COUPLE DISAGREEMENT AND REPRODUCTIVE DECISION-MAKING RULES IN ITALY

Maria Rita Testa Laura Cavalli** and Alessandro Rosina****

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Abstract

Using couple data from a longitudinal study conducted in Italy between 2003 and 2007 we examined the effect of couple disagreement on childbearing behavior and compare the predictive power of couples' short-term childbearing intentions for partners who have concordant and discordant views. We tested four different decision rules that might be used by couples in disagreement to resolve their conflict: sphere of influence rule, power rule, golden mean rule and social drift rule. We started from the hypothesis advanced in an earlier study that women prevail in reproductive decision-making because childbearing lies mainly in their sphere of influence in Italy. We found that either both partners have equal power in negotiation about having a child or women tend to have a greater influence on the final decision, and moreover, their prevalence seems to be not strictly responsive to couple gender equality in terms of division of housework and child-care tasks and intra-family distribution of bargaining power. The disagreement is shifted more toward not having a child than toward having a child among couples at parity two or above who adopt a symmetrical veto power model but produces an intermediate childbearing outcome at lower parities which also depends on which of the partners has a stronger child intention among childless couples. Results suggest that the predictive power of short-term fertility intentions strongly improve both partners' view is considered in the fertility model and support the adoption of a couple approach in fertility research.

Keywords: fertility decision-making, reproductive behaviour, couple disagreement, childbearing intentions, child-timing intentions, child-number intentions, partner context

**Maria Rita Testa is researcher at the Vienna Institute of Demography of the Austrian Academy of Sciences*

***Laura Cavalli is researcher at the University of Verona*

****Alessandro Rosina is Professor at the Catholic University of Milan*

1.Introduction

In this paper we address the issue of fertility decision-making using couple longitudinal data spanning over a 4-year period (2003-2007). There is a widespread agreement about the importance of men in reproductive decision-making (Ryder 1973) and several authors have adopted a couple-oriented approach in their fertility research (Fried and Udry 1979; Coombs and Chang 1981; Morgan 1985; Thomson et al. 1990; Corijn et al. 1996; Thomson 1997; Thomson and Hoem 1998; Jansen and Liefbroer 2006; Miller and Pasta 1996; Miller et al. 2004; Becker 1996; Testa 2010 and 2012a). Most of the studies on fertility, however, continue to be primarily based on the female perspective. This choice is justified by the high degree of homogamy within the couple, and the fact that women are the main actors and the most reliable reporters of childbearing events.

A major difficulty in the couple-level research lies in the need to have high quality data that collect information on both partners, possibly in repeated waves, which allow researchers to ascertain the differences between partners' reproductive goals, and to identify the contribution of each partner to the final childbearing outcome. If this is true for every country, the lack of adequate data is an even greater problem in European countries, where longitudinal household surveys have only rarely been conducted in recent decades.

This study addresses the following research questions: 1) Which rules drive the resolution couple conflict about short-term fertility intentions? 2) Do couples with different gender divisions of housework and childcare duties follow different decision rules? 3) Does the intra-family bargaining power influence the couple's final decision? 4) What is the ultimate childbearing outcome of the couple's disagreement? 5) Is the childbearing postponement effect produced by the conflict more pronounced in couples who are uncertain about their short-term fertility intentions? 6) Does the predictive power of fertility intentions improve among partners who agree on having a child in the next short-term future?

The empirical analysis is based on a sample of 2304 couples from the "Family and Social Survey" conducted by the Italian National Institute of Statistics (Istat) in the period 2003-2007. Italy is a country in which the two-child norm is still predominant among women and men in reproductive ages but the actual fertility is below such a norm (Testa 2006 and 2012). The desired number of children in Italy is, on average, at two children per woman, but the cohort completed fertility rates for women born in 1960 was 1.4 children per woman. Moreover, the low gender equity system and the high incompatibility between childrearing and employment make it challenging for women to realize their reproductive wishes, suggesting that high educated and working women may face larger gaps between their desired and their actual family size than women who do not participate in the labour market (Cavalli 2010, Testa 2012b).

The rest of the paper is organised as follows: first, we review the existing literature on couple's fertility intentions and behaviour, next, we present data and methodology and then we describe the main statistical findings. In the final section we discuss alternative interpretations of the results as well as possible caveats inherent to the analysis.

2. Theoretical background

There are two major theoretical frameworks suitable for studying fertility decision-making: the Theory of Planned Behaviour (TPB) and the Theory of Traits-Desires-Intentions-Behaviour (TDIB), both are reviewed with the aim to examine how they take into account the dyadic aspect of reproduction.

