# Intergenerational contact across marriage and cohabitation in Italy. Something new?

Elena Pirani
Dipartimento di Statistica, Informatica, Applicazioni — DiSIA "G. Parenti",
University of Florence, ITALY - pirani@disia.unifi.it

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## SHORT ABSTRACT

As far as cohabitation became increasingly popular as a form of union beside marriage, scholars started to question if this alternative way to form a romantic union shapes differently intergenerational ties. Empirical literature generally offered proofs that the type of union is negatively associated with intergenerational contact, especially in traditional societies. Past research for the Italian context was in line with this assumption. We intend to assess the effect of choosing cohabitation relative to marriage on the frequency of contact with mother in contemporary Italy, a country where the strong family system is still exercising a main role within the society, but where the force of change in family behaviours is increasing year after year.

Using data from a large, nationally representative survey, we study the frequency of contact mother-adult child across marriage and cohabitation, considering three measures of contact: face-to-face contact, telephone contact and mixed contact. In order to overcome endogeneity and selectivity problems, we adopt a simultaneous equation approach.

Our findings prove that adult Italians cohabitors of the end of 2000s have a lower probability to meet personally their mother on daily basis relative to marrieds, but they are more likely to have frequent phone calls with her; overall, no differences across marrieds and cohabitors appear when considering a composite indicator of mixed contact. We advance that when face-to-face contact is blocked for some reasons, for instance geographical distance, it is replaced by telephone contact, suggesting a potential compensation among children who live further away from parents. Cohabitors may have a non-traditional vision of the family and of family roles; nevertheless, they stay in touch with their family of origin changing the way to maintain contact. In conclusion, our results do not lead to the indication of deteriorated contacts mother-child for cohabitors.

This paper expands and updates previous findings on this issue, illustrating the association between union type and various indicators of contact mother-child in contemporary Italy. We interpret the novelty of these results suggesting that the slow yet incessant diffusion of cohabitation in 2000s has probably contributed to open the route to an increasing acceptance by the old generations, relaxing the parental negative attitude towards their children's cohabitation decisions.

## **INTRODUCTION**

Some years ago, Sarkisian and Gerstel (2008) pointed out that marriage is a "greedy institution" pulling the romantic partners away from ties to other family members. Compared to single adult children, married ones have been found less likely to stay in touch with their parents, in terms both of frequency of contact and exchange of emotional, financial and practical help. Explanations for this are various: "modern marriage" (Gerstel and Sarkisian 2006) represents a distinctive social unit, creating boundaries that compete with respect to the wider community; within the boundaries of marriage, spouses tend to (and are expected to) make it on their own, both practically and emotionally; marriage demands a kind of intense emotional and physical involvement detracting time and resources for other relationships and collective life (Johnson and Leslie 1982; Sarkisian and Gerstel 2008). However, this state of affairs has not always been the same: in pre-industrialized societies, marriage expanded, rather than to limit, opportunities and resources for relationships with kin and with the wider community (Fischer et al. 1989; Gerstel and Sarkisian 2006).

Recent years have witnessed an increasing diffusion of unmarried cohabitation, or living together in an intimate union as a couple without marriage. The nature of cohabitation is different from that of marriage, and unmarried cohabitation tends to represent, more than marriage, a private experience, embodying an expression of self-contained individualism and less commitment to kin and community (Daatland 2007). As far as cohabitation became increasingly popular as form of union beside marriage, some scholars started to question if this alternative way to form a romantic union shapes differently intergenerational ties. Empirical literature generally offered proofs for the hypothesis that the type of union is not neutral for intergenerational relationships: a detrimental effect of cohabitation on parentschildren support, exchange and contact has been often found, although differences across countries and time exist (e.g., Yahirun and Hamplova 2014). Cohabitation has reached important proportions across younger generations in most European countries in recent years, thus making the understanding of the consequences of this form of union undoubtedly important (Kalmijn 2007; Kiernan 2004; Sobotka and Toulemon 2008). Unstable or infrequent contacts during time could deteriorate contacts and relationships in the future, and consequences of this detachment in the long term – when the parents need the support of their children in their old age (De Graaf and Fokkema 2007) - could be dramatic. The understanding of whether and how this way to live an intimate union leads to sparse relationships with the family of origin is a relevant issue in family demography research.

The objective of this paper is to add on knowledge about the association between partnership choices - marriage versus cohabitation - and strength of bonds with parents in Italy. The only two previous studies on this issue for this country (Yahirun and Hamplova 2014; Nazio and Saraceno 2013) found a negative association between cohabitation and intergenerational contact relative to marriage. These studies referred to the beginning of the 20<sup>th</sup> century, when the decision to cohabit still represented an unconventional, and highly selective, family behaviour, however. Using data from a large, nationally representative survey referring to the end of 2000s, we intend to verify if this state of affairs is still sound in contemporary Italy. In the most recent years, indeed, tradition is still exercising a main role within the Italian culture (Dalla Zuanna et al. 2007; Di Giulio and Rosina 2007; Gabrielli and Hoem 2010; Vignoli and Salvini 2014), and cohabitation is not still a completely accepted way to form a romantic union. Nevertheless, signals of erosion of this traditional system are appearing: unmarried cohabitations are diffusing to increasingly larger segments of population, regardless social or economic status of individuals (Gabrielli and Hoem 2010; Gabrielli and Vignoli 2013), and differences across married and cohabiting couples are vanishing in several domains of life (e.g., Guetto et al. 2016; Pirani and Vignoli 2016). Besides, adult Italian children are still bound to their parents when taking important decisions such as leaving home and establishing a new family. Italy is a typical example of country of strong intergenerational ties (Dalla Zuanna and Micheli 2004; Dalla Zuanna et al. 2007). Given this framework, Italy represents an interesting case study for the analysis of the association between type of union and intergenerational contact.

