

”Always Around... Family Living Arrangements of Young Adults in Europe”

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Abstract

Comparative research suggests that there are great cross-national and cross-temporal differences in family living arrangements in Europe. In this paper, we examine young adults' family living arrangements (1) across several European countries and different national contexts, and (2) by taking into account cross-time variability. In doing so, we pay careful attention to a comprehensive conceptualization of family living arrangements (incl. extended and non-family living arrangements). The aim of this paper is to deepen our understanding of family structure and household arrangements in Europe by examining and mapping the cross-national and cross-temporal variety of young adults' family living arrangements. For our analysis we use data from the Integrated Public Use Microdata Series International (IPUMSi) for the census rounds 1980, 1990, and 2000 and for eight European countries (Austria, France, Greece, Hungary, Ireland, Portugal, Romania, and Switzerland). The analysis is restricted to young adults (aged 18 – 34) and we employ log-linear models (separate for men and women) to ascertain the influence of individual and contextual factors on family living arrangements. The analyses lend further support to a North/ West – South/ East divide in family living arrangements and general gender differentials in extended family living. Other interesting results are the heterogeneity in the family living arrangements of single mothers across geographic areas, and the upward trend of extended household living for young men and women between 1980 and 2000.

Keywords: living arrangements, young adults, IPUMS-International, transition to adulthood, Europe.

Word count: 6970

1. Introduction

Numerous demographic studies have revealed an increased diversity and de-standardization of family forms and partnership and parenthood patterns since the second half of the 20th century in Europe (Rindfuss, 1991; Corijn & Klijzing, 2001; Brüderl, 2004; Elzinga & Liefbroer, 2007; Sobotka & Toulemon, 2008; Sobotka, 2008; Billari & Liefbroer, 2010). These changes seem to follow a rather similar trajectory all across Europe – in fact so much so that they sparked theoretical discourses on the discontinuation of family as an institution. Europeans are marrying later, and more are remaining unmarried; divorce rates have increased; non-marital cohabitation and non-marital childbearing have become more common; and “new” family forms and households (i.e. step-families, living apart together arrangements) have gained visibility (Corijn & Klijzing, 2001; Brüderl, 2004; Billari & Liefbroer, 2010) .

At the same time family demographers have observed a continuity of divergence of European family living arrangements (Kuijsten, 1996; Blossfeld, Klijzing, Mills, & Kurz, 2006; Fokkema & Liefbroer, 2008). Empirical research has lent particular support to strong regional patterns across groups of countries in Europe. Western and Northern Europe, for example, are generally characterized by small households (consisting of only the nuclear family members), non-familial arrangements (particularly living alone and shared arrangements), and non-residential partnerships (Iacovou & Skew, 2011). Conversely, Southern Europe is generally characterized by large households where sons and daughters live with their parents well into their 20s and tend to leave home to marry rather than to live as singles or for informal cohabitation. The family living arrangements in Central and Eastern Europe are in many respects most similar to Southern Europe, with large households, late home-leaving, and a high frequency of multi-generational households (Ahmed & Emigh, 2005; Iacovou & Skew, 2011).

This articles focus on 1) how much diversity in family living arrangements is observable across European countries and 2) how the family living arrangements of young adults have changed between 1980 and 2000. The first question has been mainly addressed by examining a small set of family living arrangements and comparative analyses have not extensively studies extended and non-familial living arrangements (e.g.,Fokkema & Liefbroer, 2008). Our paper aims to map the extent to which young adults

are surrounded by their families in a variety of living arrangements across European countries— paying particular attention to both extended and non-familial arrangements. Furthermore, we add to the debate about whether there is an asynchrony of changes in family living arrangements between European countries and whether European diversity in family living arrangements remains.

To answer these questions we use data from the Integrated Public Use Microdata Series International (IPUMSi) for the census rounds 1980, 1990, and 2000 and for eight European countries (Austria, France, Greece, Hungary, Ireland, Portugal, Romania, and Switzerland). The analysis is restricted to young adults (aged 18 – 34) and we employ log-linear models (separate for men and women) to ascertain the influence of individual and contextual factors on family living arrangements.

2. Background

2.1. European diversity in family living arrangements

Cross-national research suggests a significant impact of relatively stable institutional arrangements— under this heading fall welfare regimes and policy environments— on young adults' family living arrangements across Europe (e.g., Daatland & Herlofson, 2003; Aassve, Mazzucco, & Mencarini, 2005; Albertini, Kohli, & Vogel, 2007; Chiuri & Del Boca, 2007; Gauthier, 2007; Albertini & Kohli, 2012; Steinbach, 2012). Esping-Andersen (1999, 2013) developed a comparative typology of welfare regimes which has gained a pivotal role in explaining how qualitatively different welfare state provisions and work and family policies across countries translate into different family structures and living arrangements. The main argument is that family living arrangements are influenced by the organisation and provision of social care, namely by the degree to which welfare regimes are either *familialistic* or *de-familialistic*. In countries with *familialistic* regimes (such as Spain, Italy, and Greece), care for children or the elderly is mainly provided by the familial household and there are hardly any family policies supporting young adults or parents. Conversely, in countries with *de-familialistic* welfare regimes (such as Denmark, Sweden, Norway, Finland, Belgium and France), care for children or the elderly is provided by the state. Young adults can thus rely on a number of governmental aids and services to live independently from their parents. Empirical findings generally underscore the importance of welfare

regimes –and their considerable and stable cross-national variation in the nature of provisions and policies– for shaping young adults' family living arrangements across Europe (e.g., Aassve, Billari, Mazzuco, & Ongaro, 2001; Breen & Buchmann, 2002; Aassve et al., 2005).

However, literature has also pointed to problems in disentangling the effect of institutional arrangements and longstanding sociocultural differences (Kalmijn & Saraceno, 2008; Billari & Liefbroer, 2010). Researchers have long pointed to systemic variation in family forms and cultures– which loosely follows a North/ West – South/East divide and remain remarkably resilient– to account for family living arrangement patterns as well as patterns of family solidarity and family obligations (Hajnal, 1965; Kertzer, 1991; Daatland & Herlofson, 2003; Hank, 2007; Kalmijn & Saraceno, 2008; Albertini & Kohli, 2012). Reher (1998) argues that Northern and Southern European countries differ with respect to family ties. In countries with *strong* family ties, there are strong norms of intergenerational support, and people are more responsive to the needs of their family members (Reher, 1998; Kalmijn & Saraceno, 2008). In addition, prolonged coresidence of children with parents in extended family households is common (Aassve, Billari, Mazzuco, & Ongaro, 2002). In countries with *weak* family ties, adult family members are more strongly committed to residential autonomy, young adults leave the parental home comparatively early, and living alone or living in nuclear households is very common.