The Theory of Planned Behaviour (Ajzen 1991) has been applied in the domain of fertility decision-making (Billari et al. 2009). It studies intentions as an immediate forerunner of the corresponding behaviour, and views intentions as being formulated under the immediate influence of three groups of factors: (a) personal positive and negative attitudes towards the behaviour, i.e., having a child; (b) subjective norms, i.e., perceived social pressure to engage or not to engage in the behaviour; and (c) perceived behavioural control, i.e., ability to perform the behaviour which may depend, for example, on the availability of housing, income, or other resources. The partner's intentions are not explicitly considered in the theory, but it may be implicitly assumed that the perception of a disagreement with the partner may influence an individual's normative beliefs. An individual who wants to have a(nother) child, and perceives that his/her partner does not share this wish, is likely to form the belief that the partner does not want her/him to have a(nother) child. This perception may clearly influence the respondent's own fertility intentions. In a recent conference on reproductive decision-making, Ajzen clarified that the close link between intentions and subsequent behaviour holds true only if the behaviour is specified in all of its four components: namely, the target, the action, the context and the time (Ajzen 2010). In the field of fertility, the target is a child, the action is giving birth, the context is the current partner, and the time could be a short-term horizon, which may make the intentions more realistic. Consistent empirical evidence has been collected on the crucial importance of the partner's context for the construction of pregnancy intentions (Barret and Wellings 2002; Zabin et al. 2000). Although it can be adapted to incorporate the partner's dimension, the Theory of Planned Behaviour does not explicitly consider the complexity of the dyadic nature of reproduction (Philipov 2011) nor does it describe the disagreement effects of couple's decisional conflicts (Miller 2011a; Miller and Pasta 1996).

Unlike the TPB theory, the traits-desires-intentions-behaviour theory (Miller 1986 and 1994) explicitly considers the dyadic nature of reproduction (Miller and Pasta 1996; Miller et al. 2004). This theoretical framework sees the behaviour that determines whether or not a pregnancy occurs as the last step of a motivational sequence which encompasses four major stages. The first one refers to motivational traits, or the dispositions to feel, think, and behave in certain ways with respect to fertility; the second stage concerns the desires, emotional feelings or conscious wishes which do not lead directly to action; the third stage refers to intentions, desires constrained by reality, psychological states that represent conscious commitment to act in a certain way or to achieve a certain goal at some future time. Eventually, the reproductive behaviour is aimed at achieving (proceptive) or avoiding (contraceptive) a pregnancy. According to the TDIB intentions are assumed to incorporate the perception of desires of significant others, above all the partner, as well as other situational factors that may prevent individuals from simply doing what they want. In the couple-based version of the theory, the interaction between partners is examined at each stage of the sequence (Miller et al.2004).

Miller and Pasta (1996) have disentangled two main components of the disagreement between the partners, each of them differently influences the individual's decision-making. The signed difference or

influence effect that depends on which member of the couple has more or less influence on the behaviour; and the absolute difference or conflict effect that is independent from the desires of the male or the female partner. The conflict effects produces a delay in fertility decision-making due to inertia, which tends to favour the partner who does not want to have a child in a context in which using contraception between births is standard practice (Davidson and Beach 1981; Beach et al. 1982). The influence effect may also produce a delay in fertility if a symmetric veto power model is working within the couple (Thomson 1997; Thomson and Hoem 1998; Voas 2003) which also requires a concordant view of both partners before the action is taken (in this case a proceptive behaviour).

2.1 Decision rules

One important criterion in the resolution of conflict is given by the predominant decision rule at the stake in the couple. We will overview four different decision rules which are supposed to resolve couple conflict.

If the two partners differ in their child-number or child-timing intentions they try to reach a decision which could be mid-way between the preferences of either of the two (Thomson 1997; Thomson and Hoem 1998; Thomson et al. 1990; Jansen and Liefbroer 2006). The corresponding decision rule is called the golden-mean rule: partners view each other's intentions as equally important and since they have equal power in negotiation they will try to strike an acceptable compromise which then equally reflects their initial desires. Jansen and Liefbroer (2006) found that this is the most frequent heuristics approach used by couples in the Netherlands. They also discussed other possible decision rules which could be adopted by couples with disparate attitudes towards childbearing. The first one is the power rule according to which the partner who has the better access to socio-economic resources will prevail. As long as men have higher occupational and income levels than women they will predominate in the couple's negotiation process. The male prevalence is also envisaged under the 'patriarchal' rule. A second heuristic is the sphere-of-interest rule, according to which the partner in whose sphere of interest a decision is located will have greater influence over subsequent behaviour. As long as childbearing tends to lie in the female sphere of interest women will be more influential in the couple's fertility decision-making. A third heuristic is the social-drift rule, according to which the maintenance of the status quo will prevail by favouring the partner who does not want to have children if contraception between births is routine. Neal and Groat (1980) demonstrated that women who perceive their broader environment as being unpredictable develop a life style characterised by social drift and they respond to events like pregnancy as they happen rather than deliberately causing them to happen through an effort of their own. Jansen and Liefbroer (2006) argued that in the Netherlands such a rule controls couples' reproductive choices if neither of the partners has a clear intent to impose her/his own point of view to the other.

In Italy, the literature on the negotiation process of fertility choices within couples is scarce. Recent analysis on the determinants of couple disagreement about childbearing intentions suggests that women in more egalitarian relationships, i.e. those who cohabit and those who work on the labour market, are more likely to express their disagreement if their partner wants a first or a second child (Rosina and Testa 2009; Cavalli 2010).

3. Research hypotheses

In the traditional Italian society with low gender equity at the individual and societal level, women carry the main responsibility of child care and childrearing activities and therefore couples and the whole society may view decisions on childbearing as fair if the woman's view predominates. We advanced a first working hypothesis as follows: *Women have more influence on childbearing behaviour if there is a conflict with their partners about having a(nother) child in the the next three years* (**Hypothesis 1**, sphere of influence rule).

The exception to this rule is expected for couples in which partners equally share the responsabilities linked to housework and childcare duties. Hence, we suppose that: *partners have the same degree of influence on childbearing decisions if the partners equally share the responsabilities related to housework and childcare duties* (**Hypothesis 2**, gender equality effect will favor the adoption of the golden mean decision rule).

