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ABSTRACT

Family Values, Social Needs and Preferences for Welfare^{*}

This paper investigates the links between family values, social needs and individual preferences for welfare using data from the 2005 French “Generation and Gender Survey” (GGS). We analyse individual preferences, for financial assistance and the provision of care services, with respect to welfare support as opposed to within household production. The strength of family ties is based on individual’s self-assessed family values (such as, duties, responsibilities and norms of reciprocity), both within the couple and between parents and children. We find a positive association between weak (strong) family values and the preferences for welfare state support (provision of domestic services). The relevance of family values is shown to be invariant to different socio-economic circumstances, such as: financial distress, bad health or family size. Using long term cultural determinants of selected ethnic and religious groups as instruments for family values, we also provide evidence for causal effects.

JEL Classification: J12, J13, I31, I38

Keywords: family values, preferences for welfare, culture, religion

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1. Introduction

Family values and family ties are important institutions which, among others, affect various economic decisions. Human capital investment, as well as many other labour market and credit market choices - such as type of job, wages and career opportunities, home ownership and financial wealth - are taken within the family and strongly depend on family values. Although in the last few decades, in most industrialised countries, many things have changed in relation to female labour market participation, falling birth rates, increasing divorce and cohabitation rates, as well as erosion of family values; still the family, as an institution, is at the core of most economic and social behaviour (Goldin, 2006; Lundberg and Pollak, 2007).

In this respect, while in sociology there is a long standing tradition in the analysis of family organisation and behaviour (Durkheim, 1888; Elster, 1989; Esping-Andersen, 1999), in economics the relationship between family values and economic outcomes is more recent (Becker, 1981; Algan and Cahuc, 2007; Giuliano, 2007; Alesina et al., 2010). In a number of recent studies, strong family links have been shown to reduce female labour market participation, foster fertility, increase home production and reduce reliance on the market, facilitate risk pooling among household members and influence both civic engagement and political participation (Alesina and Giuliano, 2010; 2012; 2011; Ljunge, 2011). What has been less investigated in the literature is the role of family values in shaping preferences for welfare assistance. In particular, given that individuals and households face different types of social needs over the life cycle, which may or may not be of pecuniary nature, such as (just to name a few): child care, elderly support, unemployment and (negative) income shocks, it seems interesting to investigate to what extent household members prefer to deal with those needs within the family (direct care or income transfer), whether they do resort to the market (borrowing and buying services) or, finally, if they expect society (or the welfare state) to take care of them (public child/elderly care or welfare benefits). Family values, that is the reliance of family members on a set of norms of reciprocity within the couple and between parents and children, are likely to influence the need and desire to resort to the market or to society and the welfare state for insurance. Since strong family ties produce social insurance, it is argued that where family values are stronger, demand for welfare support and state intervention is lower.

In this paper, we investigate the links between family values, social needs and preferences for welfare assistance using data from the 2005 French "Generation and Gender Survey" (GGS). The focus on one single country has the advantage to minimise confounding factors

associated to institutional differences (taxation, structure of welfare) which may contaminate the relationship between family values and preferences for welfare assistance. Social needs cover both financial support and the provision of care services and for each of them individual's preferences are retrieved comparing welfare assistance with services provided within the household. Family values are measured using a wide range of indicators based on individuals' self-assessed measures of duties and responsibilities within the couple and across generations (such as, parents obligations *vis-à-vis* their children and *vice versa*), as well as reciprocal care assistance or financial support.

The contribution of this paper to the existing literature is as follows. First, we show that there is a positive association between weak (strong) family values and preferences for the provision of services by society or the welfare state (within the household). Second, while in the literature preferences for welfare and redistribution are usually identified with reference to rather general questions, we investigate several dimensions of social needs, such as: care for children or elderly, financial assistance for those in needs. We find a positive association between weak family values and preferences for provision of care services by society and the welfare state. To put it differently, strong family values are associated to preferences for the provision of such services and financial assistance within the family. Also, we find that different dimensions of family values correlate to different types of social needs, such as care and financial support. The association between family values and preferences for welfare assistance does not differ significantly across groups of individuals characterised by different socio-economic circumstances - such as credit rationing or large family size – thus refuting the hypothesis that individuals value the family links more only when in need or when they are constrained. Finally, we address the issue of causality using long term cultural determinants of selected ethnic and religious groups as instruments for family values. Since culture and religious beliefs are grounded in the home country social norms or in religious beliefs and are persistent, we use them to identify the causal effect of family values on preferences for welfare or family support. In this respect, in line with previous findings, we find evidence that weak family values are causally related to preferences for welfare support, although in some cases estimates are less precise.

The structure of the paper is as follows. Section 2 presents a review of the literature. In section 3, we describe the data and the family indicators that we use in the empirical analysis. The main set of results is presented in section 4, while section 5 concludes.

2. Family Values and Economic Outcomes

A large body of literature within the social sciences has investigated the theoretical implications of the family as an institution for the functioning of markets and individual behaviour. Since the seminal work of Becker (1981) on the foundation of the economics of family, the literature has developed significantly covering a large range of issues, only to name a few: mating and family formation (Pollak, 1985; Lundberg and Pollak, 2003); marriage and fertility (Lundberg and Pollak, 2007; Stevenson and Wolfers, 2007), allocation of time within the household (Burda et al., 2008), family and welfare reform (Bitler, et.al. 2004; Lundberg, et.al. 1997; Di Tella and MacCulloch, 2002), family and intergenerational transfer (Cigno, 1993) with also numerous empirical applications (see Lundberg, 2005, for a survey).

Despite its composition and size, there is significant heterogeneity across countries, ethnic groups and religious beliefs in the set of norms that regulate duties, obligations and reciprocity rules in the family: both within the couple and between parents and children. These norms are often implicit and coded by the group itself and range from division of labour and priority rights to employment in the household, obligations to support younger (older) generations by means of pecuniary transfers, as well as child and elderly care. Depending on how these norms are valued by families, the social and economic outcomes are likely to be different.

Our paper is related to two different lines of research. The first is linked to the literature investigating the relationship between family values, social norms and more generally culture and their effect on various economic outcomes.¹ Within this line of research, family ties have been rationalised as a second-best solution in environments characterised by weak legal structures, lack of general trust and corruption, in this context reliance on family members can serve as substitute for market failures and other negative externalities. The studies concerned have tried to explain why social norms may imply a different reliance on family members face to social needs and influence a wide range of economic outcomes, such as: labour market participation, home production, fertility, firm size, trust, political participation and growth. Cross-country heterogeneity in family culture have been shown to be able to explain a large portion of the divergent employment rates (particularly for women, young and older workers) during the last decades in OECD countries, also stronger family values appear to be

¹ While economists have been in general reluctant to refer to values or culture as a possible determinant of economic phenomena, there is an increasing literature which addresses these problems. See for example: Guiso, et al (2006); Tabellini (2010); Algan and Cahuc (2009)

systematically related to existing differences in household outcomes *vis-à-vis* labour market participation, total hours worked, home production, as well as less preferences for welfare assistance and social insurance (Bertrand and Schoar, 2006; Algan and Cahuc, 2007; Fernández and Fogli, 2006; Burda et al., 2008; Alesina and Giuliano, 2010). Strong family values also imply the existence of intergenerational transfers between young adults and their parents, such as a range of direct (pecuniary) or indirect costs (care): child-rearing, investment in education, bequests to children or grandchildren, support of elderly parents. Alternatively, intergenerational transfers may take place through the welfare system when tax receipts are used to provide public education, public pensions, welfare subsidies, health assistance, or other programs.² A number of studies have contrasted the experience of Mediterranean countries, where family values held are generally higher, to Northern and Anglo-Saxon countries, where family values are the weakest, to analyse the insurance mechanisms households can adopt face to business cycle shocks and the resulting patterns in income, consumption, as well as cohabitation, marriage and fertility decisions. Results show that in Mediterranean countries individuals seek insurance within the family (i.e. children tend to remain longer with their parents), as they can benefit from household consumption avoiding the uncertainty and the credit constraints they would face away from home; while in Northern and Anglo-Saxon countries social insurance mainly comes from the welfare state (i.e. ‘extensive’ in the case of Northern countries, ‘residual’ in Anglo-Saxon countries)³. Interestingly, the effect of an unemployment spell on household consumption is found to be similar across the different set of countries, suggesting that family support and the welfare state, face to economic shocks, can be considered as substitute (Fogli, 2004; Bentolilla and Ichino, 2008; Giuliano, 2007)⁴. In this respect, Becker and Murphy (1988) have developed a framework linking the provision of public education and public pensions, as a way of inducing efficient investments in education when family values (i.e. parents' altruism) is insufficient and credit markets are imperfect. Preference for a wider welfare system

² There are of course other means of redistribution which may be imposed indirectly by the State, when debt is incurred today for future consumption type expenditures (rather than capital items), debt which must be repaid or serviced by future generations.