We operationalized intergenerational ties considering three measures of contact with mother, i.e., face-to-face contact, telephone contact and mixed contact: our aim is to verify if intergenerational contact is reduced in case of cohabitation relative to marriage, or whether, instead, characteristics of cohabitors involve changes in managing the relationship mother-adult child. There are several reasons for which contact remains a central dimension of intergenerational ties (Lye 1996; Kalmijn and De Vries 2009). On the one side, parent-children contact may be mainly driven by normative obligations, and in such a case it does not necessarily correspond to a high-quality relationship (Silverstein and Bengtson 1997); on the other side, research suggests that the frequency of contact between parents and adult children is a good overall measure of the strength of their relationship (Lye et al. 1995), and it offers a good indirect measure of intergenerational solidarity (Bengtson and Roberts 1991; Kalmijn 2006). Moreover, being in regular contact enables exchange of companionship and information on each other's lives and needs (Mancini and Blieszner 1989), providing the

foundation for other types of transfers, such as financial and instrumental support (Silverstein and Bengtson 1997; Silverstein et al. 1995; Tomassini et al. 2004).

Differently from the majority of previous studies, we adopted a simultaneous equation approach which models jointly the selection of people into a specific type of union and the association of this choice with the frequency of contact. This approach enabled us to account for unobserved factors that may drive both the frequency of contact and the choice to cohabit instead to marry, or endogeneity between the two processes.

In the following sections, we review previous empirical findings about the association between type of union and intergenerational contact, discussing possible mechanisms, then, we present the Italian setting. After the illustration of data used and method adopted, we present models' results. A discussion of main findings concludes the paper.

# **BACKGROUND**

# Type of union and intergenerational contact

Researchers investigating the association between the type of union and intergenerational contact generally found that cohabiting people tend to show lower frequency of contact with their parents relative to marrieds, but differences across countries and time exist. Referring to young Americans of the end of '80s, Eggebeen (2005) showed that cohabitors were less likely than single and also than married young adults to be receiving assistance from and giving assistance to their parents. Nevertheless, the gap across marriage and cohabitation seems to vanish when considering young Americans of the turn of the new century: according to Musick and Bumpass (2012), entering into both marriage and cohabitation entails lower frequency of contact with parents and friends relative to singles, without differences across union type. A reduced level of intergenerational face-to-face contact of cohabitors relative to marrieds was found by Hogerbrugge and Dykstra (2009) as for the Netherland, but not by Bucx and colleagues (2008). Differences in sample selection or in the method of analysis used could explain some of the differences. Unmarried cohabitations evidenced a detrimental effect on the quality of the parents-adult children relationship in Poland (Baranowska 2014); a negative effect of the type of union on both personal and telephone contact was shown for Italian cohabitors of the beginning of 2000s, relative to marrieds (Nazio and Saraceno, 2013), and this result was confirmed by Yahirun and Hamplova (2014); no differences were found, instead, across British cohabitors and marrieds (Nazio and Saraceno, 2013). A lack of association between the union type and face-to-face contact with the parental generation was proved also for other European countries, from Northern to Eastern ones, like Norway

(Daatland 2007) and Lituania (Maslauskaite 2001). Results from a recent cross-country comparative study (Yahirun and Hamplova 2014) confirmed that the association between type of union and parental contact is not universally assessed.

People who choose cohabitation instead of marriage have a number of characteristics which make them a selected group relative to young adults who choose to formally recognize their union through a marriage; and these characteristics may shape intergenerational ties, too (Hogerbrugge and Dykstra 2009; Nazio and Saraceno 2012). For instance, having experienced parental separation was shown to raise both the likelihood to cohabit (Gabrielli and Hoem 2010; Kiernan 2001) and to reduce frequency of contact with parents (De Graaf and Fokkema 2007; Kalmijn 2013; Tomassini et al. 2004). Moreover, cohabiting couples are more likely than married couples to live far from their parental house (Kiernan 2001), a characteristics associated with less frequent contact and exchange of support (Kalmijn 2006; Tomassini et al. 2004). Finally, cohabitors may have non-traditional values concerning family relationships (Kalmijn 2006) and thus may be less prone to frequent contact.

Some years ago, Eggebeen has claimed that a possible explanation for the gap in contact across marriage and cohabitation is that «cohabitation remains largely uninstitutionalized» (Eggebeen 2005, p. 1108). Many traditional societies are implicitly based on certain societal norms regarding life course stages and family formation (Billari and Liefbroer 2010): young people are generally expected to complete their education, find a stable job, form a union, and leave the parental home establishing an independent life; and, ultimately, to become a potential source of support for their parents. In these traditional societies, marriage is seen the only "suitable" route to family formation, whereas cohabitation, lacking moral legitimacy and violating normative standards, may not be accepted by parents (Di Giulio and Rosina 2007; Yahirun and Hamplova 2014; Schröeder 2010). Importantly, these normative standards regarding family formation can be reinforced by religious influences (Thornton et al. 1992), considering living in a non-marital relationship as a sin. In these contexts, parents consider children as their personal continuation, and thus the child engagement in a practice that clash with their norms of reference and values may be considered as a personal defeat (Santarelli and Cottone 2009), undermining the parent-child relationship (Di Giulio and Rosina 2007; Rosina and Fraboni 2004; Schröeder 2010). Conversely, cohabiting adult children might feel as failing to respect the rules their parents tried to teach them (Maslauskaite 2011), and sensing that their parents may not approve their relationship, minimize contact.