2.2. Processes of Social Change

Europe witnessed profound and sometimes even radical changes in marriage and family life in the second half of the 20th century. In many countries, marriage and fertility rates have declined, divorce rates have increased, and unmarried cohabitation has become more common. In addition, the ways in which families live together have changed, as well. Young adults in most Western countries, for example, have postponed leaving the parental home, marriage, and parenthood, with various complex living arrangements characterizing this trend. At the same time, living alone has increased particularly among working-age adults (e.g., Sobotka & Toulemon, 2008; Billari & Liefbroer, 2010). Some theorists have posited that these weakened traditional family patterns reflect underlying value changes and an overall shift towards privacy and autonomy, coined the *Second Demographic Transition* (SDT) (Lesthaeghe,

1995). While the SDT predicts convergence of family living arrangements over time, comparative research has highlighted that there are critical interdependencies between the SDT and social policies and cultural backgrounds thus suggesting persistent cross-national diversity in young adults' family living arrangements (Kuijsten, 1996; Sobotka, 2008).

Other theorists applied a modernization and globalization perspective which underlines the increasing structural uncertainties in the domain of labor markets, finance, education, and family (Blossfeld et al., 2006; Mills & Blossfeld, 2013). From this perspective, globalization processes – specifically internationalization of markets, intensification of competition, spread of global networks, and rising importance of markets (Blossfeld et al., 2006, p. 2) – have generated labor market transformations and labor market instability (e.g., risk of unemployment, fixed-term contracts) which in turn affected family forms and living arrangements as young people have tended to remain longer in education, enter the labor market at later ages, and increasingly postponed family formation. The proponents of this globalization perspective, however, add an important specification to their model by considering country-specific and historically grown institutional settings and social structures that modify the impact of structural uncertainties. Consequently, young adults across different European countries and regions are not affected uniformly in the same way and a convergence to a new common pattern of family living arrangements is empirically not observable (Blossfeld et al., 2006; Sobotka & Toulemon, 2008). In this vein, some authors have particularly pointed to the role of welfare regimes shaping the impact of economic and social developments (Breen & Buchmann, 2002).

3. Hypotheses

The aim of this paper is to give a detailed picture of young adults' living arrangements – including extended and non-family arrangements – by examining and mapping the cross-national and cross-temporal variety of them. We address how the family living arrangements of young adults differ across European countries and how they have changed between 1980 and 2000.

(1) We expect that young adults' family living arrangements follow a marked geographical gradient. All studies which relate to the EU, share the common finding that young adults leave the

parental home earlier, households are generally small and nuclear in nature, and frequent solitary living and shared arrangements in Northern and Western Europe, less so in Southern and Eastern Europe. The latter regions show a high frequency of multi-generational households (Ahmed & Emigh, 2005; Iacovou & Skew, 2011). Among the factors advanced to explain this North/ West – South/ East gradient are differences in relatively stable welfare regimes and policies but also relatively stable country-specific sociocultural settings. If institutional arrangements (i.e. welfare regimes and policies) and longstanding historical and sociocultural continuities matter, and are persistently different along geographical axes, this should result in divergent family living arrangement patterns that follow a North/West – South/ East divide.

(2) We also expect that there is a general increased trend towards intergenerational coresidence with parents, solo living and living in nuclear households—given the globalization processes across Europe. Globalization processes and economic and social developments, however, are filtered through welfare regimes and policies, as well as through sociocultural systems. This should lead not to one uniform and linear trajectory of change in family living arrangements over time but to diverse pathways of change between countries or groups of countries.

4. Data and Methods

4.1. Sample

We use pooled census microdata for the census rounds 1980, 1990, and 2000 from eight countries (Austria, France, Greece, Hungary, Ireland, Portugal, Romania, and Switzerland) to compare the family living arrangements of young adults across Europe. We choose these eight countries on the basis of data availability, and because comparisons among them illustrate particularly well cross-national differences in family living arrangements across major European regions: North–Western (i.e. Austria, France, Ireland, and Switzerland), Southern (i.e., Greece and Portugal) and Central–Eastern Europe (i.e., Hungary and Romania). For the sake of simplicity, we refer to them as Western Europe, Southern and Eastern Europe, respectively. Despite considerable heterogeneity in family living arrangements within these major regions (e.g., Sobotka, 2008), this geographic grouping follows the longstanding sociocultural systems described,

for example, by Hajnal (1965) and Reher (1998), as well as the regional differences welfare regimes across Europe (Esping-Andersen, 2013).

The census samples were obtained from the Integrated Public Use Microdata Series International (IPUMSi) data archive (Minnesota Population Center, 2011) and consist of approximately 5% of the French, Hungarian, Portuguese, and Swiss population, and 10% of the Austrian, Greek, Irish, and Romanian population. We restrict the data analysis to young adults (i.e. men and women aged 18 – 34) because across all European countries it is in this age range that the transition to adulthood unfolds, producing variability in family living arrangements. Furthermore, we exclude those young adults living in collective households and those with missing values on the dependent variables. Missing values (i.e. refusals or don't knows) are only a minor issue, affecting at most 2% of the observations in our sample. The final sample size is $N = 6,119,500$.

The IPUMSi data are a unique source of information for cross-countries analyses at the European level due to its standardized methodology, procedure in data collection, high response rates, large sample size, and robust questionnaires. They also include a wide variety of useful and harmonized information, including indicators of household relationships – with which we construct measures of family living arrangements – and key demographic and socioeconomic factors (e.g., age and gender). Although we argue that the IPUMSi data are a useful and rich source to examine differentials and trends in family living arrangements across Europe, they have certain limitations. First, the IPUMSi data are cross-sectional and thus we cannot assess changes in the timing of – and potentially in the frequency of transitions between – different family living arrangements. Second, apart from demographic variables the IPUMSi data do not contain other relevant information that might affect young adults' living arrangements (e.g. preferences, attitudes, and family values). Third, the data do not contain information on many European countries – especially information on Scandinavian countries is not available – and IPUMSi data thus can only be used to identify changes and patterns of a small part of Europe.