³ Alesina and Giuliano (2010) show that strong family ties, by increasing mobility cost (i.e. moving away from home), expose individuals to monopsony power of firms. They explain the prevalence of regulated labour markets as a second best solution to constrain firms' monopsony power, at the expense of significant efficiency losses (i.e. lower employment and income). They find that stronger family ties are associated to lower mobility, lower wages and higher labour market regulations.

⁴ Alesina and Giuliano (2011) investigate the relationship between family ties and social values, such as trust and political participation. They argue that when individuals consider the family as main provider of care services and income support, the civic values and political participation are weak.

compensate for the lack of family values as children who received education will repay their parents through their contributions to the welfare system.

The second line of research is related to the investigation of individual preferences for welfare assistance. While households are likely to be confronted with different types of social needs over the life cycle, preferences for redistribution and welfare support will depend, among others, on a number of different features: the relative position in the income distribution, the degree of altruism, dislike for (in)equality and the extent of social mobility. In this literature, demand for insurance against social risks is the main motivations of the existence of a welfare state (Rawls, 1971). However, individuals are heterogeneous *vis-à-vis* the type of risks to be insured, the sources of inequalities and the extent of redistribution which is desirable. Several papers have investigated individual attitudes towards redistribution and welfare support using self-reported preferences for taxation and welfare spending. When differences in total income to a large extent are attributed to luck, then redistribution and higher taxation are considered socially acceptable, hence taxes are high and individuals end up working and investing less. Alternatively, when differences in total income are largely attributable to effort (rather than luck), then taxation is lower and redistribution is more limited. In this context, effort and investment in productive activities are generally higher (Alesina and Angeletos, 2005; Alesina and Glaeser, 2004; Alesina and La Ferrara, 2005)⁵. It is argued that imperfect rationality and concern for the welfare of others (non-affective altruism) may result in over-spending on private consumption and under-provision of welfare and public goods. Recent evidence on happiness and quality of life also tends to support the above conclusions (Ng Yew-Kwang, 2000; Boeri, et al., 2001, 2002; van Praag and Ferrer-i-Carbonell, 2008).

What has received less attention in the literature reviewed above is the role of family values in shaping preferences for welfare assistance. Since strong family ties produce social insurance, it may be argued that where family values are stronger demand for welfare support and state intervention will be lower. Alesina and Giuliano (2010) provide direct evidence that strong-family-ties societies rely more on the family than on the market and the government for insurance with respect to social needs. Using individuals' replies, from the World Value Survey to alternative statements with respect to taxation and social welfare (i.e. high/low taxes and extensive/small social welfare), they show that weak family ties are positively correlated with preferences for extensive social welfare. In other words, they find support for

⁵ Luttmer and Singhal (2011) ask whether culture is an important determinant of preferences for redistribution. Using data for 32 countries, they relate immigrants' preferences for redistribution to the average preference (culture) in their birth countries, and show evidence of a strong positive relationship. The effect of culture on preferences for redistribution persists also for second generation immigrants.

the hypothesis that where family values are strong, households take responsibility for themselves and prefer to deal with social needs within the family rather than expect the market or the state to take care of them. Esping-Andersen (1999) introduces the notion of "familialism" to characterise the degree of welfare obligation to the family. In that context, family involvement in internalising social needs is maximum, and female unpaid work is the major source of welfare. Hence, in classifying welfare systems according to the size and degree of services provided (i.e. Social democratic, Liberal, Continental European, Southern European), he finds that there is an inherent trade-off between familialism and the welfare state and that this combination is most prominent in Mediterranean countries.⁶

3. The Welfare System in France

The extent to which individuals and families look for welfare state assistance also depends on its characteristics, the degree of generosity and the quality of services. In the case of France, the welfare system provides extensive support in terms of care and financial assistance for the different types of social needs (e.g. direct care and financial assistance) that are considered in our study. A National health system provides widespread coverage for both general and occupational illnesses through a mixed public-private insurance system (*Caisse assurance maladie* and *Mutuelles d'assurance*). A generous retirement scheme (*Caisse assurance vieillesse des travailleurs salariés*, CNAVTS, being the main one) offers extensive coverage to retired workers, with a minimum retirement age of 60 (recently raised to 62) and high replacement ratios. The above health and retirement insurance schemes, however, are organised in numerous occupational schemes providing a different degree of insurance to covered individuals which is deemed to replicate social stratification (Algan and Cahuc, 2009). There is a system of family allowances structured in terms of tax cuts and benefits for housing (e.g. for household with two children and more) and particular needs (such as financial distress and people with handicap). Income support is also granted by a general scheme of statutory minimum wage (*Salaire Minimum Interprofessionnel de Croissance*, SMIC) and minimum guaranteed income (*Revenu de solidarité active*), the latter providing extensive coverage to all individual below the poverty line. The welfare system is financed through a two-tier system, whereby on top of general taxation (income tax and social charges) there is a system targeted to general social contribution (*contribution sociale généralisée*, CSG). Extensive care assistance to pre-school age children is also offered to families through

⁶ Esping-Andersen also argues that familialistic regimes are heavily influenced by the Catholic social teaching tradition and the principle of 'subsidiarity', which sees the 'family' as primary form of social network.

state funded nursery school and tax cuts for employers of nannies or domestic workers. In terms of care to elderly, the French government is discussing the introduction of a new branch of social protection (the so-called *cinquième risque*) to cover old-age dependence in terms of illness and disability. Hence, in terms of welfare policies and spending the French system can be characterised as fairly universal and generous in terms of protection against social needs, implying a lower need to resort to the family network for care or financial assistance. This view of welfare generosity and universality based on statutory rights has been challenged face to the progressive retrenchment of welfare entitlements which have reduced individuals' access and coverage to welfare programmes. Scruggs (2006) reviews the generosity of welfare systems (in terms of health, retirement and unemployment insurance) in 18 OECD countries comparing statutory entitlements with actual coverage (i.e. conditions for people to actually claim benefits and assistance) and replacement rates (i.e. some benefit-income ratio). His measure of generosity is reported in Figure 1, where France ranks in the lower tiers within OECD countries.

Seen in this context, of less than universal access to welfare assistance and unequal treatment across occupational groups, family ties can provide an important source of insurance against social risks.

[Figure 1 – Around here]

4. Data and Family Indicators

The data used in this study are drawn from the French sample of the 2005 "Generation and Gender Survey" (GGS), covering 10,069 individuals.⁷ The questionnaire provides a comprehensive description of the individual, household organisation, relationship with parents and self-reported views on different items. In particular, one section of the survey is devoted to value orientations and attitude questions, such as: religion, views on marriage, views on children education, attitudes on inter-generational relationship and attitudes towards gender related issues. With reference to a number of social needs, the questionnaire records individual preferences for care and financial assistance to be provided by society or by the family. Finally, information on incomes, wealth, and economic deprivation are also collected. We use this information to investigate to what extent household prefer to deal with social needs within the family (direct care or income transfer), whether they do resort to the market

⁷ In France the survey has been administered by the *Institute National d'Etudes Demographiques* (INED). See Vikat et al (2007) for extensive documentation on the GGSurvey.

(borrowing and buying services) or expect society and the welfare state to take care of them (public child/elderly care or welfare benefits). The specific social needs we consider in this study are summarised in the questions reported below, while the name of the variables used in the empirical analysis is given in parentheses.