Following the same line of reasoning, according to the uncertainty perspective (Eggebeen 2005), the generally higher instability of cohabiting relationships relative to

married unions (Bumpass and Lu 1999; Bumpass et al. 1991) may reduce parental investments in their child's relationship: parents may be reluctant to invest time and resources and may feel fewer obligations to support their cohabiting children until this relationship shows some evidence of stability or permanence. Marriage, as institutionalized union, develops and fosters new kinship ties, and creates a multitude of social roles for the parties involved – like the role of daughter/son-in-law – whereas the uncertainty surrounding the role of cohabiting partners may translate into a weaker obligation to a partner's parents and relatives (Yahirun and Hamplova 2014). The lack of commitment to partner's family may in turn decrease intergenerational contact with one's own family as far as couples tend to socialize together (Kalmijin and Bernasco 2001).

To sum up, a negative association between intergenerational contact and the choice to cohabit is expected especially in traditional societies, where cohabitation is scarcely diffused, where social attitudes regarding family formation patterns are largely determined by religious teachings and traditional values, and where family formation decisions are bounded by social pressure and parental approval. In contrast, differences across union type seem less relevant in countries where cohabitation is largely diffuse and accepted or, in a word, institutionalized (Guetto et al. 2016; Liefbroer and Dourleijn 2006).

## The Italian Setting

Contemporary Italy is a country at an intermediate stage of diffusion of cohabitation, where the force of change in family behaviours combats with the force of tradition. Direct marriage still remains more popular than non-marital cohabitation among couples, and the great majority of the population does not consider the marriage an outdated institution (according to data from 2008 European Values Study); nevertheless, members of younger generations tend to have more positive attitudes towards cohabitation (Gabrielli and Hoem 2010; Nazio and Blossfeld 2003), and they are increasingly likely to choose this type of partnership (Pirani and Vignoli 2016). During 2000s the diffusion process of cohabitation seems having taken flight: in 2010 more than 10 couples out of 100 cohabited (with peaks of 16 in some areas), and this practice was no longer confined solely to certain social groups (Gabrielli and Vignoli 2013; Guetto et al. 2016). This percentage could appear low, but it indicates a clear signal of change with respect to the less than 10 years before, when only 4% of young Italians were cohabiting.

Beside this state of affairs, Italy of the 21<sup>st</sup> century is still considered a country with a strong family system (Dalla Zuanna and Micheli 2004; Dalla Zuanna et al. 2007; Gabrielli

and Hoem 2010; Vignoli and Salvini 2014). Parents invest in the education of their adult children, and often help them to find a first job and to purchase a home (Rosina and Fraboni 2004; Santarelli and Cottone 2009; Tommasini et al. 2003). The involvement in each other's lives, and the support and financial exchange may continue long thereafter, even when young people have left the parental home and established a family (Dalla Zuanna and Micheli 2004; Rosina and Fraboni 2004; Tomassini et al. 2003), for instance for needs linked to childcare. The patterns of close residential proximity between parents and their adult children (Santarelli and Cottone 2009; Tomassini et al. 2003) are further proofs. In many other European countries, the welfare state provides a wide range of services to families, whereas the family is the most important provider of welfare in Italy (Saraceno and Keck 2010): the lack of social and care services for young people experiencing crucial life events reinforce the role of the family in the Italian societies (Albertini and Mencarini 2014; Di Giulio and Rosina 2007; Schröeder 2010).

## DATA AND METHOD

## Data

Empirical analysis drew on data from the Italian survey on Family and Social Subjects (FSS) carried out in 2009 by means of face-to-face interviews with a nationally representative sample of 43,850 men and women nested in around 20,000 households (Istat 2009). Data were collected by the National Institute of Statistics based on a two-stage sampling design with a stratification of the primary units and, similar to other national household surveys, the overall response rate was over 80%. Thanks to its retrospective section, the Italian FSS survey provides very detailed information on union formation processes, and it is a valuable source of data on intergenerational ties.

For the purposes of this study, we focused on a sub-sample made up of male and female cohorts born between 1960 and 1991 (18,416 individuals), during an age window that goes from 18 to 49 years old. We restricted our attention to 9,590 men and women who was in union – marriage or cohabitation – by the time of the survey. We excluded respondents whose parents were not alive (14.5%) and those who were sharing a household with their parents (2.0%), resulting in final subsamples of 8,007 partnered, both in marriage or cohabitation, young adults.

# Model specification

A typical problem in the research field about the choice of union type and its consequences is the presence of endogeneity and unobserved factors underlying both intergenerational ties and the decision about union type. Moreover, previous research suggested that people who choose to cohabit are a very specific – or selected – group. In order to correctly estimate the association between frequency of contact and type of union, we estimated simultaneous equation models which examine jointly the selection of people into a specific type of union and the consequences of this choice in terms of frequency of contact with mother, a statistical technique that enables us to taking into account the endogeneity between the two processes. A similar analytical strategy has been successfully implemented in previous demographic research (e.g., Godwin 1985; Kalmijn and Saraceno 2008; Paik 2011; Vignoli et al. 2012).

The simultaneous equation approach consists in the joint estimation of two equations: an *outcome equation* for the intergenerational contact C, [1]; a *selection equation* for the choice of union type U, [2]. Defining  $C_i$  the individual i's outcome ordered variable – i.e., the frequency of contact with mother – and  $U_i$  a dummy variable equal to 1 if the individual cohabits and 0 if the individual is married, the two equations may be defined as follows:

$$C_{i} = \alpha + \beta \mathbf{X}_{i} + \gamma U_{i} + \varepsilon_{i}$$
 [1]

$$U_i = \eta + \delta \mathbf{X}_i + \lambda Z_i + v_i$$
 [2]

 $X_i$  is a set of exogenous control variables associated both with intergenerational contact and type of union;  $Z_i$  included in the *selection equation* [2] stands for one (or more) exogenous control variable, the so-called instrument variable. Conditional to the other variables, the instrumental variable is not related to  $\varepsilon_i$  and does not directly affect the frequency of contact modelled in the *outcome equation* [1], thus serving to the identification of models' parameters (Monfardini and Radice 2007). Finally,  $\varepsilon_i$  and  $v_i$  represent the error terms in the equations. In our specification, the outcome and selection equations are simultaneously estimated through, respectively, an ordered probit and a probit regression model.