In Italy, as in all the other contemporary societies, the intra-household distribution of bargaining power has become an important factor driving the fertility decisions of spouses with different interests (Jansen and Liefbroer 2006). Hence, we express our third research hypotheis as follows: *partners equally influence childbearing decisions if they share the same level of bargaining power* (**Hypotesis 3**, equal bargaining power effect will favor the adoption of the golden mean decision rule).

In alternative to the sphere of inluence rule we could expect that the partner who has more access to socio-economic resources drives the negotiation process in the event of a conflict. This may be true especially at high parities at which the choice of having an additional child may be particularly linked to the monetary costs (Becker 1981, De Santis 2004). Consistently, we formulated our fourth research hypotheisis as follows: *men will have more power than women in childbearing decisions if the male breadwinner model is adopted by the couple* (**Hypothesis 4**, power decision rule).

Italy is characterised by low financial support to families with children and a lack of adequate policy measures that facilitate the conciliation between work and family life (such as parental leave, child care provision and the access to part-time employment). In such a context childbearing is seen as a potential threat for the achieved standard of living and the lack of agreement between partners may favour the one who does not want to have a child, given that having a baby has immediate and permanent implications for individuals (Rindfuss et al. 1988). We advanced our fifth research hypothesis as follows: *partners who disagree about wanting a(nother) child in the next three years are more likely not have a child than to have a child in the subsequent 3-year period.* (**Hypothesis 5**, veto power effect).

In Italy, as in all the other modern societies, contraception between births is the prevalent regime and a birth of a child requires a change in the standard behaviour of couples, and automaticly favours the partner who plans not to have a child due to the inertia mechanism (Davidson and Beach 1981). Note that veto power and inertia work via different mechanisms but produce similar inhibiting effects on childbearing in contexts caharacterised by an almost universal contraception among couples. Here we suppose that inertia is particularly pronounced if there is uncertainty in childbearing intentions and advance our sixth working hypothesis as follows: *partners who disagree about having a(nother) child in the short-term future but do not have a strong intention (probably yes or not answers) are more prone to postpone childbearing than couples in which one of the partners expresses a certain intention (i.e., definitely yes or not answers)* (**Hypothesis 6,** social drift decision rule).

4. Data and sample

We used data from the Multipurpose Household Survey on "Family and Social Subjects", carried out by the Italian National Institute of Statistics(Istat) between 2003 and 2007. The survey unit here is the household, so that information on the both members of the couple is available. The follow-up wave includes 10,000 individuals who were randomly drawn from the initial sample of 50,000 respondents interviewed at the initial wave. A comparative analysis between all the couples interviewed in 2003 and those followed up in 2007 did not evidence any significant difference in the distribution of some demographic variables such as: female partner's age, couple's parity, marital status, education and employment status of the man and the woman, and the couple disagreement. The share of couple disagreement is the same in the 2003 sample and the 2007 follow-up.

The survey was addressed to people aged 18-64 years but questions on fertility intentions were asked only to respondents 18-49 years old. Within this age group, we selected only men and women living in a union at the time of the initial wave, independently on whether they were married or cohabiting. We further restricted the analytic sample to couples in which both partners provided answers to the fertility intentions questions at the initial survey (we registered 4% of non responses) and at least one of the two provided information about births, adoptions and marital disruption that occurred between the two waves (2003-2007). If only one of the partners was followed up (this circumstance affected 60% of the couples interviewed in 2003), we checked for the possibility that she/he experienced a partnership disruption in the inter-survey period. This was the case for 1% of the respondents re-interviewed in 2007 without their partner. These cases are taken out from the analysis because if a birth occurred in the inter-survey period we could not figure out whether this happened in the framework of the old or a new relationship. Eventually, our analytic sample includes 2304 couples for whom we could compare the fertility intentions as reported at the first wave with the subsequent reproductive behaviour as measured at the second wave.

5. Measures of short-term intentions, couple disagreement and childbearing

People interviewed in 2003 had been required to indicate their short-term fertility intentions by answering to the following item: *Do you intend to have a child in the next three years?* The response options were: *definitely not, probably not, probably yes, definitely yes*.

People re-interviewed in 2007 were asked whether they had a child in the inter-survey period, either their own biological children, affiliated and/or adopted ones. The survey questions were: "*From November 2003 up to now have you had any child?*" and "*From November 2003 up to now have you adopted a child or have you had an affiliated child?*" Information on the number of children had and the precise date of each birth as well as on the sex of each newborn were also asked in the questionnaire.

Exactly the same questions were addressed to both partners allowing a fully comparative analysis between them. Moreover, all the fertility intentions items were included into the self-administered questionnaires. This circumstance ensures a high degree of independence between the answers of the partners in comparison to other surveys in which both partners may be present at the interview (as for instance in the case of the British Household Panel Survey, see Berrington 2004). We did not find any systematic difference in the responses given by the male and female partners, both men and women used the given response options in the same way to express the strength of their childbearing plans.

Additional questions on fertility intentions were asked in 2003, *"In the future do you intend to have any child?"* and *"How many children would you like to have over your life course?"* Women and men re-interviewed in 2007 were asked again the all set of fertility intentions questions: "*Do you intend to have*

a(nother) child in the next three years?", "*In the future do you intend to have a(nother) child?*", and "*"How many children would you like to have over your life course?"*.