“There can be different opinions on how we should deal with people in our society. Assuming that the family has the possibility, who do you think should take charge of ...”: (i) Care for older persons in need of care at their home (*care_old*); (ii) Care for pre-school children (*care_preschool*); (iii) Care for schoolchildren during after-school hours (*care_afterschool*); (iv) Financial support for older people who live below subsistence level (*fin_oldpeople*); (v) Financial support for younger people with children who live below subsistence level (*fin_youngparents*). The first three indicators concern social needs related to care services for young children and older people, the latter two cover financial support for either young or old people.⁸ The indicators are defined over a Likert-type five-points scale, in which the lowest category corresponds to the family and the highest category to society. To illustrate better how we construct our preferences indicator, consider the statement *“financial support for older people who live below subsistence”*, the indicator *fin_oldpeople* will score a value of 1 if it is preferable that 'older people in financial need' find assistance within the family; alternatively if the individual thinks that society should be in charge, then the score of the indicator will be 5. Hence a higher score for each of the above indicators denotes a preference for society and welfare state support, an intermediate level can be interpreted as indifference between family and society, while a lower score is that family should be in charge. Note that the preferences retrieved with the above questions are independent of taxation, that is: when individuals state a preference for household support, as opposed to welfare state provision, this should not be interpreted as preference for lower taxation or less redistribution. Table 1 reports the distribution for the five indicators in terms of preferences for care and financial assistance by society or family. The distribution of preferences reveals a clear dichotomy between care and financial assistance.

[Table 1 around here]

When asked about care of children or elderly between 50 and 65 per cent of people report a strong preference for family assistance, conversely when asked about financial assistance less

⁸ Even if the indicators above refer to different types of social needs, the underlying preferences are (positively) correlated. Pairwise correlation among the indicators range from 0.6 to 0.9.

than 20 per cent thinks that the family should support financially those (young parents or old people) in need.

Do individuals with high family values prefer to receive assistance within the family, or they resort to society and welfare state support? To properly address this question, we need to be precise in defining the nature and relevance of family links. In the paper we use the term household for individuals who live in the same place and are related by birth, marriage or cohabitation. The term "family" has been used more broadly to include closely-related individuals (in couple, and parents versus children) who may or may not live together, but share a number of social norms and are linked by a common set of duties and responsibilities. Moreover, members of a family are expected to provide mutual care assistance or financial support and to reciprocate help of others. In a review of the literature, Lundberg and Pollak (2007) when suggesting new challenging areas to focus research within the field of the economics of family recommended the following: "[...] *those between men and women, and those between parents and children*". We construct our family values along the couple dimension (married or cohabiting) and the intergenerational dimension (parents *versus* children and vice versa). We rely on a large set of questions and use self-reported measures on value orientations and attitudes concerning the relationship with the partner and children with parents (or the opposite). Individuals have to state whether they agree or not with a number statements reported on a scale from 1 (totally agree) to 5 (totally disagree). Two summary indicators are constructed out of each set of simple questions:⁹ couple values and division of tasks within the couple (*cpl*); duties of children toward parents and parents toward children (*interg*).

To construct the indicators, we choose to simply add up the values of each single item and then standardize it. The two indicators have been constructed such that a lower (higher) score corresponds to stronger (weaker) family value, and normalised so that they can be compared¹⁰. Individuals are classified as having strong family ties in "couple" if they replied, for example, that they totally agree with the statement "*Marriage is a lifetime relationship and should never be ended*" alternatively "*A child needs a home with both a father and a mother to grow up happily*", or "*When jobs are scarce, men should have more right to a job*

⁹ The single indicators with the exact wording of the questions are reported in the appendix A5. In some cases, the ranking of values has been inverted to be consistent with the values of the other items

¹⁰ In practice the following standardisation has been used, $\left(\frac{x_i - \bar{x}}{\sigma_x} \right)$; where x is the indicator of interest, \bar{x} is the mean and σ is the standard deviation. We also used principal component analysis to extract a score out of the first factor; the results were similar to those obtained with the previous indicators.

than women". With reference to the duties of children *vis-à-vis* their parents individuals were classified as having strong "intergenerational" family ties if, for example, they replied that they totally agree with the statement "*Children should take responsibility for caring for their parents when parents are in need*" or "*If their adult children were in need, parents should adjust their own lives in order to help them*".

Table 2 reports the proportion of individuals who, on the basis of the above indicators, reported to have high family values (i.e. totally agree or agree with the statements)¹¹.

[Table 2 – around here]

Percentages, with few notable exceptions, do vary significantly across different groups, particularly with concern to regard couple values. The proportion of males with high traditional family values is higher than for females. Youngest, more educated or single individuals show significantly weaker couple family values. Differences in terms of intergenerational family values are less pronounced, except for those aged 60 years and more who have higher intergenerational values.

4. Empirical Analysis and Main Results

We empirically analyse whether individuals, who consider the family as a social institution with specific duties and responsibilities for reciprocal care and financial support, are more (or less) likely to prefer society (and the welfare state) to take care of social needs, as opposed to receive informal assistance within the family. We model the relationship between individual preferences and the set of family values indicators, as a probability model and estimate it in two alternative ways.

First, since the dependent variable is categorical and ordered (i.e. preferences for family/welfare state), we estimate an ordered probit model. Second, we use the Probit adjusted ordinary least squares (POLS) method, whereby we linearize the categorical dependent variable using the expectation of a double truncated standard normal variate (van Praag and Ferreri-i-Carbonell, 2004).¹²

The empirical model is specified as follows:

¹¹ Formally the proportion of individuals with high family values corresponds to the proportion of individuals with a negative value of the indicators.

¹² In practice, the transformation applies to the truncation points derived from the marginal distribution of the preference indicator Y_i . One advantage of the POLS method is the possibility to implement 2SLS estimation to account for endogenous regressors. See van Praag and Ferreri-i-Carbonell (2004) for further details.

$$\Pr(Y_i = j | Fam, X) = \Omega(\alpha + \gamma Fam_i + X_i' \beta) \quad [1]$$

where the left hand side variable Y_i represents any of the preference for family *versus* welfare indicators (*care_old*, *care_preschool*, *care_afterschool*, *fin_oldpeople*, *fin_youngparents*) defined over a five-point scale (j) for individual i . Family variables, Fam_i describe individual's values both within couple and across generations (*interg*, *cpl*), while X_i is a vector of controls for personal characteristics, labour force circumstances and other household attributes. All regressions include the following controls: gender, age, marital status, number of children, education, partner's education, labour market status, hours worked, (bad) health conditions, individual (equivalised) income,¹³ an indicator of financial distress, to have at least one living parent more than 65 years and living in a city. Variable definitions and descriptive statistics are reported in the Data Appendix (Table A1). Table 3 reports the main set of results estimating equation [1] with ordered probit (panel a) and POLS (panel b) methods, separately for each of the five preferences indicators (columns 1 to 5).

[Table 3 around here]

To preserve space, we only report the results for the family indicators (the full set of results is reported in Table A2 in the Appendix).¹⁴ Given the nature of the dependent variable, the estimated coefficients in the tables have only qualitative content. Family values turn out to be an important determinant of individual's preferences. Weak family values are always statistically significant and show a positive association to preferences for society and welfare state support. This holds even after controlling for a large set of personal characteristics and household attributes. To put it differently, individuals who value strong ties among partners and share traditional values within the couple (such as marriage, having children, no-divorce, etc.) prefer that care services are provided by the household. The effect of intergenerational family ties is particularly strong with respect to all social needs indicators considered, either preferences for care or financial support. Strong intergenerational links within the family (such as norms of reciprocity between parents and children, and *viceversa*) shape preferences for care and income support favouring household's support rather than the welfare state. The effect of other controls is also interesting. The gender variable indicates that males, compared to females, prefer that care of children is provided within the household, particularly if they

¹³ Individual income has been computed using simple equivalence scale, household income has been divided by the square of total household members.