Statistically speaking, the simultaneous estimation of the two equations allows for a parameter,  $\rho$ , which captures the correlation between the unobserved variables in each process. This means that when  $\rho=0$  the choice of union type and the frequency of contact are two independent processes. When  $\rho$  significantly differs from 0, the two processes are interrelated, and the results from a standard (ordinal probit) regression models would be biased, thus making essential to consider them simultaneously (Moffitt, 2005). Note that in

our dataset, individuals were nested in 19 geographical regions, which implies that the observations violate the independence assumption required by most estimation methods. We dealt with this clustered data structure by adjusting the estimates of standard errors to account for non-independence (i.e., robust standard errors).

## Outcome variable

Our dependent variable in the *outcome equation* [1] was the frequency of contact with mother, measured in three ways. First, we considered the frequency of face-to-face contact between young adult children and their mother (1 = never or annually; 2 = monthly; 3 = weekly; 4 = some times per week; 5 = daily). We acknowledge, however, that mother and her adult children may not have latitude regarding face-to-face contact, because meeting in person requires geographic proximity. Although the Italian context is generally characterized by a higher level of geographical closeness between parents and children (Santarelli and Cottone 2009; Tomassini et al. 2003), the spurious association between face-to-face contact, cohabitation, and geographical proximity could confuse the results. Moreover, face-to-face meetings do not represent the only way to maintain contact: recently developed technologies enable family members to remain in closer contact than they could in the past, and these communication tools may be especially important for people who live far away from their parents. In order to account for potential bias introduced by the correlation between residential proximity and frequency of face-to-face contact, as second outcome variable we considered the frequency of telephone contact between young adult children and their mother (again, 1 = never or annually; 2 = monthly; 3 = weekly; 4 = some times per week; 5 = daily). Finally, because these two forms of contact do not exclude each other and, on the contrary, it is probable that persons living far away their parents have scarce face-to-face meetings but numerous phone calls (at least in case of a high-quality relationship), we built a composite indicator accounting for both forms of contact, face-to-face and by telephone, i.e., an indicator of mixed contact (considering when either face-to-face or telephone contact is in a given response category, we classified the responses in: 1 = never or annually; 2 = monthly; 3 = weekly; 4 = some times per week; 5 = daily). We thus estimated three separate models for the three outcome variables: face-to-face contact, telephone contact, and mixed contact between mother and her adult child.

# Explanatory variables

Our key explanatory variable in the analysis of the frequency of intergenerational contact (the *outcome equation*) and our dependent variable in the *selection equation* was the union

type of young adult Italians: marriage vs. cohabitation. The information referred to the union status declared by respondents at the time of data collection. Because both the frequency of contact mother-child and the choice of the union type are well-known related to several other factors, we considered a series of control variables in our statistical models, referring to child and mother. When no otherwise specified, the covariates described in the follow were included in both the *outcome* and *selection equation*.

Young adult daughters tend to have closer relationships with their mother than sons (Hogerbrugge and Dykstra 2009; Hank 2007), and contacts decrease as far as the child become older (Hogerbrugge and Dykstra 2009; Daatland 2007). In addition, cohabitation is preferred by younger generations. Gender and age (aggregated in classes: 18-24; 25-29; 30-34; 35-39; 40-44; 45-49) were thus introduced as covariates.

Socio-economic conditions of young adult children may shape intergenerational relationships, too: higher levels of education and labor market participation generally enlarge networks and activities of young adults, thus tending to reduce time and possibilities to devote to family relationships at least as for personal meetings (Kalmijn 2006; Yahirun and Hamplova 2014; Lye 1996; Hank 2007; Tomassini et al. 2004). At the same time, socio-economic status is associated to the choice of union type (Gabrielli and Hoem 2010; Kiernan 2001; Thornton et al. 1992). Socio-economic status was measured, in our analysis, through three variables. First, we used the educational level (primary or lower secondary; upper secondary; tertiary); because only 0.3% of our sample was still in education, we did not consider this category. Second, we introduced the occupational status, differentiating between employed, unemployed, and inactive; the latter category included housewives (92.3%), retired (0.7%), people unable to work (1.8%), and a residual part (5.0%) inactive for other reasons. Finally, we considered the subjective evaluation of financial resources (good or very good; poor or very poor).

Even if Italy is experiencing a phase of secularization and redefinition of being religious (Sansonetti 2009), tradition continues to exercise a certain influence on individuals' life (Vignoli and Salvini 2014). The degree of religiosity, measured through the frequency of attendance to religious ceremonies (and coded into: high; medium; low), represents an element attached to union formation behaviours (Vignoli and Salvini 2014; Thornton et al. 1992) and to some extent also to family ties (Hogerbrugge and Dykstra 2009; Kalmijn and De Vries 2009), although some authors claimed that the latter association is generally modest and should not be overstated (King et al. 2013).

Individual differences come also from the area of residence where people are embedded in: in Southern Italian regions unmarried cohabitations are still less diffused relative to Northern areas (Pirani and Vignoli 2016); besides, the North-East and the Centre regions display a higher degree of proximity and support (Barbagli et al. 2003; Santarelli and Cottone 2009). The territorial gradient was included in the analysis differentiating by North, Centre, South and Islands.

The length of the current union (in years) and the presence of offspring less than thirteen in the household were used to account for the level of stability (or uncertainty) of the union (Eggebeen 2005) in the *outcome equation*. The presence of dependent children was introduced also in the *selection equation*, being known the different propensity to parenthood of cohabiting and married couple, at least in Italy (Kiernan 2001).