4.2. Variables

We use the ‘Family Relationship Variables’ – harmonized pointer variables that identify the presence of mother, father, spouse, and children for all household members – (Sobek & Kennedy, 2009) in the IPUMSi to create nine mutually exclusive living arrangements based on partnership and parental status of the young adult, and whether the young adults live in an extended family household: (1) *With parents*; (2) *Alone*; (3) *As a couple*; (4) *As a couple with parents and/ or extended family*; (5) *As a couple with children*; (6) *As a couple with children and parents and/ or extended family*; (7) *As lone parent*; (8) *As a lone parent with parents and/ or extended family*; and (9) *Sharing with others*. An extended family household captures multiple generations (such as young adults and their parents), multiple relatives (such as adult siblings or any other relatives), non-relatives, or a combination of both living together. The category *With parents* jointly considers cases where young adults live with their parents only as well as cases where young adults live with parents and additional extended family members. The data show the vast majority of young adults (78.2%) lives with parents only.

By using this broad categorization, we aim to capture a wide variety of young adults’ family living arrangements in different stages of their life course. Because the IPUMSi data do not collect information about absent spouses or partners, our categorization is, however, limited in regard to non-standard living arrangements (i.e. non-cohabiting couples and living apart together). It is also important to note that we cannot account for multi-residence (i.e. young adults living in more than one household).²

In addition to family living arrangements we use the following categorical covariates: (1) *Country* (8 categories: Austria, France, Greece, Hungary, Ireland, Portugal, Romania, and Switzerland), (2) *Year* (3 categories: 1980, 1990, 2000), and (3) *Age* (4 categories: 18–19, 20–24, 25–29, 30–34). The means and standard deviations of the independent variables are presented in Table 1.

*** Table 1 about here ***

² In most censuses, some rules are applied in order to avoid double-counting of individuals (most often by restricting the observation of individuals to their main dwelling), but these rules do not allow for an accurate description of multi-residence (i.e., individuals living usually in two dwellings).

4.3. Modeling strategy and method

We first calculate the weighted percentage distribution for men and women by age group, year and country in order to examine prevalence and overall change in family living arrangements of young adults in Europe. Subsequently, we specify log-linear models for contingency tables to describe the associations between the variables in a standardized way and to assess whether: 1) there are cross-national differences in family living arrangements; (2) the age pattern in family living arrangements differs across countries; and (3) there are cross-temporal differences in family living arrangements.

Log-linear models are a special case of the general linear model (GLM) for Poisson – distributed data and are a powerful tool to analyze the relationships among different categorical variables – particularly for multi-way contingency tables (i.e. tables with more than 2 x 2 categorical variables) (Agresti, 2013). Log-linear models predict the expected frequencies in a contingency table, considering both main effects (that pertain to differences among the marginal probabilities of a variable) and interaction effects (that pertain to associations between variables). They are different to other GLM's in that the cell counts are the response and there is thus no formal distinction in dependent and independent variables among the categorical variables in the model.

The log-linear model for a four-way contingency table is formulated below. **L** refers to the respondent's family living arrangement (with $i = 1, \dots, 9$), **C** refers to the respondent's country of residence (with $j = 1, \dots, 8$), **Y** refers to the year (with $k = 1, \dots, 3$), and **A** refers to the age group (with $t = 1, \dots, 4$). The statistic F_{ijkl} represents the number of young adults in each cell of the cross-tabulation of family living arrangement, country, year, and age group ($9 \times 8 \times 3 \times 4 = 864$ cells):

$$\ln F_{ijkl} = \mu + \lambda_i^L + \lambda_j^C + \lambda_k^Y + \lambda_t^A + \lambda_{ij}^{LC} + \lambda_{ik}^{LY} + \lambda_{it}^{LA} + \lambda_{jk}^{CY} + \lambda_{jt}^{CA} + \lambda_{kt}^{YA} + \lambda_{ijk}^{LCY} + \lambda_{ijt}^{LCA} + \lambda_{ikt}^{LYA} + \lambda_{jkt}^{CYA} + \lambda_{ijkl}^{LCYA}$$

(1)

Because we apply effect coding, μ reflects the grand mean of all observations. In addition to controlling for marginal distributions of the categorical variables $(\lambda_i^L; \lambda_j^C; \lambda_k^Y; \lambda_t^A)$, we also account for the four-way interaction between family living arrangement, country of residence, year, and age group (λ_{ijkl}^{LCYA}) and all lower-order interactions. A particular advantage of log-linear modelling for our purpose is that we can analyze the associations between demographic variables and changes over time net of changes in demographic composition. Note that we 1) estimate separate but analogous log-linear models for men and women, and that 2) we report weighted estimates.

5. Results

5.1. Descriptive Findings

Table 2 and Table 3 show the weighted percentage distribution for men and women, respectively, by age group, year and country in order to examine prevalence and overall change in family living arrangements of young adults in Europe. We find that there are considerable regional differences: Southern and Eastern Europeans are particularly likely to live with extended family, far exceeding levels in France and Switzerland. Austria and Ireland, however, interestingly show levels of extended family living arrangements (i.e. couples with children and parents and/ or extended family) in the 30-34 age group that are very similar to those of the Southern and Eastern European countries for both men and women. Similarly, living with parents is considerably more common in Southern and Eastern Europe in the older age groups (i.e. 25–29 years old and 30–34 years old, respectively) than in Western Europe. We also find that across age groups living alone and sharing with others is generally more prevalent in Western European countries and Hungary than in Southern and Eastern Europe.

*** Table 2 and Table 3 about here ***

If we compare the results from Table 2 and Table 3 with respect to sex differences, we see that living with parents is much more common for men than for women across all countries and age groups. In addition, men are more often sharing with others or living alone. The results also show that living as a lone parent and living as lone parent with parents and/ or extended family are very much female living

arrangements. Across all countries and age groups they amount to only 2% at most for men. Women particularly live more frequently as lone parents (and thus without assistance of parents or extended family) in Austria, France, Switzerland, but also in Ireland. By comparison, there are no big differences between living as lone parent and living as lone parent with parents and/ or extended family in Romania, Portugal, and Greece.

