Controls: Has Radio, Has Television , Years of study, Knows how to read, Watches TV every week, Sex of Household Head , Years of Union, Age and Square of Age

Fertility Controls: Children born alive, Births in the last 5 years, Knowledge of Contraceptive Methods and Knowledge of Ovulatory Cycle

NOTE : We always control for the presence of the husband , other man, other woman or children at the moment of the interview.

Figures