A well-known factor related to the union type is the parental separation: young adult children with divorced parents are generally overrepresented among people deciding to cohabit instead to marry (Gabrielli and Hoem 2010; Kiernan 2001). In addition, previous literature on intergenerational contact showed that marital disruption negatively influences relationship with child, above all as for the relationship father-child (De Graaf and Fokkema 2007; Daatland 2007; Tomassini et al. 2004; Kalmijn 2013; Lye 1996). We thus controlled our model estimation for parental separation (yes/no) when the respondent was 15 years old.

In some cases, people may prefer either cohabitation or marriage as a form of union; in other cases, cohabitation without marriage could be the unique alternative. For instance, due to the specific Italian normative context in effect on recent decades<sup>1</sup>, for a person who passed through a marital separation and does not wish to wait the long period needed to obtain the divorce (Nazio and Saraceno 2013) cohabitation is an obliged choice. In addition, these circumstances could find different approval by parents, and thus lead to different levels of intergenerational contact. To account for previous marital history of respondents, we juxtaposed those who were single before the current union, to those who have been already married and passed through a marital separation, and to those who experienced widowhood.

As previously discussed, the distance from parental house, even if it does not necessarily affect the quality of the relationship, is a founding element in shaping the frequency and the type of contact with mother: the higher the distance, the lower the possibility to meet

terms to 6 months or one year, respectively for consensual to judicial divorces.

<sup>&</sup>lt;sup>1</sup> Since 1970, when divorce has become legally permissible (Law 898/1970), spouses who decided to separate had first to obtain a legal separation, and then wait a period of physical and legal separation (five years, initially, three years since 1987) to apply for a divorce. Only in 2015, a new law (Law 55/2015) reduced these

frequently in person; the frequency of telephone contacts is less foregone. It is also possible that a selection effect plays a role, that is, when intergenerational ties are weak, the adult child decide to go living far from the family of origin. Moreover, young adults more prone to cohabitation have a higher probability to live less close to their parents (Kiernan 2001). FSS data provided information about the distance from mother's house (same building or within 1 km; 1-16 km; 16-50 km; over 50 km; abroad).

Since contact mother-child is a dyadic phenomenon, the *outcome equation* also controlled for two mother's characteristics that could affect the relationship with her child: health and living arrangement. Generally, poor health of the mother tends to increase contact with child (Silverstein et al. 1995), but some exceptions were found (Yahirun and Hamplova 2014; Hank 2007). Moreover, whether the mother lives alone, with other people (partner, child(ren), other relatives or friends), or is institutionalized could modify the frequency of contact with the adult child. In the equation for the choice of union type (*selection equation*), we introduced as covariate the mother's level of education (primary; lower secondary; upper secondary or tertiary), as suggested in previous literature (e.g., Kiernan 2001).

Finally, in the *selection equation* for the choice of union type, we added an instrumental variable, or a factor related to the type of union but unrelated to the frequency of contact mother-child. The most common types of instrumental variable are variables referring to the area where individuals reside or related to population segments (Moffitt 2005). We built an aggregate-level indicator representing the incidence of cohabitation (i.e., the number of cohabiting unions on the total number of unions) by region and by year when the respondent was in his/her 20-25 years-old, a phase of life when, generally, union formation decisions grow up. We claim that this variable represents a suitable instrument: from a theoretical point of view, it is conceivable that the incidence of cohabitation during adulthood of respondent is unrelated to the current frequency of contact with parents; from an empirical point of view, we verified the lack of association of this instrument with the frequency of contact mother-child (results not shown but available upon request).

# **RESULTS**

# Cohabitors and marrieds at a glance

From a descriptive point of view, it seems that the frequency of contact slightly differ across marriage and cohabitation (Table 1). Married respondents tend to meet personally their mother more frequently than cohabitors (chi-squared test significant at 5% level); on the

contrary, telephone contacts seem more similar (chi-squared test non-significant), whereas mixed contacts represent a combination of the two types of contact.

Marriage is preferred by older cohorts, more religious individuals, those living in Southern Italian regions and coming from higher educated families (i.e., with high educated mother). Differences in terms of education or financial resources are not significant, while the percentage of employed people is higher among the group of cohabitors. The latter figure depends mostly on the higher presence of housewives (in the category "inactive") across marrieds. As expected, cohabitors are less likely to have children, have experienced a parental separation and are themselves separated more frequently than spouses. In addition, they tend to live faraway their family of origin.

*Table 1 – Descriptive statistics: individual and mother's characteristics by union type, Italy, 2009* 

	Marriage	Cohabitation	Total
Face-to-face contact			_
annually/never	16.3	24.1	17.0
monthly	9.2	9.9	9.3
weekly	11.1	12.0	11.2
some times week	25.7	23.0	25.5
daily	37.7	31.0	37.0
Telephone contact			
annually/never	11.8	10.1	11.6
monthly	6.7	7.3	6.8
weekly	9.1	10.4	9.2
some times week	30.4	31.9	30.6
daily	42.0	40.3	41.9
Mixed contact			
annually/never	1.7	3.1	1.8
monthly	4.4	4.8	4.5
weekly	7.6	9.0	7.8
some times week	26.3	27.2	26.4
daily	60.0	55.9	59.5
Gender			
male	44.7	47.1	44.9
female	55.3	52.9	55.1
Classe of age			
18-24	1.1	4.7	1.5
25-29	6.0	17.6	7.1
30-34	15.7	23.1	16.4
35-39	24.4	24.0	24.3
40-44	27.5	19.6	26.8
45-49	25.3	11.0	23.9
Level of education			
lower sec/primary	49.0	52.5	49.3
upper secondary	36.2	33.7	35.9
tertiary	14.8	13.8	14.8
Occupational status			
employed	70.9	80.0	71.8
unemployed	8.0	8.6	8.0
1 2			