¹⁴ For ease of presentation, the estimated thresholds are not presented in the estimation table.

are pre-school age. The reverse is found when care services concern older people, where males are more likely to prefer welfare state support. The effect of age is only relevant for preferences over financial type of needs: older people seem to prefer that financial matters are dealt within the support of family members. More educated individuals, when confronted with care services or financial assistance, behave differently. Highly educated individuals, *ceteris paribus*, are more likely to prefer welfare support from the state to take care of their children (pre or post school age), while in case of financial needs this should come from within the family. The first result probably hides a labour supply effect, since more educated people (females in particular) are more likely to participate to the labour market. The second finding, seems to indicate that educated people are willing to pool resources within the family and transfer them to those component who happen to be in need. The same effect is detected with (equivalised) individual income. People in need, such as the unemployed and those with bad health conditions, prefer to receive financial support from the welfare state, while no statistically significant effect is detected for care services. Finally, there is a clear urban non-urban divide, individuals living in large cities show a marked preference for state support in terms of care services, while no differences are detected for financial support. The above results highlight the existence of a significant heterogeneity in individuals' preferences according to both the type of social need involved as well as demographic attributes, household characteristics and labour market circumstances.

4.1. Heterogeneity and robustness checks

In this section, we address the question of the heterogeneous effects of family values under different social and economic circumstances. It has been argued that individuals are more likely to value family links when in need – i.e. rationing in the provision of care services for children or elderly – or when they are somewhat constrained – i.e. credit is rationed or too costly. We investigate this hypothesis considering a number of circumstances that characterise the socio-economic needs of individuals and households, such as: financial distress, bad health conditions and big family size. In particular we interact our family indicators, respectively, with: a dummy variable recording financial distress (*finshock*=1), a dummy variable for bad health (*health*=1) and a dummy variable for large family – i.e. 3 children or more (*big family*=1).

Table 4 reports the estimated coefficients of our family values for the different socio-economic circumstances described above. We find no statistically different effects of intergenerational links and family values in the couple between the various socio-economic

circumstances considered. This evidence seem to suggest that individuals do not value family links only when in need or when rationed.

[Table 4 around here]

To assess the robustness of the above findings, we also run a number of sensitivity checks on our preferred equations (results are reported in table A3 in the Appendix). First we replicated our estimations adopting a different definition for our dependent variable (table A3 panel a). In particular, we replaced variables recording individuals' preferences for welfare support with simple binary indicators taking value 1 when strong preferences for welfare state were reported (values 4 and 5 of the original variable) and 0 otherwise. Results are essentially unchanged. Next, we used a more disaggregated set of family values indicators: two for intergenerational links (*interg1*- "parents *versus* children"; and *interg2* – "children *versus* parents") and two for couple values (*cpl1*- "traditional couple values"; and *cpl2* – "division of tasks within the couple") (table A3 panel b). Estimates of family values are similar with only slight differences between preferences for care services and financial assistance.

4.2. Endogeneity

One concern with the results presented in the previous sections is that the strong correlations detected between weak family values and preferences for welfare state support may hide omitted or unobserved factors that affect both preferences for welfare as well as family related value. Alternatively, the existing welfare provisions (and related preferences) may affect family formation and family related values, such that reverse causation may influence the results. While it usually argued that family values and other cultural traits are strongly persistent and unlikely to change as frequently as welfare provisions¹⁵, so that potential bias should be minimised; we do take a number of steps to address the endogeneity of family values using instrumental variable techniques.

The identification strategy we use relies on the long term cultural determinants of ethnic and religious groups as instruments for family values. In particular, we focus on cultural traits that are inherited from previous generations, such as religious affiliation¹⁶, and ethnic background

¹⁵ Note that different cultures may held different views concerning the importance of family vis-à-vis welfare demand and preferences for redistribution (Alesina and Glaeser, 2004).

¹⁶ Religion may shape views about the family, both in terms of couple relationship as well as children obligation vis-à-vis their parents (Benabou and Tirole, 2006). Also, parents have a natural tendency to teach their children

whose family values are grounded in the home country social norms and beliefs and can be considered as time invariant over an individual's lifetime (Guiso et al. 2006; Alesina and Giuliano, 2012).¹⁷ In practice, we assume that ethnic and religious affiliations (i.e. the current affiliation or, when no affiliation was provided, the religion in which the respondent was educated) impact on preferences for within household *versus* welfare state support only through family values, and as such are considered valid exclusion restrictions¹⁸. The first set of instruments is derived from information on the respondent's religious affiliation and religious practice¹⁹. We use a number of dummy variables for the religious denomination in which the individual was brought up (we consider, Christian, Muslim, other religions and no religion); next we consider the current religious activity (i.e. frequency of religious services in days per month); and, finally, the importance given to religious ceremonies (i.e. for a birth, marriage, burial). The second set of instruments relies on individuals' immigrant status, whose family values are held to be centered in the culture of the country of origin. If family values are persistent, then views of immigrants on couple relationship and norms on intergenerational relationship between children and parents in France should mimic those of their counterparts in the home country. In order to insure that their family values were shaped in their home country, we restrict the immigrant category to those arrived in France at age of 18 years or more from non-European countries²⁰. Ideally we would like to associate to individuals the family values of their counterparts in the country of origin at the time of arrival in France. However data restrictions only allow us to identify family values currently held by individuals. Under the assumption that values are time-invariant (or evolve very

what they have learned from their own parents, without revising the optimality of the inherited beliefs (Bisin and Verdier, 2000).

¹⁷ The use of immigrant status (first or second generation) to study the importance of culture on economic outcomes has become relatively standard in the economic analysis of culture (Fernandez and Fogli, 2006; Giuliano, 2007).

¹⁸ Note that considering religious and ethnic traits as inherited by individuals, we do not intend to deny that some unobserved factors may also be correlated with societal preferences for welfare, we simply argue that they do not change (or change very slowly in the long-run) with individuals preferences over the life cycle. Guiso, Sapienza, and Zingales (2006) report evidence that migrants from the (low trust) South of Italy are likely to carry their lack of trust over to their destination countries. They also show that those raised religiously show persistent preferences and beliefs even after rejecting religion later in life. Ljunge (2010) finds that social insurance programs have long-term effects on individual demand for program benefits, which mainly depends on older generations' past behaviour.

¹⁹ Notice that there are very few religious communities services offered in France contrary to Anglosaxon countries. So the impact of religious belief on demand for specific care services could be considered as negligible.

²⁰ We exclude second generation immigrants from our instrument, since – as shown by Luttmer and Singhal (2011) – the preferences of first generation immigrants correlate strongly with the demand for redistribution in their country of origin, while preferences of second generation immigrants are not. Moreover, support for the welfare state of second generation immigrants is strongly correlated with the institutions prevailing in their residence country thus invalidating the exclusion restriction hypothesis.

slowly over time) the latter should be a good proxy for immigrants' home country values.²¹ Results, reported in table 5, in general support a causal interpretation of previous findings - though in some cases the precision of estimates is lower - showing that weak (strong) family values influence preferences for welfare state support (within household services).²²

It is interesting to notice that the relationship between family values and preferences for welfare appears to be differentiated according to the intergenerational and in-the-couple dimensions we have considered. Positive (statistically significant) relationships are detected between intergenerational values and welfare services for the care of old people or for financial assistance to young parents, that is: the lower (higher) are reciprocity norms of care between parents and children (and *viceversa*), the more preferences are in favour of welfare state (household) assistance. Conversely, when the care of young children is considered preferences for the welfare state (household care) appear to depend more on the weakness (strength) of family ties in-the-couple.

[table 5 around here]

5. Conclusions

In this paper we investigated the links between social needs, family values and the demand for welfare assistance using data from the 2005 French "Generation and Gender Survey" (GGS). Given that individuals and households face different types of social needs over the life cycle (child care, elderly support, illness, unemployment and negative income shocks), we studied to what extent individual expect to pool those risks within the family (direct care or income transfer), whether they expect to resort to the market (borrowing and buying services) or, finally, if they think that the welfare state should take care of them (public child/elderly care or welfare benefits). We defined the relevance of family relationship using individuals' self-assessed measures of family values (such as, values and obligations between partners in couples, as well as duties and responsibilities of parents *versus* children and *vice versa*) and constructed different indicators of family values. We found a positive association between

²¹ In practice, the set of instruments considered in estimation is: religion in which the individual was brought up, current religious activity, importance given to religious ceremonials, to be an immigrant arrived at age 18 years and over, to have a non-European origin.