We defined couple disagreement as partners' responses going in opposite directions, i.e. to have a child versus not to have a child in the next three years, independently on whether definitely or probably (**Scheme 1**). Alternatively, we defined couple disagreement as a discrepancy between partners reported levels of certainty about having or not having a(nother) child in the next three years. In this latter case disagreement encompasses also the contrasts between definitely yes and probably yes; and probably not and definitely not (**Scheme 2**). The results of this analysis are reported in section 7.3 and more details may be provided by the authors upon request.

Scheme 1 Definition of couple disagreement as discrepancy between yes and no answers

<table>
<tr><td>Man
Woman</td><td>Definitely no</td><td>Probably no</td><td>Probably yes</td><td>Certainly yes</td></tr>
<tr><td>Definitely no</td><td colspan="2" rowspan="2">Both no</td><td colspan="2" rowspan="2">M yes, W no</td></tr>
<tr><td>Probably no</td></tr>
<tr><td>Probably yes</td><td colspan="2" rowspan="2">M no, W yes</td><td colspan="2" rowspan="2">Both yes</td></tr>
<tr><td>Certainly yes</td></tr>
</table>

Scheme 2 Definition of disagreement as any discrepancy between partners' answers

<table>
<tr><td>Man
Woman</td><td>Definitely no</td><td>Probably no</td><td>Probably yes</td><td>Certainly yes</td></tr>
<tr><td>Definitely no</td><td>Both no</td><td colspan="3">M wants more than W</td></tr>
<tr><td>Probably no</td><td rowspan="3" colspan="2"></td><td>Both no</td><td rowspan="2"></td></tr>
<tr><td>Probably yes</td><td>Both yes</td></tr>
<tr><td>Certainly yes</td><td colspan="2">M wants less than W</td><td>Both yes</td></tr>
</table>

6. Models

We estimated logistic regression models with a response variable equal to one if couple had at least one child in the inter-survey period, and 0 otherwise. We did not distinguish between those who reported to have had only one child and those who had two or more children because too few cases of couples with more than one birth were observed in the inter-survey period. We tested each of our research hypotheses formulated above by comparing nested models with the the goodness of fit criterion.

All of the models are stratified by parity, which is defined as the number of children born in the current union. Accordingly, separate models are run on childless couples, couples with only one child and parents with two or more children. This method choice is based on the assumption that the predictors of childbearing intentions are different in the two selected groups, which is in line with a conditional-sequential fertility decision-making process (Namboodiri 1972; Bulatao 1981). We test the assumption, in the context of the test about normatively appropriate desires for one, two, or more children.

6.1. Explanatory variables

The key covariate of the model is related to the combined partners' intentions to have a(nother) child in the next three years. According to the definition describe in the scheme 1, agreement consists of partners giving the same answer, either positive or negative but irrespective of whether probably or certainly to the fertility intention's item. We computed the following four-categorical variable: 'Both partners do not want', 'Man wants, woman does not want', 'Man does not want, woman wants', 'Both partners want'. For the sake of simplicity, in the empirical analysis we labeled the above mentioned categories as follows: 'Both no', 'M yes, W no', 'M no, W yes'; 'Both yes'.

The explanatory variables included in the models are: the type of union, the man's and the woman's education, the man's and the woman's employment status, the man's and the woman's age, the man's and the woman's mass attendance, the difference in the levels of education between the partners, the women' satisfaction about their partner involvement in childcare duties, partner's bargaining power, and the geographical area of residence. The percentage distribution of the variables used in the multivariate analysis is reported in **Table 1**.

We measured men's involvement in childcare tasks with a dummy variable equal to one if women report that they are very satisfied about their partner's involvement in housework and family duties; and zero otherwise. The question item is worded as follows: "*How satisfied are you about the division of housework and family duties between you and your partner?*" The question was asked only to women. The response options were 'very satisfied', 'quite satisfied' 'not satisfied' 'not at all satisfied'. We distinguished between those very satisfied and the remaining interviewed people because the option 'very satisfied' was discriminating better them than the group of 'quite satisfied' (79% responded that they were quite satisfied).

We measured the intra-household distribution of bargaining power with the difference in education levels between partners (Lundberg and Pollak 1996). The variable has three categories: the man is better educated than the woman, the man and the woman have the same levels of education, and the woman is better educated than the man. One of the two partners is considered to be better educated if the achieved level of education is higher than that of the partner's, regardless of the size of the gap between the two education levels. A refinement of the variable that takes the size of this gap into account has not been introduced because the sample sizes are too small. We also tried a different proxy variable: the woman's perception on which of the partners has more decision power on children education (the item is worder as follows: "who of the partners has more power in the decidion-making of the follwing aspects? " Response options were: "more he", "more she" "she and he in an equal way" "it is not relevant"). We could not find any significant difference in the results by using this alternative variable. For this reason we only show results in which bargaining power is measured by the difference in the level of education between the partners.