inactive	21.1	11.4	20.2
Economic resources			
good/very good	66.7	63.5	66.4
poor/very poor	33.3	36.5	33.6
Religiosity			
high	30.8	20.5	29.8
medium	58.0	56.7	57.9
low	9.7	20.1	10.7
n.a.	1.5	2.7	1.6
Area of residence			
North	40.9	62.4	42.9
Centre	17.0	20.0	17.4
South/Islands	42.1	17.6	39.7
Presence of children under 13	3		
no	13.4	38.4	15.8
yes	86.6	61.6	84.2
Parental separation			
no	95.4	87.5	94.6
yes	4.6	12.5	5.4
Previous marital status			
single	97.8	77.2	95.8
separation	2.0	21.4	3.9
widowhood	0.2	1.4	0.3
Distance from mother's house			
< 1km	32.9	23.1	32.0
1-16 km	39.0	36.5	38.7
16-50 km	8.7	11.8	9.0
>50 km	10.7	15.6	11.2
abroad	8.7	13.0	9.1
Mother's education			
primary	60.8	43.3	59.1
low secondary	26.1	37.1	27.2
upper sec./tertiary	10.7	16.5	11.2
n.a.	2.4	3.1	2.5

# Union status and contact mother-adult child

The key result of the *outcome equation* [1] is the estimate of the parameter  $\gamma$ , or the coefficient for the association between union type and frequency of contact mother-child (see first row of Table 3). In order to better appreciate this effect, we computed the Average Marginal Effects (AMEs), which illustrates the change in the probability of a given level of contact as union type changes from marriage to cohabitation, averaged across the values of the other covariates introduced in the model (Table 2).

The first model (Mod. 1) addressed the association between the type of union and face-to-face contact with mother. Looking at Table 2, it is clear that the type of union shapes negatively the likelihood to have frequent face-to-face contacts with one's own mother. Cohabitors have 2.8 percentage points higher probability to meet personally their mother only annually or never relative to married people. The AMEs decrease for the other categories,

continuing to show a reduced frequency of contact for cohabitors; finally, cohabitors display a reduced probability to see their mother on daily bases (AME = -6.6).

The correlation parameter  $\rho$  between the *outcome* and the *selection equations* is reported on the bottom of the table. It clearly demonstrates that there is significant correlation between the two processes, i.e., face-to-face contact and entry into a given type of union. In other words, not accounting simultaneously for both equations would lead to biased results.

Table 2 – Average Marginal Effects (AMEs, in percentage points) of cohabitation relative to marriage on the probability to have a given level of 1) face-to-face contact, 2) telephone contact 3) mixed contact, with mother. Estimation through simultaneous ordinal probit models corrected for selection effects, Italy, 2009

	Mod. 1:		Mod. 2:		Mod. 3:	
	Face-to-face contact Telephone contact		contact	Mixed contact		
Frequency of contact	AME	sig.	AME	sig.	AME	sig.
Never/annually	2.8	0.051	-13.6	0.000	-0.5	0.325
Monthly	1.3	0.075	-5.6	0.000	-0.7	0.315
Weekly	1.5	0.038	-6.8	0.000	-1.1	0.329
Some times a week	1.0	0.002	-14.3	0.000	-2.1	0.358
Daily	-6.6	0.037	40.3	0.000	4.4	0.340
ρ	0.17	0.001	-0.79	0.000	-0.05	0.542

Note: Average Marginal Effects (AMEs) illustrates the change in the probability of a given level of contact as a categorical covariate changes from one category to another or as a continuous covariate increases of 1 unit, averaged across the values of the other covariates introduced in the model. Models controlled for variables listed in Table 3.

Looking at the Model 2 of Table 2, referring to the telephone contact outcome, things change. Once again, the correlation coefficient  $\rho$  is significant, highlighting the importance to recur to the simultaneous estimation for the model reliability. In this case, results show that cohabitors have 40.3 percentage points higher probability to have daily phone calls with their mother relative to their married counterpart. Conversely, cohabitation is associated to a strong decrease of the probability to have very sporadic contacts (AME of never/annually equal - 13.6 percentage points).

Finally, when considering the composite indicator accounting for both face-to-face and telephone contact (Mod. 3), once again results are not foregone. As for this comprehensive and global indicator of contact, the correlation between the two processes investigated disappears ( $\rho$  not significant). In statistical terms, this means that the association between union type and mixed contact could be estimated adopting a standard ordered probit model, without the need to control for selection effects. Results reported in Table 2 are however consistent with a standard model (results not shown but available upon request). Importantly,

the last columns of Table 2 illustrates a lack of association between type of union and mixed contacts: in other words, Italians cohabitors are not different relative to married people in the frequency of mixed contacts – both face-to-face and by telephone – with their mother.

As accessory result, it is worth noting that the magnitude of the effect of cohabitation changes depending on the specific frequency category time by time considered (daily, weekly, and so forth). This underlines the need to be the most precise as possible when analyzing this kind of data, because a rough aggregation of response categories could lead to misinterpretation.

## Other covariates

In the *outcome equation* [1], we controlled for quite a few individual characteristics that may influence the frequency of contact mother-child. Results are reported in Table 3. Other things equal, daughters tend to stay in touch with their mother more frequently than sons, regardless the form of contact, whereas no relevant age differentials are depicted. High levels of education decrease the frequency of face-to-face contact but increase telephone one, consistently with previous findings (Yahirun and Hamplova 2014). No differences were found for the occupational status, while a poor financial situation is associated with less frequent contact, both face-to-face and by telephone. People living in central and southern regions meet and phone their mother more frequently that those living in northern regions. The association between religious service attendance and mother-child ties did not result statistically significant, other things equal.

In line with previous literature (De Graaf and Fokkema 2007; Daatland 2007; Lye 1996), our results confirmed that parental separation reduces the frequency of both meetings and phone calls with mother, while the presence of offspring entails a higher frequency of phone calls. Moreover, a previous marital separation affects in a negative way only telephone contact. As expected, the association between frequency of contact and distance from mother's house depends on the type of contact: the higher the distance from mother's house, the lower the likelihood to have frequent meetings, and the higher the likelihood to keep in touch through other channels, such as phone calls. Overall, mixed contacts seem to be slightly reduced as distance increases.