²² First stage results show that religiosity and ethnicity indicators are good predictors of family values held by individuals (i.e. both within couple and between children and parents). The partial R2 for the excluded instrument is resp. 0.11 and 0.35, while the Stock and Yogo (2005) statistics is above 17. Notice that in one specification (column (4) in table 5) the over-identification tests does not accept the null for the exclusion restriction. The full set of results is reported in Appendix A4

strong (weak) family values, both within the couple and between generations, and the pooling of social risks within the household (demand for welfare state support). The relevance of family values is shown to be invariant to different socio-economic circumstances, such as: financial distress, bad health or family size. Using long term cultural determinants of selected ethnic and religious groups as instruments for family values, we provide evidence for causal effects. In particular, it is shown that family values grounded in the intergenerational dimension of care and financial support, matter more when preferences for assistance concerns the care of old people and young parents, while family ties in-the-couple are relevant when the care of young children is considered. The above findings provide significant implications for welfare policies and for the design of a wide range of public programs, particularly in the light of the progressive retrenching of welfare programmes that countries are facing *vis-à-vis* debt consolidation policies.

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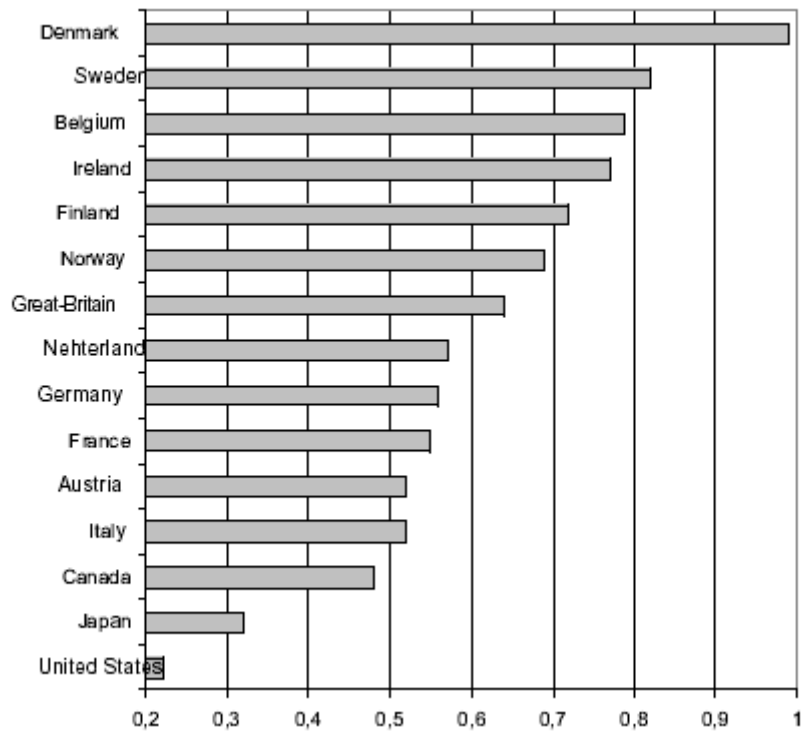
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**Figure 1 - Welfare Generosity in OECD countries (France=57%)
(statutory entitlements *versus* actual replacement and coverage rates).**



Source: Comparative Welfare Entitlements Data (CWED)

Table 1. Society and welfare state assistance *versus* within family care

Score	Definition	Care old people	Care pre-school children	Care children after school	Financial support old people	Financial support young parents
1	family <i>exclusively</i>	20.1	41.2	35.2	9.4	9.0
2	family <i>mostly</i>	24.7	24.3	26.7	10.8	12.4
3	family <i>or</i> society	42.1	23.7	26.4	28.9	31.3
4	Society <i>mostly</i>	6.7	5.9	6.7	14.4	15.9
5	Society <i>exclusively</i>	6.4	4.9	5.0	36.5	31.4
		100	100	100	100	100
	Observations	9,987	9,984	9,977	9,956	9,824

Source: 2005 French GGS

Table 2 - Proportion of individuals with high family values by socio-economic groups

	Gender		Age			Education		Marital status	
	Males	Females	Less 25 years	25-59 years	60 years and +	College	No college	Single	Couple
Intergenerational Values	0.54	0.47	0.51	0.48	0.55	0.48	0.51	0.53	0.49
Couple Values	0.52	0.45	0.34	0.41	0.69	0.31	0.59	0.44	0.50
Observations	4,371	5,708	1,184	6,510	2,541	4,206	5,873	3,617	6,462

Source: 2005 French GGS

Table 3 - Preferences for welfare and family values (ordered probit, POLS)

Panel (a)		Ordered probit estimates				
	(1)	(2)	(3)	(4)	(5)	
	care_old	care_preschool	care_afterschool	fin_oldpeople	fin_youngparents	
<i>Interg</i>	0.259*** <i>0.013</i>	0.115*** <i>0.013</i>	0.117*** <i>0.013</i>	0.193*** <i>0.013</i>	0.145*** <i>0.013</i>	
<i>Cpl</i>	0.051*** <i>0.014</i>	0.080*** <i>0.014</i>	0.089*** <i>0.014</i>	0.031** <i>0.014</i>	0.043*** <i>0.014</i>	
Observations	8,600	8,599	8,599	8,584	8,508	

Panel (b)		POLS estimates				
	(1)	(2)	(3)	(4)	(5)	
	care_old	care_preschool	care_afterschool	fin_oldpeople	fin_youngparents	
<i>Interg</i>	0.219*** <i>0.010</i>	0.093*** <i>0.011</i>	0.098*** <i>0.011</i>	0.158*** <i>0.010</i>	0.122*** <i>0.011</i>	
<i>Cpl</i>	0.043*** <i>0.012</i>	0.065*** <i>0.012</i>	0.074*** <i>0.012</i>	0.026** <i>0.012</i>	0.037*** <i>0.012</i>	
Observations	8,600	8,599	8,599	8,584	8,508	

Notes: sd dev in italics; *** 1 percent, ** 5 percent, * 10 percent significance level

Source: 2005 French GGS

Table 4 – Interacted effects: financial distress, bad health, big family (ordered probit, POLS)