Table 1 Distribution of the variable used in the analysis. Figures in percentage

	Childless Couples	Couples with one child	Couples with more than 2 children
Both yes	70	36	4
M yes, W no	4	6	3
M no, W yes	5	4	2
Both no	21	54	91
Geographical area of residence			
Nord	56	57	42
Center	17	18	18
South_Islands	26	24	41
Level of education			
Female partner			
Low (Isced 0 - 2)	24	31	42
Medium (Isced 3 - 4)	55	55	47
High (Isced 5 - 6)	21	14	11
Male partner			
Low (Isced 0 - 2)	38	42	45
Medium (Isced 3 - 4)	45	45	44
High (Isced 5 - 6)	16	14	11
Partnership Status			
Married	89	96	99
Cohabiting	11	4	1
Attendance of religious service			
She attends	46	55	68
She does not attend	54	45	32
He attends	36	42	50
He does not attend	64	58	50
Employment status			
Female partner			
Employed	77	67	58
Unemployed	17	22	35
School enrollment	5	11	7
Male partner			
Employed	97	98	97
Unemployed	2	1	2
School enrollment	1	1	1
Gender equlity			
Satisfaction with division of tasks	74	66	71
Unsatisfaction with division of tasks	26	34	29
Bargaining power			
Partners with same educational level	56	58	61
Partners with different educational level	44	42	39
N	**287**	**655**	**1362**

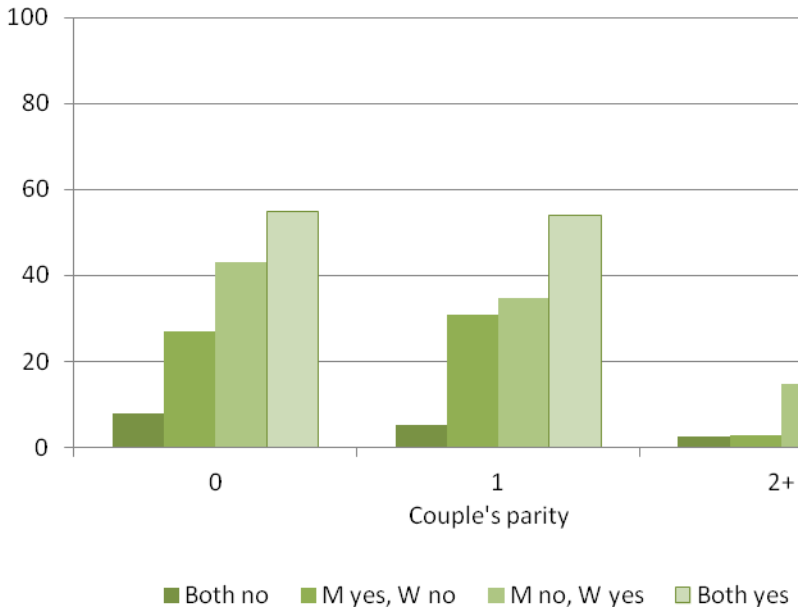
7. Results

7.1 Descriptive analysis

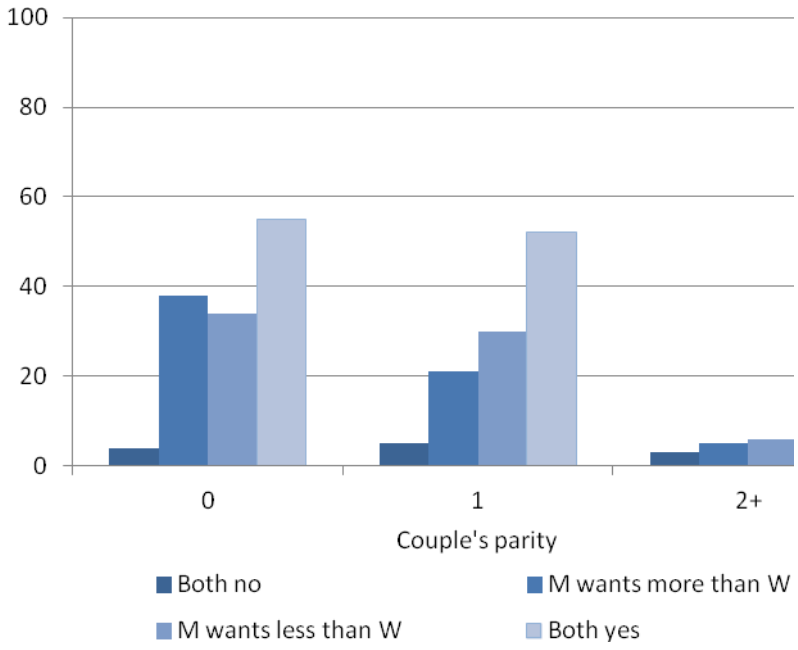
In **Figure 1**, we show the percentages of couples having a child between 2003 and 2007 by partners' intentions as reported three years before, in 2003, and separately for childless couples, couples with only one child, and couples with two or more children. At parity zero the share of couples who had a child between the two waves gradually increases from 8% if the partners agreed on not having a child three years before, to 55%, if the partners agreed on having a child three years before; with the disagreeing couples taking an intermediate position: 27% and 43% if only he or only she, respectively, wanted a child. Interstingly, couples in which only he wanted a(nother) child are closer in terms of share of births to those agreeing on not having a child than to those agreeing on having a child while couples in which only she wanted a(nother) child are closer to agreement on yes than to agreement on no. At parity one, the percentage of couples having a child between 2003 and 2007 goes from 5% if partners agreed on not having a child three years before, to 54% if partners agreed on having a child three years before. 31% of the disagreeing couples had a child if he only wanted and 34% of the disagreeing couples had a child if she only wanted. Unlike childless couples, the share of childbearing is quite similar in the two signed categories in which only she or only he wanted a child. At parity two or above, 3% of couples had a child if partners agreed on not having a child or only he wanted a child three years before, 49% had a child if partners agreed on having a child and 15% of couples had a child if she only wanted a child (**Figure 1**). As seen for childless couples, the disagreement effect is signed, i.e., the chidlbearing outcome depends on whether only he or only she wanted, here, however, differently from childless disagreement is shifted more toward not having a child than toward having a child.