The mother's health status is negatively associated with both types of contact; a similar association were found recently (Yahirun and Hamplova 2014). Finally, relative to mothers living in couple or with other child(ren), those living solo or in institutions meet their child more often (no differences across types of union are found as for telephone contact, instead).

Table 3 – Results of the outcome equation: coefficients of individual variables on the probability to have a given level of 1) face-to-face contact, 2) telephone contact 3) mixed contact, with mother. Estimation through simultaneous ordinal probit models corrected for selection effect, Italy, 2009

0.000 0 0.000 0 0.439 0.065 0.052 -	0.139 0.52 -0.01 0.00 -0.01 -0.03	0.04 0.11 0.11	<i>p</i> - <i>value</i> 0.348  0.000  0.939
0.000 0.439 0.065 0.052 0.021	0.52 -0.01 0.00 -0.01	0.04 0.11 0.11	0.000 0.939
0.000 0.439 0.065 0.052 0.021	0.52 -0.01 0.00 -0.01	0.04 0.11 0.11	0.000 0.939
0.439 0.065 0.052 0.021	-0.01 0.00 -0.01	0.11 0.11	0.939
0.439 0.065 0.052 0.021	-0.01 0.00 -0.01	0.11 0.11	0.939
0.065 0.052 0.021	0.00 -0.01	0.11	
0.065 0.052 0.021	0.00 -0.01	0.11	
0.052 0.021	-0.01		
0.021			
	-0.03		0.951
0.003			0.803
	0.02	0.12	0.887
0.000	0.15		0.000
0.000	0.12	0.05	0.009
			0.661
0.520	-0.03	0.04	0.503
0.007	-0.12	0.04	0.001
0.916	0.00	0.03	0.900
0.054	-0.02	0.05	0.665
0.016	0.17	0.04	0.000
0.000	0.23	0.08	0.003
0.003	0.09	0.04	0.012
0.000	-0.40	0.08	0.000
0.000	-0.61	0.06	0.000
0.000	-0.94	0.06	0.000
0.000	-1.16	0.06	0.000
0.000	-2.01	0.07	0.000
0.000	-0.13	0.08	0.088
0.148	-0.15	0.31	0.635
0.132	-0.07	0.04	0.125
0.033	-0.08		0.227
0.313	0.14	0.05	0.008
	0.17		
	0.000 0.944 0.520 0.007 0.916 0.054 0.016 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.148 0.132 0.033 0.313 0.334	0.000       0.12         0.944       -0.02         0.520       -0.03         0.007       -0.12         0.916       0.00         0.054       -0.02         0.016       0.17         0.000       0.23         0.003       0.09         0.000       -0.40         0.000       -0.61         0.000       -0.94         0.000       -1.16         0.000       -2.01         0.000       -0.13         0.148       -0.15         0.132       -0.07         0.033       -0.08         0.313       0.14         0.334       0.17	0.000       0.12       0.05         0.944       -0.02       0.06         0.520       -0.03       0.04         0.007       -0.12       0.04         0.916       0.00       0.03         0.054       -0.02       0.05         0.016       0.17       0.04         0.000       0.23       0.08         0.003       0.09       0.04         0.000       -0.40       0.08         0.000       -0.61       0.06         0.000       -0.94       0.06         0.000       -1.16       0.06         0.000       -2.01       0.07         0.000       -0.13       0.08         0.148       -0.15       0.31         0.033       -0.08       0.07         0.313       0.14       0.05         0.334       0.17       0.07

# Selection equation

For the sake of completeness, we briefly discuss results from the *selection equation* [2] into union type (Table 4). Consistently with previous studies, our results showed that cohabitation is more prevalent among younger people, with divorced parents, living in northern Italian regions and declaring low levels of religious attendance (Gabrielli and Vignoli 2013; Kiernan 2001; Vignoli and Salvini 2014; Thornton et al. 1992). At the same time, cohabitation is less diffused among people with high degree of education. This result confirms the inversion in the educational gradient in cohabitation recently found by Guetto and colleagues (2016). On the contrary, the gradient referring to the mother's educational level still persists: individuals coming from better educated families are more prone to cohabit. In addition, cohabitors are less likely to have children and more likely to be separated and widow. The residential proximity with mother's house was found to matter: young people living far away from their mother have a greater probability of cohabiting, but we do not know the direction of this association. Finally, the diffusion of cohabitation across groups of peers when the individual was 20-25 years old -i.e., the instrumental variable used for the identification of models' parameters - also matters: the higher the diffusion of cohabitation, the higher the individual likelihood to prefer cohabitation relative to marriage.

## Robustness checks and limitations

Our findings may not be valid without a series of sensitivity checks (results not shown but available upon request). First, we estimated the same models considering contacts between young adult Italians and their father instead of mother. The pattern of results remained virtually unchanged (as found for instance by Tomassini and colleagues in 2004), and for the sake brevity we presented here only results for contacts with mother.

Comparable results were obtained also performing separate analysis by respondent's gender (although with a reduced significance in the model for face-to-face contact of male adult children with their mother). Finally, we tested different formulations of the contact indicators, for instance aggregating frequency of contact in two or three categories, and again we did not find substantial differences with respect to the final models presented here.

As for the potential limitations of our study, we are aware that mother-child contacts are measured at the time of the survey, and we cannot control for the level of contacts in the past. Nevertheless, our study addresses associations between contacts and type of union, and not causality.