There is an upward trend of living with parents between 1980 and 2000, but the increase for the age groups 20–24, 25–29, and 30–34 were much stronger in the Southern and Eastern European countries. At the same time, living alone increases in Austria, Switzerland, and France across all age groups, but only slightly in the Southern and Eastern European countries and Ireland. While the change over time for women generally mirrors that of their male counterparts, sex differences have not diminished over time.

5.2. Multivariate Findings

Next, we turn to log-linear modeling, based on the cell distributions in Table 2 and Table 3, to examine the associations between men's and women's characteristics (family living arrangements, country, year, and age group) while taking into account the marginal distributions of these characteristics. We estimated a saturated model (i.e. a model including all interaction and main effects) and tested, by process of backward elimination, whether any components could be removed from the model. Likelihood ratio tests (Men: LR $\chi^2 = 93,651.5$, $df = 336$, $p < .001$; Women: LR $\chi^2 = 120,464.9$, $df = 336$, $p < .001$) showed that the four-way interaction effect – and thus all lower-order interaction and main effects – have to be retained in both the men's and women's model. According to fit measures, the models we used fit the data poorly, but because of the large number of cases in our sample (Table 1) the model fit is not as relevant a criterion to us than the parameter estimates. Note that even the smallest deviations were to be found significant. Rather than interpreting all 864 parameters of the saturated model for women and men, respectively, we will focus on selected key parameters.

*** Figure 1 and Figure 2 about here ***

5.2.1 Age differences in family living arrangements by country

Figure 1 and Figure 2 present the parameter estimates for the three-way interaction between family living arrangement, country and age group for men and women, respectively. Substantively, the results indicate country patterns for different age groups: It is generally more likely in Southern and Eastern European countries that young adults in the age groups 18–19 and 20–24 are either living as couple, as couple with children, as couple with parents and/ or extended family, or as couple with children and parents and/ or extended family, whereas young adults in Western European countries are underrepresented among these younger age groups and family living arrangements. This pattern is quite similar for men and women, but we note that the age pattern for young men in Austria and Greece mimics that of Southern and Eastern Europe, and Western Europe, respectively. The results furthermore indicate as expected that both young men and women in the age groups 25–29 and 30–34 are overrepresented in the category living with parents in Southern and Eastern Europe. For young adults sharing with others, however, the age pattern is less clear and we do not see a clear North/West – South/ East divide. Similarly, the age pattern of young adults living alone in Greece is similar to those in Western Europe, and of young adults living alone in Ireland similar to Southern and Eastern Europe.

*** Figure 3 and Figure 4 about here ***

5.2.2 Cross-national differences and cross-temporal differences in family living arrangements

The results in Figure 3 and Figure 4, for men and women, respectively, show that there are considerable differences in family living arrangements across countries: Southern and Eastern Europeans are particularly likely to live with their parents and/ or extended family. This is generally consistent with our descriptive results. As a Western European country Ireland interestingly shows that young adults are overrepresented in the category living with parents, which means that they are in this respect closer to young adults in Southern and Eastern Europe. If we now look at non-family living arrangements (i.e. living alone and sharing with others), we see that these family living arrangements are overrepresented in Western Europe. Young adults are thus more likely to fall into such a category in these countries. Similarly, living as a couple is overrepresented in France and Switzerland, but not in the other mostly

Southern and Eastern European countries. Figure 3 and Figure 4 also show that young adults are more likely to live alone in France, Switzerland, and Ireland. By comparison, living as a lone parent with parents and/ or extended family is overrepresented in Southern and Eastern Europe.

The importance of the cross-national comparison becomes salient when we examine changes in family living arrangements over time in the European countries. To obtain more insight in the changes over time between 1980 and 2000, Figure 3 and Figure 4 present the positive (overrepresentation) and negative parameter estimates (underrepresentation) as red and blue arrows, respectively. For both men and women across almost all countries there was a positive upward trend in sharing with others: in 2000 it was more likely that young adults fall in that category of family living arrangement. But we also see trends over time that differed by groups of countries. Between 1980 and 2000 there was a general downward trend in Western and Southern European countries in living as couple, as couple with children, as couple with parents and/ or extended family, and as couple with children and parents and/ or extended family). Similarly, young adults were less likely to be living with parents in 2000 in these countries. In Hungary and Romania opposite changes occurred in the same time period and it interestingly shows that extended family living arrangements did not become less common here.

The changes over time are generally similar for men and women, but there are slight differences with respect to the various living arrangements of young couples. Here, the changes for women were less strong but did follow a cross-national pattern. Figure 3 and Figure 4 illustrate furthermore that there are divergent trends of living as a lone parent with parents and/ or extended family between men and women. We should be cautious, however, to draw conclusions from this, because the proportion of men living in such a living arrangement is too small. For women, we see a regional pattern that is line with the other extended living arrangements: In Western and Southern Europe lone parents living with parents and/ or extended family have become less common over time in all countries but Ireland, while it has become more common in Romania.

6. Conclusions and Discussion

This paper has focused on variation in young adults' family living arrangements across eight European countries and different national contexts, as well as taking into account cross-time variability. Drawing on IPUMSi data for the census rounds 1980, 1990, and 2000, and for eight European countries (Austria, France, Greece, Hungary, Ireland, Portugal, Romania, and Switzerland), we examined how a variety of family living arrangements (incl. extended and non-family living arrangements) varied by individual (i.e., age, gender) and contextual factors (i.e., country, year). In many respects, our research confirmed general expectations and previous comparative research on family living arrangements in Europe.

Firstly, there are considerable country differences in young adults' family living arrangements across Europe. Net of demographic controls, living in a Western European country is significantly related to living in a non-family living arrangement, such as living alone or sharing with others, whereas extended family living arrangements are much more common in Eastern Europe. This pattern is compatible with the idea of longstanding, systemic variation in family forms and cultures that follows a North/ West – South/ East gradient (Hajnal, 1965; Reher, 1998). But despite large and general differences in the overall prevalence of family living arrangements across Europe, we also found exceptions to broad regional generalizations. Ireland and Austria are much more similar to Southern and Eastern Europe – at least with respect to living with parents and living as lone parent. This might seem at odds with sociocultural settings but is compatible with the possibility that countries – via welfare regimes and policies – provide institutional support for young adults which in consequence leads to over- or underrepresentation of specific family living arrangements. It could be, for example, that a significant proportion of Southern and Eastern European young adults – namely those at younger ages, without a partner and being a single parent – are living with parents and/or extended family to rely on intergenerational assistance vis-à-vis shared living arrangements, given the smaller provision of institutional support in these countries, as prior research suggests (Chambaz, 2001; Sobotka & Toulemon, 2008; Albertini & Kohli, 2012).