	Ordered Probit					POLS estimates				
	care_old	care_pre school	care_after school	fin_old people	fin_young parents	care_old	care_pre school	care_afters chool	fin_old people	fin_young parents
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Interaction financial distress										
interg*finshock=1	0.284*** <i>0.028</i>	0.065** <i>0.025</i>	0.090*** <i>0.027</i>	0.179*** <i>0.026</i>	0.138*** <i>0.027</i>	0.240*** <i>0.023</i>	0.051** <i>0.020</i>	0.073*** <i>0.022</i>	0.143*** <i>0.021</i>	0.114*** <i>0.022</i>
interg* finshock=0	0.246*** <i>0.014</i>	0.128*** <i>0.015</i>	0.124*** <i>0.015</i>	0.198*** <i>0.015</i>	0.148*** <i>0.014</i>	0.210*** <i>0.012</i>	0.104*** <i>0.012</i>	0.104*** <i>0.012</i>	0.164*** <i>0.012</i>	0.126*** <i>0.012</i>
cpl*finshock=1	0.010 <i>0.028</i>	0.058** <i>0.026</i>	0.086*** <i>0.028</i>	0.052* <i>0.028</i>	0.069** <i>0.028</i>	0.008 <i>0.024</i>	0.047** <i>0.021</i>	0.071*** <i>0.023</i>	0.043* <i>0.023</i>	0.057** <i>0.024</i>
cpl* finshock=0	0.061*** <i>0.015</i>	0.088*** <i>0.016</i>	0.092*** <i>0.015</i>	0.017 <i>0.015</i>	0.029* <i>0.015</i>	0.052*** <i>0.013</i>	0.071*** <i>0.013</i>	0.077*** <i>0.013</i>	0.014 <i>0.013</i>	0.025* <i>0.013</i>
Interaction bad health										
interg*health=1	0.266*** <i>0.026</i>	0.113*** <i>0.026</i>	0.106*** <i>0.026</i>	0.181*** <i>0.026</i>	0.117*** <i>0.026</i>	0.224*** <i>0.022</i>	0.089*** <i>0.020</i>	0.086*** <i>0.021</i>	0.148*** <i>0.021</i>	0.098*** <i>0.022</i>
interg*health=0	0.256*** <i>0.015</i>	0.116*** <i>0.015</i>	0.121*** <i>0.015</i>	0.197*** <i>0.015</i>	0.155*** <i>0.015</i>	0.217*** <i>0.012</i>	0.095*** <i>0.012</i>	0.102*** <i>0.013</i>	0.161*** <i>0.012</i>	0.131*** <i>0.013</i>
cpl*health=1	0.044* <i>0.027</i>	0.068** <i>0.027</i>	0.092*** <i>0.027</i>	0.009 <i>0.026</i>	0.041 <i>0.026</i>	0.037* <i>0.022</i>	0.053** <i>0.021</i>	0.075*** <i>0.022</i>	0.006 <i>0.022</i>	0.034 <i>0.022</i>
cpl*health=0	0.054*** <i>0.016</i>	0.085*** <i>0.016</i>	0.087*** <i>0.016</i>	0.039** <i>0.016</i>	0.044*** <i>0.016</i>	0.046*** <i>0.013</i>	0.069*** <i>0.013</i>	0.073*** <i>0.013</i>	0.033** <i>0.013</i>	0.038*** <i>0.014</i>
Interaction big family										
interg*enf3=1	0.304*** <i>0.026</i>	0.126*** <i>0.027</i>	0.128*** <i>0.027</i>	0.221*** <i>0.025</i>	0.167*** <i>0.026</i>	0.255*** <i>0.021</i>	0.100*** <i>0.021</i>	0.105*** <i>0.022</i>	0.180*** <i>0.020</i>	0.140*** <i>0.021</i>
interg* enf3=0	0.242*** <i>0.015</i>	0.111*** <i>0.015</i>	0.113*** <i>0.015</i>	0.182*** <i>0.015</i>	0.137*** <i>0.015</i>	0.206*** <i>0.013</i>	0.091*** <i>0.012</i>	0.095*** <i>0.013</i>	0.149*** <i>0.012</i>	0.115*** <i>0.013</i>
cpl* enf3=1	0.051* <i>0.028</i>	0.071*** <i>0.028</i>	0.106*** <i>0.028</i>	0.053* <i>0.028</i>	0.052* <i>0.028</i>	0.043* <i>0.023</i>	0.056** <i>0.022</i>	0.087*** <i>0.023</i>	0.044* <i>0.023</i>	0.044* <i>0.023</i>
cpl* enf3=0	0.051*** <i>0.016</i>	0.083*** <i>0.016</i>	0.083*** <i>0.016</i>	0.024 <i>0.016</i>	0.040** <i>0.016</i>	0.044*** <i>0.013</i>	0.068*** <i>0.013</i>	0.070*** <i>0.013</i>	0.020 <i>0.013</i>	0.034** <i>0.013</i>
Observations	8,600	8,599	8,599	8,584	8,508	8,600	8,599	8,599	8,584	8,508

Notes: st dev in italics; *** 1 percent, ** 5 percent, * 10 percent significance level

Source: 2005 French GGS

Table 5 – Preferences for welfare and family values, IV-POLS estimates

	care_old	care_preschool	care_afterschool	fin_oldpeople	fin_youngparents
	(1)	(2)	(3)	(4)	(5)
Interg	0.345*** <i>0.108</i>	-0.204* <i>0.107</i>	-0.025 <i>0.103</i>	0.431*** <i>0.112</i>	0.213* <i>0.110</i>
Cpln	0.067 <i>0.075</i>	0.246*** <i>0.075</i>	0.153** <i>0.073</i>	-0.082 <i>0.076</i>	0.054 <i>0.075</i>
Obs	8,540	8,539	8,540	8,525	8,453
Hansen J Statistic	4.795	6.23	4.58	8.3	5.49
Chi-sq / P-Val	0.441	0.284	0.469	0.14	0.358

Notes: standard deviations in italics; *** 1 percent, ** 5 percent, * 10 percent significance level
Instruments: religion in which the individual was brought up, current religious activity, importance given to religious ceremonies, to be a non-European immigrant arrived at age 18 years and over
Source: 2005 French GGS

APPENDIX

Table A1 – Variables and Descriptive Statistics

Distribution of preferences of type of provider for care and financial assistance

	Care			Financial help	
	old people	pre-school child.	child. after school	old people	young parents
mean	2.55	2.09	2.19	3.58	3.48
st dev	1.08	1.15	1.14	1.32	1.29
obs	9,987	9,984	9,977	9,956	9,824

Variable name	Mean (st. dev.)
<u>Gender</u>	
male (ref : female)	0.436
<u>Age</u>	
25 years and less	0.094
25-44 years	0.392
45-60 years	0.291
+ 60 years	0.222
<u>Family structure</u>	
couple (ref: single)	0.634
1 child (at home or not)	0.193
2 children	0.311
3 children and more (ref: no child)	0.236
No child	0.259
To have 1 or 2 parents aged 65 y & +	0.378
<u>Education</u>	
Primary school	0.315
technical diploma	0.260
high school diploma	0.148
college degree	0.278
Partner with college degree	0.165
<u>Labour market circumstances</u>	
Active	0.555
Scholars, students	0.040
Unemployed	0.068
Retired	0.232
Other inactivity	0.104
Hours worked per week	21.65
(st. dev.)	(20.2)
Household income per head (log)	7.231
(st. dev.)	(0.586)
<u>Other circumstances</u>	
live in city of more than 200,000	0.378
Declare financial difficulties	0.216
Declare health problem	0.255
<u>Religiosity/Ethnicity</u>	
Christians	0.775
Muslims	0.034
Other	0.007
Refuse to declare	0.019
No religion	0.100
Frequency of attending religious ceremonials (day/month)	7.250
Importance given to religious ceremonials	0.507
Immigrant	0.073
Non-European arrived at age 18 and over	0.026
Observations	8,508

Table A2 Preferences for welfare and family values (ordered probit)