Figure 1 Share of couples having a child between 2003 and 2007 by partners' intentions to have a(nother) child in the next three years and couple's parity as measured in 2003.

a) Disagreement defined as partners' answers going in opposite directions



b) Disagreeement defined as any dicrepancy between partners' answers.



Selecting only those who had a child in the inter-survey period we found that inertia generated by couple disagreement produces a postponement effect (**Table 2**): couples who had a child between the two waves

but were initially in disagreement had, on average, their child later than couples who were in agreement about having a(nother) child at the initial wave. This result is to be considered with some caution because it could be based only on those answers provided by couples in which both partners were re-interviewed in 2007 and is missing for those couples in which only one of the partners was re-interviewed (30%).

Table 2 Births occurred between 2003 and 2007 by year and combined partners' intentions to have a child in the next three years as reported in 2003

Year of birth of a child	Partners' combined intentions to have a child in the next three years		
	Both yes	M yes, W no	M no, W yes
2004	58	7	37
2005	24	60	50
2006	38	33	13
N.cases	265	15	16
	Both yes	M more than W	M less than W
2004	61	26	46
2005	22	47	35
2006	17	27	19
N.cases	173	34	37

7.2 Testing the research hypotheses

Sphere of influence rule. To test the **first** research hypothesis (women's predominance in childbearing decision) we compared the fit of a model in which the categories only she and only he wants a(nother) child are considered separately with a model in which they are collapsed together in one single category. As can be seen in **Table 3** at parity one the latter model fitted the data better than the former suggesting that the effect of disagreement does not depend on whether only the woman or the man wants to have a child. This result suggests that the disagreement has not a signed effect for these couples, but both partners have equal power in childbearing decisions. By contrast, for couples at parity zero and two or above we found that the effect of disagreement is signed and, more specifically, women are more influential than men. Unlike the disagreement in which 'man yes, women no', the variable 'man no, women yes' increases the likelihood of having a child as compared to the case in which 'both partners do not want'. Furthermore, the empirical evidence suggests that the chance of having a child between the two waves does not significantly changes if both partners or only the woman do not want to have a(nother) child (which would imply that only women do have a veto power on childbearing). We tested this latter hypothesis with the goodness-of-fit criterion and we indeed find that the models in which the categories 'man wants, woman does not' and 'both partners do not want' are collapsed in one category fitted the data better than the models in which only 'Man wants, woman does not' is kept separated from 'both partners do not want' (results may be provided upon request). This result reveals that childless women as well as women who have (at least) two children have more influence on childbearing decisions than men if a disagreement about whether having a first or a third or higher birth order child rises within the couple.

Table 3 Testing the women's prevalence in fertility decisions. Beta coefficients from the logistic regression model on having a child between 2003 and 2007

	Childless		One child		Two or more children	
Model I						
Both yes	2.13	***	2.16	***	3.27	***
Disagreement	1.4	**	1.22	***	0.78	
Both no (ref.)	0.00		0.00		0.00	
Constant	-4.17		-0.08		-4.22	**
Log-likelihood	-145.90		-238.91		-183.79	
AIC- BIC	331.73	404.92	517.79	607.48	405.48	509.82
Model II						
Both yes	2.13	***	2.16	***	3.28	***
M yes, W no	1.25		1.17	***	-0.27	
M no, W yes	1.50	**	1.29	**	1.35	**
Both no (ref.)	0.00		0.00		0.00	
Constant	-4.12		-0.07		-4.26	
Log-likelihood	-145.86		-238.89		-182.74	
No. of cases	287		655		1362	
AIC- BIC	329.80	399.33	515.83	601.04	405.59	504.70

* p<0.05; ** p<0.01; *** p<0.001. Models controlled for all the background variables shown in Table 5.

We expected that the woman's prevalence in childbearing decisions is turned out in gender equality in gender egalitarian relationships where men and women are equally involved in housework and childbearing tasks. To test this second research hypothesis, we compared two different models: one in which an interaction effect between disagreement and woman' satisfaction about partner's involvement in housework and/or childcare duties is included and one in which such an interaction is left out. The empirical evidence is in favour of the latter model, suggesting that net of other covariates included in the model, couples with a more gender egalitarian division of housework and childbearing tasks are not necessarily more egalitarian in childbearing decisions than couples in which the internal distribution of housework and childcare tasks is gendered. Given that the interaction was not statistically significant, we did not keep it in the final model shown in Table 5.

We expected that the woman's prevalence in childbearing decisions is turned out in gender equality in relationships where men and women have equal bargaining power. To test this third research hypothesis, we compared two different models: one in which an interaction effect between disagreement and the equal level of education between men and women (proxy for equal bargaining power) is included and one in which such an interaction is left out. The empirical evidence is in favour of the latter model, suggesting that couples in which partners have the same power in decision-making are not necessarily more egalitarian in terms of childbearing decisions than couples in which the distribution of bargaining power is gendered. Given that the interaction was not statistically significant, we did not keep it in the final model shown in Table 5.