Table 4 – Results of the selection equation: coefficients of individual variables on the probability to cohabit (vs. to marry), Italy, 2009

	Mixed contacts		
	Coef.	s.e.	p-value
Gender (ref.: male)			
female	-0.09	0.04	0.035
Classe of age (ref.: 18-24)			
25-29	-0.12	0.15	0.402
30-34	-0.37	0.15	0.017
35-39	-0.50	0.18	0.005
40-44	-0.69	0.16	0.000
45-49	-1.15	0.17	0.000
Level of education (ref.: primary/lower sec.)			
upper secondary	-0.19	0.06	0.001
tertiary	-0.23	0.10	0.015
Occupational status (ref.: employed)			
unemployed	-0.12	0.07	0.095
other	-0.31	0.08	0.000
Economic resources (ref.: good/very good)			
poor/very poor	0.10	0.07	0.167
Religiosity (ref.: high)			
medium	0.05	0.06	0.398
low	0.33	0.08	0.000
Area of residence (ref.: North)			
Centre	0.01	0.04	0.732
South/Islands	-0.25	0.10	0.008
Presence of children (ref.: no)			
yes	-0.40	0.07	0.000
Parental separation (ref.: no)			
yes	0.29	0.09	0.001
Distance from mother's house (ref.: < 1 km)			
1-16 km	0.07	0.05	0.179
16-50 km	0.23	0.10	0.020
>50 km IT	0.15	0.07	0.041
abroad	-0.09	0.11	0.416
Previous marital status (ref.: single)			
separation	1.65	0.10	0.000
widowhood	1.80	0.32	0.000
Mother's level of education (ref.: primary)			
low secondary	0.16	0.05	0.002
upper sec./tertiary	0.19	0.08	0.013
Degree of diffusion of cohabitation	0.05	0.01	0.000
Constant	-0.83	0.17	0.000

Results refer to the model for mixed contacts, but they are consistent with the estimations for the other outcome specifications, i.e., face-to-face contact and telephone contact.

## CONCLUDING DISCUSSION

This study dealt with the important issue of how romantic cohabitation is associated with intergenerational ties. Recent studies emphasized that cohabitation may lead to a deterioration of parental ties – e.g., a reduction in the amount of emotional and material support received from parents or a reduced frequency in parents-child contact – especially in countries where the level of social acceptance and institutionalization of informal unions is low and the value placed on marriage is high (Eggebeen 2005; Yahirun and Hamplova 2014; Nazio and Saraceno 2013; Schröeder 2010). In this paper, we investigated the effects of choosing cohabitation relative to marriage on the frequency of contact with mother in contemporary Italy, a setting where cohabitation, although not still completely accepted, is increasingly wide-spreading. We addressed this issue considering three indicators of mother-child contact – face-to-face contact, telephone contact, and mixed contact – and adopting a simultaneous equation approach to account for endogeneity and selection effects.

Our results proved that adult Italians cohabitors of the end of 2000s have not necessarily a reduced amount of contacts with their mother relative to marrieds: Italian cohabitors have a lower probability to meet personally their mother on daily basis relative to marrieds, but the probability to meet her sometimes a week is higher for them; moreover, cohabitors are more likely than marrieds to have daily phone calls with their mother; overall, no differences across marrieds and cohabitors appear when considering a composite indicator of mixed contact. We may advance that when face-to-face contact is blocked for some reasons (e.g., geographical distance), it is replaced by telephone contact, suggesting a potential compensation among children who live further away from parents. Cohabitors may have a non-traditional vision of the family and of family roles, and this reflects in their daily living, working activities, or decision about the place where to live, not necessarily close to the family of origin, contrary to the Italian strong family ties tradition; they tend to have higher income, more education, and higher rates of participation in the labor market, and these characteristics may allow cohabitors to be more "independent". Nevertheless, cohabitors try to stay in touch with their family of origin changing the method of contact: phone calls are less (time) demanding, allow contacts continuously during day, and are subjected to fewer constraints relative to personal meetings. Overall, our results do not lead to the indication of deteriorated contacts mother-child for cohabitors. They rather show that contemporary societies, characterized by changes in union formation behaviors, by increase in mobility and geographical distance – for instance due to the search of job – and by changes in the labor market participation, may face changes in the way to maintain contact.

Apparently, our results partially contradict previous findings reporting a negative association between cohabitation and intergenerational contact for the Italian setting (e.g., Yahirun and Hamplova 2014; Nazio and Saraceno 2013). However, it is worthwhile to note that as for face-to-face contact, we substantially confirmed previous evidence, although with a low magnitude; besides, we added an important result about telephone contact proving that, in this case, this alternative form of contact tend to be higher for cohabitors than for marrieds. In addition, the cited previous studies referred to a period of lower diffusion and acceptance of cohabiting unions within the Italian society than the one we considered, when probably some stigma associated to unmarried cohabitation was still present. In that context, young Italians did not leave parental home to start a cohabitation without parental approval (Castiglioni and Dalla Zuanna 2009), or whether this happened, the clash with the values of parents most likely produced a deterioration in intergenerational contact (Rosina and Fraboni 2004). Although not testable due to the lack of appropriate data, we interpret the novelty of our findings relative to past results by suggesting that the slow but incessant diffusion of cohabitation in 2000s has possibly contributed to weaken the negative association between the type of partnership and intergenerational ties, for instance undermining the mechanisms of selectivity, institutionalization and uncertainty. According to Guetto and colleagues «In the Italian setting, cohabitation could only spread when parental norms became more amenable to new family behaviours» (Guetto et al. 2016, p. 4); but probably also the slow but continuing diffusion of cohabitation within the society has in turn contributed to relax the parental negative attitude towards their children's cohabitation decisions.

Relative to 2009, the year to which our data referred to, current family demography is still evolving in Italy, and although acceptance of unmarried cohabitations has not yet completely permeated the entire society, marriage and cohabitation are becoming increasingly more and more indistinguishable, year after year (Pirani and Vignoli 2016). We thus wait for more updated data in order to verify if and how the relationship between cohabiting adult children and their parents is progressing.

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