Secondly, there are differences in young adults living arrangements by social groups. Men are more likely than women to be living with their parents across all countries, but in Western Europe less likely at older ages than in Southern and Western Europe. Both men and women seem to be more likely to live as couples in an extended family living arrangement (e.g., as couple with parents and/ or extended family, or as couple with children and parents and/ or extended family). This could possibly hint at the continuing importance of patrilocality for residence choices of young adults especially in that region of Europe. The biggest differences between men and women pertain to living as a lone parent and living as a lone parent with parents and/ or extended family. While probably not surprising that this is very much a female living arrangement, it is interesting to note that young women in Western Europe particularly tend to live alone and not with parents or extended family.

Thirdly, there are considerable changes over time in young adults' family living arrangements. Our analysis shows that extended family living arrangements (i.e. as couple with parents and/ or extended family, or as couple with children and parents and/ or extended family) have become less common between 1980 and 2000 in Western and Southern Europe, but not in Hungary or Romania. These results could suggest that (1) a mix of economic constraints, housing and labor markets as well as the transition to market economy in Eastern Europe have affected living arrangements of young adults or (2) that extended living arrangements are quite robust in these countries. Furthermore we found that there is an upward trend of both young men and women living with parents between 1980 and 2000, especially in Southern and Eastern Europe. In Austria, Switzerland, and France, however, non-family living arrangements have become more common at the same time too. This general trend corresponds to the common increase in youth education, later labor-market entry and insecure income and postponement of partnership and family formation; but it also relates to trends in family policies. It could indicate that young adults in Southern and Eastern Europe and Ireland stay longer with their parents and move out much later in reaction to less favorable opportunities offered by the labor market and welfare state.

For future research, we suggest to expand the analysis to more European countries in order to arrive at a more complete picture about cross-national variation in family living arrangement and its determining factors. The choice of data sources is a crucial one in this respect. Although the IPUMSi data are of particular value due to their sample size and reliable measures across countries, they do not cover the whole of Europe. It would be particularly interesting to include the Scandinavian and Baltic countries into further analysis. Second, and since this study has focused on differences between countries – a study that incorporates more complex measures of macro-level/structural factors could be particularly fruitful. Previous research lend some support to continuing historical patterns of family living and underscore the importance of considering people's frames of reference and normative orientations (Kalmijn, 2007; Saraceno, 2008). We should consider multiple factors, including nations' cultural and historical legacies, for a deeper understanding of young adults' family arrangements. A crucial task for future studies is to establish substantive ways to explore multi-level and multi-dimensional determinants of cross-national differences in young adults' family living arrangements. This means first and foremost the accurate operationalization of theoretical frameworks and its empirical testing. This will require additional methodological and theoretical work.

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Table 1 Descriptive statistics

Variable	%	N	Range
<i>Living arrangement</i>			
with parents	36.63	2,241,641	0-1
alone	7.00	428,505	0-1
as a couple	10.20	623,941	0-1
as a couple with parents and/ or extended family	2.30	140,731	0-1
as a couple with children	32.36	1,980,560	0-1
as a couple with children and parents and/ or extended family	6.05	370,198	0-1
as lone parent	1.53	93,559	0-1
as a lone parent with parents and/ or extended family	1.01	61,860	0-1
sharing with others	2.92	178,505	0-1
<i>Sex</i>			
female	49.85	3,050,434	0-1
male	50.15	3,069,066	0-1
<i>Age group</i>			
18-19	11.42	699,079	0-1
20-24	29.74	1,819,930	0-1
25-29	29.07	1,778,783	0-1
30-34	29.77	1,821,708	0-1
<i>Country</i>			
Austria	9.79	599,348	0-1
Switzerland	3.95	241,543	0-1
France	32.83	2,008,742	0-1
Ireland	4.27	261,394	0-1
Hungary	6.10	373,480	0-1
Romania	25.71	1,573,433	0-1
Portugal	6.19	379,049	0-1
Greece	11.15	682,511	0-1
<i>Year</i>			
1980	32.17	1,968,743	0-1
1990	32.51	1,989,453	0-1
2000	35.32	2,161,304	0-1

Note: IPUMSi, own calculations.

Table 3 Changing distribution of living arrangements of WOMEN in European countries by age group in 1980, 1990 and 2000