We expected that the woman's prevalence in childbearing decisions is turned out into a man's prevalence if the male breadwinner model is adopted in the couple. To test this fourth research hypothesis, we compared the fit of a model in which an interaction variable between disagreement and the dichotomous variable for the presence of a male breadwinner model is included with a model in which the mentioned above interaction is left out (The variable denoting the presence of a male breadwinner model is a dummy indicating whether only he or both partners participate in the labour market). The latter model fitted the data better than the former,

hence, we can conclude that the man's influence on childbearing decisions does not increase in couples where the man has more access to economic resources (results not shown but available upon request).

We expected that the disagreement shifts the couples more toward agreement on not having a child than toward agreement on having a child. To test this fifth research hypothesis, we compared the fit of a model with a linear specification of both partners' intentions in which disagreement had a score midway between agreement on yes and agreement on no with that of a model in which a categorical variable (N-1 dummies) reflects the possible combinations of partners' short-term childbearing intentions. The linear variable for the partners' intentions takes the value 0 for agreement on no, 1 for disagreement and 2 for agreement on yes in the models for couples with one child in which no signed effect agreement was detected. For couples at parity zero and two or above a different model that allows the two forms of disagreement to differ in their effects, but maintains a 'linear' character has been tested: 0=agreement on no, 1=man wants, women does not want, 2=woman wants, man does not want; 3=agreement on yes (**Table 4**). Given that the models with linear specification of partners' combined intentions fitted the data better than the models with the categorical variables one could assume that the three or four categories that reflect the partners' intentions are not only ordinal but also equidistant. This seems to support the hypothesis that disagreement produces a middle childbearing outcome between that of agreement on yes and that of agreement on no. This effect is symmetrical for couples at parity one – it doesn't matter whether only the woman or only the man wants a child - while it is unbalanced toward a woman's greater influence among childless couples and couples with two or more children: couples in which woman only wants are closer to yes than couples in which man only wants.

Table 4 Testing the linear effect of disagreement. Beta coefficients from the logistic regression model on having a child between 2003 and 2007

	Childless		One child		Two or more children	
Model I						
Linear specification of both partners' intentions	1.00	***	1.07	***	1.59	***
Constant	-3.98	***	0.22		-4.47**	
Log-likelihood	-146.08		-239.00		-185.26	
AIC- BIC	328.17	394.04	514.00	594.72	406.52	500.42
Model II						
Both yes	2.13	***	2.16	***	3.28	***
M yes, W no	1.25		1.17	***	-0.02	
M no, W yes	1.50	**	1.29	***	1.35	**
Both no (ref.)	0.00		0.00		0.00	
Constant	-4.09	***	0.15		-4.56	**
Log-likelihood	-145.86		-238.89		-182.74	
No. of cases	287		655		1362	
AIC- BIC	331.74	404.92	517.79	607.48	405.48	509.82

* p<0.05; ** p<0.01; *** p<0.001. Models controlled for all the background variables shown in Table 5.

We expected that the postponement effect of couple disagreement is more pronounced if the discrepancy in the responses is between probably wanting and probably not wanting a child than if it were between probably (yes or no) and certainly (yes or no) answers. To test this sixth research hypothesis, we compared the fit of a model in which the disagreement is disentangled between weak and strong contrast with that of a model in which the two types of disagreement mentioned above are collapsed in one single category.

Only in the case of childless couples we found that the former model fitted the data better than the latter, suggesting a differential effect of weak and strong disagreement on first childbearing. Unlike our hypothesis, strong disagreement has stronger inhibiting effects on childbearing than weak disagreement (results available upon request).

In table 5 we reported the estimates of all variables included in the model. A part from the recorded effect of kind of couple's agreement (already commented above), as we can see, the impact of the considered demographic variables change with the considered parity. In particular, among the childless couple those in which the woman has a high level of educational attainment and those in which the female is employed in the labour market are more likely to realize the fertility plan, while an opposite effect is found when the couple is in cohabitation. Different are the effects recorded for couples that already have one child: in this case both male's and female's age play a role and in particular couples where both members are relatively young are less likely to have experienced another childbearing in the intra-period. Of relevance is -at parity one- man's working status: if the man is in education the probability of recording a childbirth is negative, while at the contrary if he is employed it is more likely that the childbirth takes place.

For what concerns couples that already have at least two children, we found again an effect of educational attainment: if the male partner is lowly educated the probability that another child born is lower, while if the woman is high educated the same probability becomes positive. These last two results combined with the effect obtained at parity zero and at parity one could be explained by the existence of the so called *income effect* that allows more educated and employed couples to reach higher level of fertility outcomes (again net of the effect of couples' (dis)agreement)).