	Care old people	Care pre-school children	Care children after school	Fin help old people	Fin help young parents
Interg	0.259*** <i>0.013</i>	0.115*** <i>0.013</i>	0.117*** <i>0.013</i>	0.193*** <i>0.013</i>	0.145*** <i>0.013</i>
Cpl	0.051*** <i>0.014</i>	0.080*** <i>0.014</i>	0.089*** <i>0.014</i>	0.031** <i>0.014</i>	0.043*** <i>0.014</i>
Male	0.049** <i>0.025</i>	-0.067*** <i>0.025</i>	-0.045* <i>0.025</i>	0.043* <i>0.025</i>	0.030 <i>0.025</i>
25-44 y	0.042 <i>0.052</i>	0.057 <i>0.055</i>	0.062 <i>0.052</i>	-0.027 <i>0.055</i>	-0.087 <i>0.055</i>
45-60 y	0.009 <i>0.058</i>	0.007 <i>0.061</i>	0.080 <i>0.059</i>	-0.184*** <i>0.061</i>	-0.249*** <i>0.061</i>
More than 60 y	0.160** <i>0.076</i>	0.021 <i>0.078</i>	0.058 <i>0.077</i>	-0.212*** <i>0.077</i>	-0.275*** <i>0.077</i>
Technical dipl	0.003 <i>0.034</i>	0.019 <i>0.035</i>	0.038 <i>0.035</i>	-0.034 <i>0.034</i>	0.008 <i>0.034</i>
High school	-0.002 <i>0.040</i>	0.211*** <i>0.042</i>	0.179*** <i>0.041</i>	-0.033 <i>0.042</i>	-0.029 <i>0.041</i>
College	0.059* <i>0.036</i>	0.252*** <i>0.038</i>	0.186*** <i>0.037</i>	-0.088** <i>0.037</i>	-0.043 <i>0.037</i>
In couple	0.018 <i>0.029</i>	0.010 <i>0.029</i>	0.020 <i>0.029</i>	0.027 <i>0.029</i>	0.011 <i>0.029</i>
1 child (at home or not)	-0.042 <i>0.038</i>	0.007 <i>0.039</i>	-0.052 <i>0.039</i>	-0.072* <i>0.039</i>	-0.060 <i>0.039</i>
2 children	-0.008 <i>0.036</i>	0.029 <i>0.037</i>	0.001 <i>0.037</i>	-0.037 <i>0.037</i>	-0.044 <i>0.036</i>
3 children and more	-0.092** <i>0.040</i>	0.023 <i>0.041</i>	-0.056 <i>0.041</i>	-0.067* <i>0.040</i>	-0.020 <i>0.040</i>
At work	0.048 <i>0.053</i>	0.128** <i>0.057</i>	0.035 <i>0.057</i>	0.145*** <i>0.055</i>	0.090* <i>0.054</i>
Scholars, students	0.119 <i>0.078</i>	-0.008 <i>0.082</i>	-0.021 <i>0.080</i>	0.199** <i>0.082</i>	0.104 <i>0.081</i>
Unemployed	0.057 <i>0.061</i>	0.071 <i>0.061</i>	0.059 <i>0.062</i>	0.129** <i>0.061</i>	0.165*** <i>0.061</i>
Retired	0.033 <i>0.060</i>	0.087 <i>0.059</i>	0.023 <i>0.061</i>	0.145** <i>0.058</i>	0.036 <i>0.058</i>
Nb of hours worked a week	-0.001 <i>0.001</i>	0.001 <i>0.001</i>	0.000 <i>0.001</i>	0.000 <i>0.001</i>	0.002 <i>0.001</i>
Bad health	0.035 <i>0.030</i>	0.020 <i>0.030</i>	0.043 <i>0.030</i>	0.071** <i>0.030</i>	0.030 <i>0.030</i>
Dipl partner: college	0.018 <i>0.039</i>	0.055 <i>0.042</i>	0.044 <i>0.042</i>	-0.035 <i>0.042</i>	-0.068* <i>0.041</i>
Family income (log)	-0.014 <i>0.026</i>	-0.034 <i>0.025</i>	-0.018 <i>0.025</i>	-0.113*** <i>0.026</i>	-0.101*** <i>0.025</i>
Financial distress	0.042 <i>0.032</i>	-0.072** <i>0.032</i>	-0.045 <i>0.032</i>	0.092*** <i>0.032</i>	0.103*** <i>0.032</i>
1 or 2 parents alive +	0.054** <i>0.027</i>	0.026 <i>0.027</i>	0.007 <i>0.027</i>	0.024 <i>0.028</i>	0.021 <i>0.027</i>
City	0.047* <i>0.025</i>	0.144*** <i>0.025</i>	0.069*** <i>0.025</i>	-0.025 <i>0.025</i>	-0.002 <i>0.025</i>
Observations	8,600	8,599	8,599	8,584	8,508

Notes: standard deviations in italics; *** 1 percent, ** 5 percent, * 10 percent significance level
Source: 2005 French GGS

Table A2 (cont.) Preferences for welfare and family values (POLS)

	Care old people	Care pre-school children	Care children after school	Fin help old people	Fin help young parents
Interg	0.219*** <i>0.010</i>	0.093*** <i>0.011</i>	0.098*** <i>0.011</i>	0.158*** <i>0.010</i>	0.122*** <i>0.011</i>
cpl	0.043*** <i>0.012</i>	0.065*** <i>0.012</i>	0.074*** <i>0.012</i>	0.026** <i>0.012</i>	0.037*** <i>0.012</i>
Male	0.041* <i>0.021</i>	-0.056*** <i>0.021</i>	-0.040* <i>0.021</i>	0.034 <i>0.021</i>	0.025 <i>0.021</i>
25-44 y	0.036 <i>0.046</i>	0.051 <i>0.045</i>	0.057 <i>0.045</i>	-0.023 <i>0.045</i>	-0.074 <i>0.045</i>
45-60 y	0.009 <i>0.050</i>	0.009 <i>0.050</i>	0.071 <i>0.050</i>	-0.155*** <i>0.050</i>	-0.211*** <i>0.051</i>
More than 60 y	0.137** <i>0.064</i>	0.021 <i>0.063</i>	0.052 <i>0.065</i>	-0.180*** <i>0.064</i>	-0.235*** <i>0.065</i>
Technical dipl	0.003 <i>0.028</i>	0.012 <i>0.027</i>	0.030 <i>0.028</i>	-0.029 <i>0.028</i>	0.006 <i>0.029</i>
High school	-0.002 <i>0.034</i>	0.172*** <i>0.034</i>	0.151*** <i>0.035</i>	-0.030 <i>0.034</i>	-0.026 <i>0.035</i>
College	0.051 <i>0.031</i>	0.212*** <i>0.031</i>	0.160*** <i>0.031</i>	-0.075** <i>0.031</i>	-0.037 <i>0.032</i>
In couple	0.016 <i>0.024</i>	0.008 <i>0.023</i>	0.018 <i>0.024</i>	0.023 <i>0.024</i>	0.010 <i>0.024</i>
1 child (at home or not)	-0.037 <i>0.033</i>	0.006 <i>0.032</i>	-0.045 <i>0.033</i>	-0.063* <i>0.032</i>	-0.052 <i>0.033</i>
2 children	-0.008 <i>0.031</i>	0.023 <i>0.030</i>	0.000 <i>0.031</i>	-0.033 <i>0.030</i>	-0.038 <i>0.031</i>
3 children and more	-0.078** <i>0.033</i>	0.017 <i>0.033</i>	-0.048 <i>0.034</i>	-0.058* <i>0.033</i>	-0.018 <i>0.034</i>
At work	0.041 <i>0.046</i>	0.102** <i>0.046</i>	0.030 <i>0.048</i>	0.121*** <i>0.046</i>	0.077* <i>0.046</i>
Scholars, students	0.102 <i>0.071</i>	-0.011 <i>0.067</i>	-0.018 <i>0.068</i>	0.164** <i>0.067</i>	0.090 <i>0.068</i>
Unemployed	0.050 <i>0.050</i>	0.054 <i>0.049</i>	0.049 <i>0.052</i>	0.106** <i>0.050</i>	0.138*** <i>0.051</i>
Retired	0.027 <i>0.049</i>	0.068 <i>0.046</i>	0.019 <i>0.050</i>	0.123** <i>0.049</i>	0.031 <i>0.050</i>
Nb of hours worked a week	-0.001 <i>0.001</i>	0.000 <i>0.001</i>	0.000 <i>0.001</i>	0.000 <i>0.001</i>	0.001 <i>0.001</i>
Bad health	0.030 <i>0.024</i>	0.016 <i>0.024</i>	0.036 <i>0.025</i>	0.060** <i>0.025</i>	0.026 <i>0.025</i>
Dipl partner: college	0.016 <i>0.036</i>	0.044 <i>0.036</i>	0.037 <i>0.036</i>	-0.031 <i>0.035</i>	-0.059* <i>0.035</i>
Family income (log)	-0.012 <i>0.022</i>	-0.028 <i>0.021</i>	-0.015 <i>0.021</i>	-0.096*** <i>0.021</i>	-0.088*** <i>0.022</i>
Financial distress	0.035 <i>0.026</i>	-0.058** <i>0.025</i>	-0.038 <i>0.027</i>	0.074*** <i>0.026</i>	0.085*** <i>0.027</i>
1 or 2 parents alive +	0.045** <i>0.023</i>	0.022 <i>0.023</i>	0.005 <i>0.023</i>	0.019 <i>0.023</i>	0.017 <i>0.023</i>
City	0.040* <i>0.021</i>	0.117*** <i>0.021</i>	0.058*** <i>0.021</i>	-0.021 <i>0.021</i>	-0.002 <i>0.021</i>
Constant	-0.049 <i>0.153</i>	-0.029 <i>0.147</i>	-0.053 <i>0.151</i>	0.687*** <i>0.153</i>	0.680*** <i>0.155</i>
Observations	8,600	8,599	8,599	8,584	8,508

Notes: standard deviations in italics; *** 1 percent, ** 5 percent, * 10 percent significance level