Type of living arrangement by age group	Austria			Switzerland			France			Ireland			Hungary			Romania			Portugal			Greece		
	1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000
	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %	(n) %
18-19	(n=13,051) (n=10,656) (n=9,775)			(n=3,205) (n=4,377) (n=3,588)			(n=41,837) (n=36,078) (n=38,900)			(n=4,854) (n=2,850) (n=6,972)			(n=6,518) (n=6,724) (n=6,521)			(n=26,805) (n=32,528) (n=28,298)			(n=8,264) (n=8,095) (n=7,196)			(n=12,723) (n=13,324) (n=13,498)		
with parents	80.06	84.16	87.25	73.35	80.35	84.45	75.88	80.79	77.15	87.02	86.39	86.35	56.67	68.92	75.71	64.50	76.22	81.52	80.74	87.61	88.01	72.52	85.06	84.69
alone	3.82	2.93	4.46	7.58	5.03	6.33	4.30	5.19	9.19	1.19	1.47	0.53	5.72	4.61	3.62	1.62	0.58	1.30	0.91	0.61	1.90	3.44	3.48	6.26
as a couple	4.38	3.81	3.26	4.37	3.61	2.15	8.50	4.99	3.74	1.42	0.28	0.87	6.32	4.57	2.13	8.86	3.70	2.74	4.21	2.83	2.57	5.02	2.58	1.96
as a couple with extended family	1.44	1.67	0.88	0.53	0.34	0.47	0.65	0.41	0.47	0.60	0.42	0.26	6.18	3.45	2.13	6.54	7.38	5.09	3.10	2.10	1.35	2.66	1.57	1.25
as a couple with children	3.71	1.91	1.22	2.62	0.89	0.47	3.54	1.45	1.01	2.60	0.74	0.44	8.41	4.57	2.25	9.59	4.51	3.47	5.76	3.14	2.54	8.72	3.22	1.55
as a couple with children and extended family	1.53	1.03	0.51	0.16	0.14	0.06	0.36	0.20	0.13	0.72	0.70	0.06	5.26	2.56	1.49	5.45	5.36	4.51	3.28	1.77	1.25	4.50	1.65	0.85
as lone parent	0.67	0.52	0.48	0.00	0.02	0.06	0.27	0.36	0.36	0.06	0.91	0.60	0.94	0.98	0.37	0.24	0.07	0.12	0.06	0.10	0.08	0.13	0.02	0.04
as a lone parent with extended family	2.19	1.55	1.00	0.28	0.23	0.14	0.63	0.64	0.48	0.58	0.63	0.44	1.41	1.23	0.94	1.68	1.40	1.25	1.09	1.07	1.10	0.75	0.16	0.19
sharing with others	2.19	2.42	0.93	11.11	9.39	5.88	5.87	5.98	7.48	5.81	8.46	10.44	9.08	9.12	11.36	1.52	0.76	0.00	0.86	0.78	1.20	2.25	2.27	3.22
20-24	(n=29,893) (n=31,960) (n=23,194)			(n=10,407) (n=12,507) (n=9,785)			(n=102,106) (n=88,169) (n=92,340)			(n=10,616) (n=10,590) (n=18,866)			(n=19,790) (n=16,470) (n=17,817)			(n=76,568) (n=95,215) (n=80,848)			(n=19,271) (n=18,824) (n=19,554)			(n=32,360) (n=34,750) (n=36,699)		
with parents	41.26	49.14	56.55	30.32	38.06	44.76	32.97	41.67	43.76	55.72	65.85	66.89	24.92	33.56	54.21	27.54	35.81	51.73	45.27	58.57	65.40	42.79	58.07	70.93
alone	8.21	9.49	12.18	17.83	17.87	20.49	9.54	11.93	17.40	3.62	2.67	1.23	5.34	6.96	6.32	2.22	1.73	2.52	1.31	1.75	3.77	4.20	5.29	5.94
as a couple	12.32	12.11	11.13	20.00	23.05	16.76	23.09	21.67	19.73	10.97	4.92	4.92	9.03	9.98	9.82	12.71	7.78	7.35	9.58	9.36	9.81	8.16	7.37	6.72
as a couple with extended family	2.44	2.73	2.10	1.00	1.14	0.98	1.24	0.96	1.05	1.97	2.29	1.40	5.75	4.93	4.09	6.19	8.29	7.97	4.63	4.01	2.77	2.87	2.51	2.40
as a couple with children	22.17	13.08	9.20	14.40	9.55	5.80	25.20	14.98	8.96	20.27	8.12	3.37	32.44	25.56	12.29	35.25	26.32	14.75	26.29	17.00	11.03	27.88	17.28	8.40
as a couple with children and extended family	4.98	3.25	2.39	1.11	0.58	0.41	1.37	0.90	0.58	2.69	2.03	0.47	11.94	7.23	3.72	12.14	15.25	12.60	9.59	5.67	3.49	10.55	5.83	3.08
as lone parent	2.31	3.04	2.27	0.53	0.54	0.63	1.31	1.75	1.74	0.51	2.55	2.78	2.85	3.16	1.33	0.67	0.67	0.49	0.62	0.41	0.58	0.39	0.31	0.21
as a lone parent with extended family	3.79	3.55	2.22	0.62	0.28	0.18	0.91	1.16	0.87	0.80	1.36	1.08	2.85	2.94	2.24	2.39	3.35	2.59	1.87	2.33	1.91	1.20	0.68	0.53
sharing with others	2.52	3.60	1.97	14.19	8.92	9.97	4.37	4.99	5.91	3.45	10.20	17.86	4.87	5.68	5.99	0.89	0.79	0.00	0.84	0.91	1.24	1.96	2.66	1.80
25-29	(n=25,913) (n=34,126) (n=27,292)			(n=10,891) (n=14,185) (n=11,263)			(n=101,555) (n=89,889) (n=105,254)			(n=9,879) (n=11,808) (n=16,257)			(n=21,755) (n=15,241) (n=17,817)			(n=73,376) (n=60,799) (n=81,956)			(n=17,130) (n=18,006) (n=20,128)			(n=30,921) (n=33,074) (n=37,885)		
with parents	12.65	18.51	21.59	7.55	9.31	11.01	8.32	11.31	14.06	18.67	28.67	37.00	10.82	10.10	22.73	7.84	10.23	20.35	15.24	22.55	30.29	17.39	25.16	40.77
alone	7.61	9.63	14.99	13.06	17.31	23.74	7.87	10.56	14.68	3.36	3.24	2.92	3.84	5.47	6.90	2.23	2.50	2.90	1.62	2.23	4.73	3.53	3.85	5.66
as a couple	12.56	12.96	15.50	21.65	28.04	30.47	14.40	17.92	24.20	13.72	13.44	17.11	5.81	6.57	13.50	8.35	5.88	9.23	6.48	10.02	16.86	7.52	9.19	12.90
as a couple with extended family	1.49	2.05	2.05	0.84	1.21	0.91	0.78	0.73	1.01	1.37	3.15	3.04	2.27	1.63	2.56	2.63	2.72	5.85	2.49	2.79	2.48	1.90	2.18	2.95
as a couple with children	49.43	39.28	31.49	44.30	34.99	24.82	59.95	50.41	37.03	54.84	34.50	15.73	55.50	55.47	40.80	59.55	57.05	36.24	54.90	46.23	34.63	51.21	45.24	27.88
as a couple with children and extended family	7.63	6.09	4.65	2.59	1.87	1.17	2.70	1.80	1.42	3.73	4.26	1.69	12.67	9.25	5.23	14.96	15.39	19.78	14.48	10.95	5.98	15.28	10.55	6.50
as lone parent	4.08	5.93	5.41	1.78	1.79	1.93	3.31	4.14	4.60	1.48	3.63	4.97	4.95	6.63	4.08	1.61	2.36	1.68	1.79	1.59	1.62	1.04	1.30	1.06
as a lone parent with extended family	2.83	3.20	2.62	0.79	0.42	0.24	1.01	1.20	1.08	0.91	1.45	1.68	2.68	3.30	3.07	2.32	3.37	3.97	2.20	2.90	2.30	1.37	1.30	1.29
sharing with others	1.71	2.35	1.71	7.45	5.05	5.72	1.66	1.93	1.91	1.93	7.66	15.85	1.47	1.57	1.13	0.52	0.50	0.00	0.79	0.74	1.12	0.76	1.23	0.99
30-34	(n=26,287) (n=30,227) (n=33,012)			(n=12,055) (n=13,331) (n=13,792)			(n=104,413) (n=89,597) (n=107,362)			(n=9,448) (n=12,188) (n=15,066)			(n=18,567) (n=19,308) (n=15,508)			(n=58,303) (n=75,742) (n=95,650)			(n=16,112) (n=17,738) (n=19,075)			(n=31,289) (n=34,120) (n=39,879)		
with parents	5.11	7.52	8.43	3.36	3.32	4.13	3.98	4.20	5.55	8.81	11.70	16.95	6.05	5.40	7.26	3.86	4.07	8.43	8.94	9.48	11.34	8.69	9.81	17.13
alone	5.65	7.86	11.15	8.67	11.77	16.23	5.47	6.97	9.79	2.73	3.22	4.27	3.22	3.98	4.78	1.79	2.42	2.59	1.59	1.97	3.92	2.52	3.22	4.91
as a couple	8.47	8.83	10.88	12.09	16.92	20.48	6.77	7.79	10.12	5.33	7.99	15.72	4.32	4.24	6.40	5.94	4.05	5.70	3.66	4.47	8.71	4.69	5.81	9.56
as a couple with extended family	0.87	1.09	1.15	0.62	0.77	0.65	0.49	0.37	0.47	0.66	1.51	2.18	1.20	1.09	0.80	1.60	1.19	2.62	1.22	1.18	1.24	1.41	1.39	2.43
as a couple with children	61.94	55.80	50.73	62.89	57.19	49.02	72.54	69.29	61.90	74.02	59.17	41.38	62.71	62.63	65.45	66.56	67.96	53.59	63.33	64.44	59.91	61.00	62.10	50.66
as a couple with children and extended family	8.75	7.15	5.54	4.35	2.95	1.73	3.76	2.44	2.02	3.34	6.41	3.82	12.78	8.78	3.71	15.19	12.68	18.81	15.34	11.99	8.00	18.28	13.07	9.72
as lone parent	5.97	7.64	9.01	3.78	3.70	4.74	5.16	6.69	7.91	2.33	4.82	6.19	6.33	10.18	8.49	2.69	4.40	3.94	2.99	3.28	3.44	1.86	2.61	2.94
as a lone parent with extended family	2.05	2.60	2.09	0.94	0.56	0.40	0.88	0.99	1.12	0.79	1.58	1.79	2.50	3.04	2.62	2.07	2.88	4.33	2.22	2.72	2.59	1.30	1.51	1.96
sharing with others	1.18	1.52	1.01	3.30	2.84	2.62	0.96	1.25	1.10	1.99	3.59	7.69	0.88	0.67	0.49	0.31	0.35	0.00	0.73	0.47	0.85	0.25	0.49	0.70