Table 5 Beta coefficients from the logistic regression model on having a child between 2003 and 2007

	Childless	One child	2 or more children
Linear specification of both partners' short-term fertility intention	1.00***	1.07***	1.59***
Age			
Female partner			
<38	-0.06	-0.13***	-0.05
Male partner			
<42	-0.09	-0.10***	-0.11**
Geographical area of residence			
North	0.23	-0.11	-0.20
Center (ref.)			
South_Islands	0.36	-0.13	-0.54
Education			
Female partner			
Low (Isced 0 - 2)	-0.48	-0.19	0.51
Medium (ref)			
High (Isced 5 - 6)	0.93**	-0.24	0.87**
Male partner			
Low (Isced 0 - 2)	-0.05	-0.34	-0.69**
Medium (ref.)			
High (Isced 5 - 6)	0.34	0.37	0.37
Partnership Status			
Married (ref.)			
Cohabitation	-1.01**	0.28	0.79
Attendance of religious service			
Female partner			
Does not attend (ref.)			
Does attend	0.13	-0.16	0.39
Male partner			
Does not attend (ref.)			
Does attend	0.19	0.06	-0.04
Employment status			
Female partner			
Not employed (ref.)			
Employed	3.13*	-0.16	-0.12
School enrollment	2.67	-0.09	0.19
Male partner			
Not employed (ref.)			
Employed	0.92	2.56***	0.41
School enrollment	0.53	-2.06*	-0.21
Gender equality			
Woman satisfied with man participation in housework and childcare tasks	-0.02	-0.23	0.34
Constant	-3.98***	0.22	-4.47**

* p<0.05; ** p<0.01; *** p<0.001.

7.3 The effect of disagreement as defined by the difference between any discrepancy between partners' answers

The results described above are not robust to a different definition of disagreement. Disagreement defined as any discrepancy between partners' answers irrespective of whether the answers go in opposite direction (scheme 2) brings about opposite results: women prevail in childbearing decisions at parity one while partners have equal power in decision-making at parity zero and two or above (**Figure 2**). These findings are also supported in the multivariate analysis which we plan to place in the Appendix in the final version of the paper.

The effect of the couple's conflict on subsequent reproductive behavior is different in the two sub-groups in which gender equality is found: at parity zero an intermediate outcome between agreement on yes and agreement on no is observed, by contrast, at parity two or above the likelihood of a birth is as low as in couples where both partners agree on not having another child, no matter whether only the woman or only the man wants to have a child (symmetric veto-power). Moreover, as seen for the disagreement defined by answers going in opposite directions, these effects do not seem to change if partners share the same responsibilities in housework and childcare tasks or they have the same level of bargaining power. We found that the women's influence on childbearing decisions increases in childless couples in which the man only works while the woman is not active in the labour market, suggesting that the female predominance in reproductive decisions is linked to the sphere of influence rule rather than to the power rule.

In addition, we examined the effect of disagreement depending on whether the answers given by the partners are in adjacent categories (definitely no vs. probably no; probably no vs. probably yes, etc.) or differ by more than one level (for instance, definitely no vs. certainly yes; probably no vs. certainly yes, etc.). We found that the effect of disagreement does not change in these two sub-groups. It is worth noticing that at parity zero the discrepancy between partners' answers is larger than one child in most of the cases, 80%, while among couples who have already children the difference between partners' answers is larger than one child only in the 20% of the cases. This result suggests that couples who have already started their reproductive career might already have come up with a general agreement about their completed family size.

8. Summary and concluding remarks

In this analysis we compared couple prospective short-term childbearing intentions with subsequent reproductive behaviour of Italian couples with the purpose to see which of the partners has a greater influence in case of partners' conflicting views and according to which decision rule the disagreement is resolved. This research topic is generating a growing amount of interest in academic research but is under-investigated because it requires high-quality data which are not easy to collect. Our study design was particularly suitable for its aim because it reflects a genuine couple approach in a longitudinal perspective.

We found that if a conflict rises between partners either women do prevail or both partners have equal influence in decision. If disagreement is defined as discrepancy between answers going in opposite directions, equality is found for couples at parity one while women seem to be more influential than men at parity zero and two or above. If disagreement is defined as any discrepancy between partners' answers, equality is observed at

the extreme parities, zero and two or above, while at parity one a greater women's influence is observed. These findings do not change if gender equality in terms of division of housework and childcare tasks and bargaining power within the couples is reached. This unresponsiveness of the dynamic in the couple interaction to gender equality needs to be further investigated because the measures of gender equality available in our analysis are in one case linked to the women's perception of partner's collaboration in housework and childcare tasks, and, in the other case, based on the difference in human capital between the partners. It could well be that more refined measures of gender equality bring about different results.

Our results are in line with the assumption that models based on both partners' fertility intentions are superior to those based on only one partner's intentions (Fried and Udry 1979; Fried et al. 1980; Morgan 1985) and that models including only the women's intentions are likely to be mis-specified (Corijn et al. 1996). Since women tend to prevail in the couple negotiation process, we share the view that models based on female child-timing intentions should be preferred over models based on male child-timing intentions—if the choice between one of the two partners has to be made (Fried et al. 1980; Morgan 1985).

An important caveat of our data has to do with measurement issues: reported child-timing intentions might reflect the resolution of a negotiation process between partners, as the theory on fertility decision-making (Ajzen 1991; Miller 1994; Miller 2011b) and some empirical findings (Barret and Wellings 2002) would suggest. If this is true, partners' concordant responses do not exclude the presence of disagreement, or alternatively, partners' discrepant reports might happen by chance (because only one of the two respondents incorporated the partner's view in their answer). Although this is a general challenge in the analysis of couple data (Becker 1996), we suggest that intentions may not be the most suitable element in the dynamic of couple interaction and perhaps we should also look at the earlier stages of the fertility decision-making sequence, i.e. desires and motivations, to follow the partners' negotiation process more deeply.

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