Note: Unweighted n and weighted percentages.

Source: IPUMSi.

Figure 1 Lambda parameters for the three-way interaction (LCA). MEN



Source: IPUMSi, own calculations.

Note: The figure displays the parameter estimates for the three-way interaction between family living arrangement, country and age group (λ_{ijt}^{LCA}). We only considered parameter estimates that differed 10% or more from the overall grand mean. Dark grey and big circles represent positive parameter estimates (overrepresentation) and light grey and small circles represent negative parameter estimates (underrepresentation).

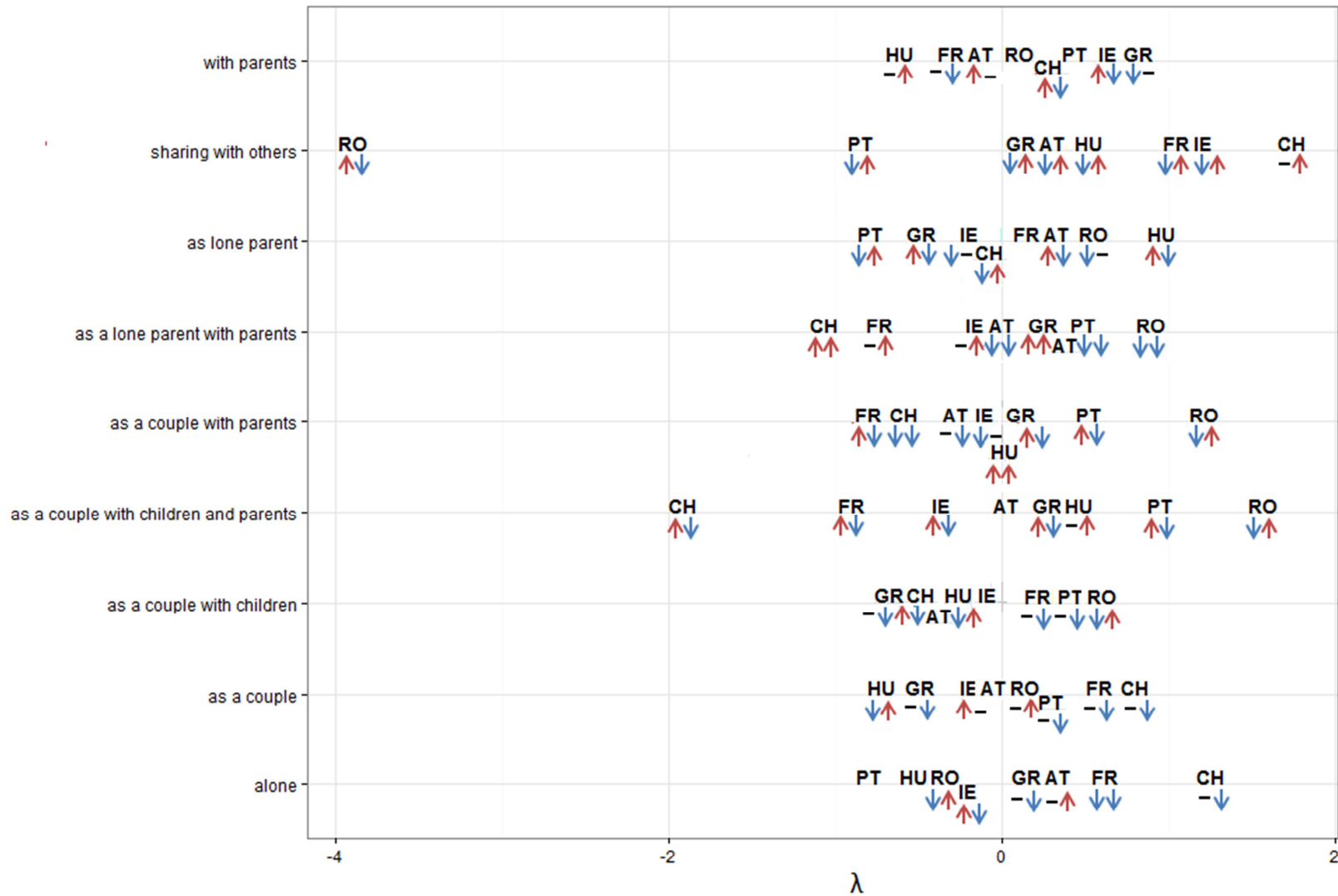
Figure 2 Lambda parameters for the three-way interaction (LCA). WOMEN



Source: IPUMSi, own calculations.

Note: The figure displays the parameter estimates for the three-way interaction between family living arrangement, country and age group (λ_{ijt}^{LCA}). We only considered parameter estimates that differed 10% or more from the overall grand mean. Dark grey and big circles represent positive parameter estimates (overrepresentation) and light grey and small circles represent negative parameter estimates (underrepresentation).

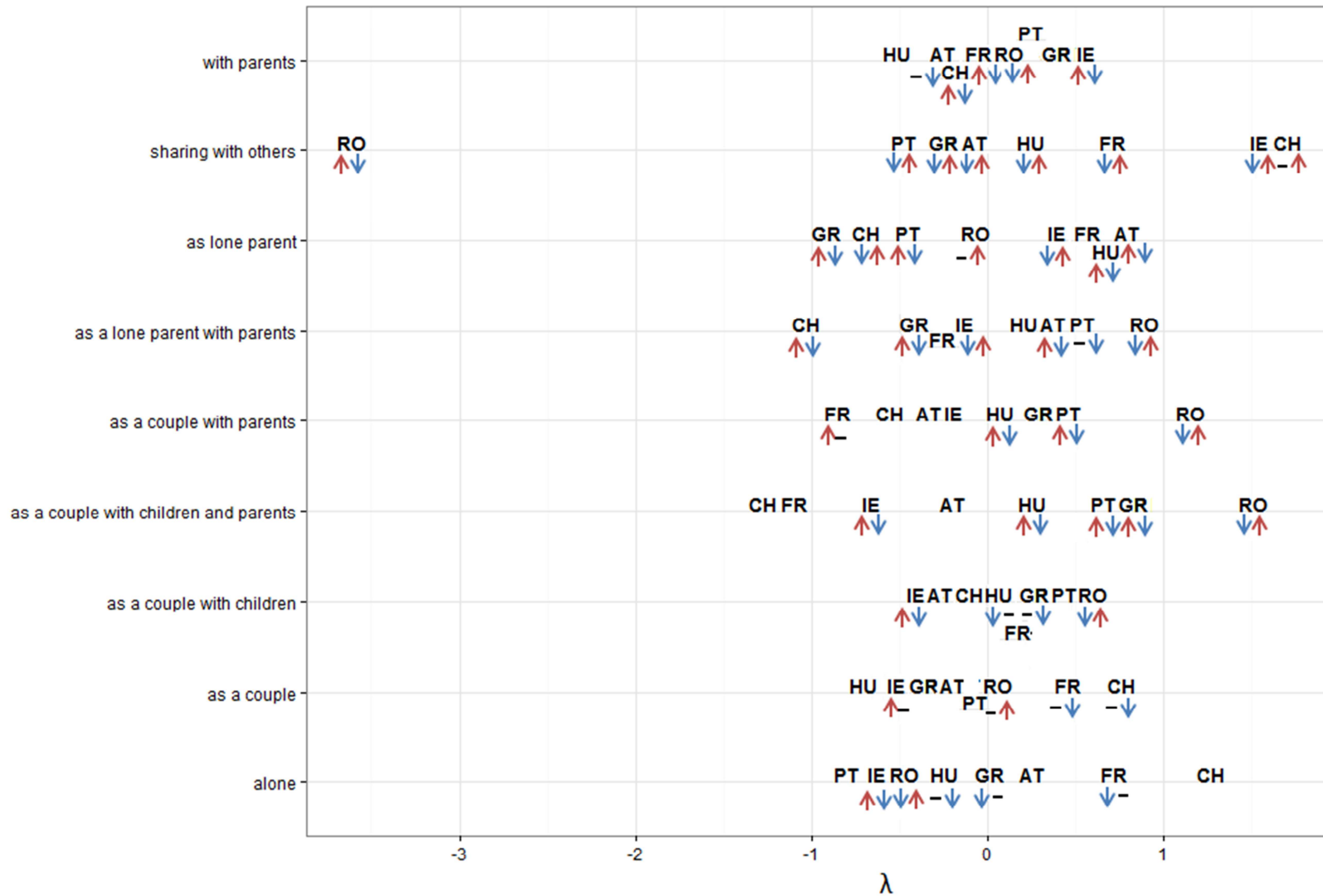
Figure 3 Lambda parameters for the two-way (LC) and three-way interaction (LCY). MEN



Source: IPUMSi, own calculations.

Note: The figure displays the parameter estimates for the two-way interaction between family living arrangement and country (λ_{ij}^{LC}), and for the three-way interaction between family living arrangement, country and year (λ_{ijk}^{LCY}). We only considered parameter estimates that differed 10% or more from the overall grand mean. Positive parameters display overrepresentation and negative parameters underrepresentation with regard to the two-way interaction. Blue and red arrows display under- and overrepresentation, respectively, for the three-way interaction.

Figure 4 Lambda parameters for the two-way (LC) and three-way interaction (LCY). WOMEN



Source: IPUMSi, own calculations.

Note: Note: The figure displays the parameter estimates for the two-way interaction between family living arrangement and country (λ_{ij}^{LC}), and for the three-way interaction between family living arrangement, country and year (λ_{ijk}^{LCY}). We only considered parameter estimates that differed 10% or more from the overall grand mean. Positive parameters display overrepresentation and negative parameters underrepresentation with regard to the two-way interaction. Blue and red arrows display under- and overrepresentation, respectively, for the three-way interaction.