Source: 2005 French GGS

Table A3. Preferences for welfare and family values: robustness checks

Panel (a)	Probit estimates (pref_welfare=1)					Panel (b)	Probit estimates (disaggregated family indicators)				
	care_old	care_pre school	care_after school	fin_old people	fin_young parents	care_old	care_pre school	care_after school	fin_old people	fin_young parents	
Interg	0.238***	0.112***	0.111***	0.193***	0.144***						
	0.018	0.019	0.018	0.015	0.014						
Cpl	-0.044**	0.044**	0.039*	0.013	0.031*						
	0.021	0.022	0.021	0.016	0.016						
interg1						0.290***	0.039***	0.042***	0.205***	0.135***	
						0.014	0.014	0.014	0.014	0.014	
interg2						0.026*	0.100***	0.102***	0.034**	0.043***	
						0.014	0.014	0.014	0.014	0.014	
cpln1						0.054***	0.057***	0.043***	0.001	0.019	
						0.014	0.014	0.014	0.014	0.014	
cpln2						0.002	0.039***	0.063***	0.032**	0.030**	
						0.015	0.015	0.014	0.015	0.015	
Observations	8,489	8,486	8,488	8,487	8,508	8,600	8,599	8,599	8,584	8,508	

Notes: standard deviations in italics; *** 1 percent, ** 5 percent, * 10 percent significance level

Source: 2005 French GGS

Table A4 Preferences for welfare and family values: IV regressions (GMM)

	persage	enfps	enfscs	finpersa	finparen
interg	0.345*** <i>0.108</i>	-0.204* <i>0.107</i>	-0.025 <i>0.103</i>	0.431*** <i>0.112</i>	0.213* <i>0.110</i>
cpl	0.067 <i>0.075</i>	0.246*** <i>0.075</i>	0.153** <i>0.073</i>	-0.082 <i>0.076</i>	0.054 <i>0.075</i>
Male	0.071*** <i>0.023</i>	-0.075*** <i>0.023</i>	-0.046** <i>0.023</i>	0.064*** <i>0.023</i>	0.046** <i>0.023</i>
25-44 y	0.024 <i>0.045</i>	0.056 <i>0.047</i>	0.059 <i>0.045</i>	-0.027 <i>0.047</i>	-0.079* <i>0.046</i>
45-60 y	0.024 <i>0.051</i>	-0.007 <i>0.053</i>	0.065 <i>0.050</i>	-0.130** <i>0.052</i>	-0.196*** <i>0.052</i>
More than 60 y	0.165** <i>0.068</i>	0.051 <i>0.069</i>	0.068 <i>0.068</i>	-0.175** <i>0.068</i>	-0.209*** <i>0.068</i>
Technical dipl	-0.018 <i>0.030</i>	0.006 <i>0.029</i>	0.029 <i>0.029</i>	-0.036 <i>0.030</i>	-0.009 <i>0.030</i>
High school	-0.028 <i>0.038</i>	0.149*** <i>0.039</i>	0.142*** <i>0.038</i>	-0.032 <i>0.039</i>	-0.051 <i>0.038</i>
College	0.034 <i>0.045</i>	0.135*** <i>0.046</i>	0.128*** <i>0.045</i>	-0.033 <i>0.046</i>	-0.053 <i>0.045</i>
In couple	0.014 <i>0.029</i>	0.045 <i>0.029</i>	0.031 <i>0.028</i>	-0.006 <i>0.030</i>	0.008 <i>0.029</i>
1 child (at home or not)	-0.028 <i>0.034</i>	0.027 <i>0.034</i>	-0.031 <i>0.034</i>	-0.071** <i>0.035</i>	-0.051 <i>0.034</i>
2 children	-0.011 <i>0.037</i>	0.079** <i>0.038</i>	0.024 <i>0.037</i>	-0.074** <i>0.038</i>	-0.046 <i>0.038</i>
3 children and more	-0.086* <i>0.045</i>	0.094** <i>0.045</i>	-0.014 <i>0.044</i>	-0.114** <i>0.046</i>	-0.024 <i>0.046</i>
At work	0.025 <i>0.046</i>	0.087* <i>0.049</i>	0.018 <i>0.049</i>	0.118** <i>0.048</i>	0.062 <i>0.046</i>
Scholars, students	0.090 <i>0.073</i>	-0.088 <i>0.076</i>	-0.061 <i>0.074</i>	0.204*** <i>0.076</i>	0.080 <i>0.074</i>
Unemployed	0.051 <i>0.053</i>	0.025 <i>0.052</i>	0.033 <i>0.054</i>	0.117** <i>0.054</i>	0.130** <i>0.053</i>
Retired	0.016 <i>0.051</i>	0.059 <i>0.049</i>	0.012 <i>0.051</i>	0.119** <i>0.051</i>	0.022 <i>0.050</i>
Nb of hours worked a week	-0.001 <i>0.001</i>	0.000 <i>0.001</i>	0.000 <i>0.001</i>	0.000 <i>0.001</i>	0.001 <i>0.001</i>
Bad health	0.035 <i>0.026</i>	0.014 <i>0.025</i>	0.037 <i>0.025</i>	0.065** <i>0.026</i>	0.030 <i>0.026</i>
Dipl partner: college	0.013 <i>0.035</i>	0.032 <i>0.038</i>	0.033 <i>0.037</i>	-0.024 <i>0.036</i>	-0.061* <i>0.036</i>
Family income (log)	-0.024 <i>0.025</i>	-0.048* <i>0.025</i>	-0.025 <i>0.024</i>	-0.084*** <i>0.025</i>	-0.095*** <i>0.025</i>
Financial distress	0.030 <i>0.028</i>	-0.066** <i>0.027</i>	-0.043 <i>0.027</i>	0.079*** <i>0.028</i>	0.085*** <i>0.027</i>
1 or 2 parents alive, 65 years +	0.037 <i>0.023</i>	0.018 <i>0.024</i>	0.002 <i>0.023</i>	0.014 <i>0.024</i>	0.012 <i>0.024</i>
City	0.058** <i>0.027</i>	0.063** <i>0.028</i>	0.038 <i>0.027</i>	0.026 <i>0.028</i>	0.013 <i>0.027</i>
Constant	0.043 <i>0.178</i>	0.118 <i>0.177</i>	0.024 <i>0.174</i>	0.600*** <i>0.181</i>	0.737*** <i>0.180</i>
Observations	8,540	8,539	8,540	8,525	8,453
Hansen J Statistic	4.795	6.23	4.58	8.3	5.49
Chi-sq P-val	0.441	0.284	0.469	0.140	0.358

Notes: standard deviations in italics; *** 1 percent, ** 5 percent, * 10 percent significance level

Instruments: religion in which the individual was brought up, current religious activity, importance given to religious ceremonies, to be a non-European immigrant arrived at age 18 years and over

Source: 2005 French GGS

Table A5. Questions used to construct the family value indicators

Indicator *interg* (intergenerational family values) : 7 separate questions

To what extent do you agree or disagree with each of the following statements? (1 to 5)

- Grandparents should look after their grandchildren if the parents of these grandchildren are unable to do so
- Parents ought to provide financial help for their adult children when the children are having financial difficulties
- If their adult children were in need, parents should adjust their own lives in order to help them
- Children should take responsibility for caring for their parents when parents are in need
- Children should adjust their working lives to the needs of their parents
- Children ought to provide financial help for their parents when their parents are having financial difficulties
- Children should have their parents to live with them when parents can no longer look after themselves

Indicator *cpl* (couple family values) : 13 separate questions

To what extent do you agree or disagree with each of the following statements? (1 to 5)

- Marriage is a lifetime relationship and should never be ended
- It is all right for a couple with an unhappy marriage to get a divorce even if they have children
- A woman has to have children in order to be fulfilled
- A man has to have children in order to be fulfilled
- A child needs a home with both a father and a mother to grow up happily
- A woman can have a child as a single parent even if she doesn't want to have a stable relationship with a man
- In a couple it is better for the man to be older than the woman
- If a woman earns more than her partner, it is not good for the relationship
- Women should be able to decide how to spend the money they earn without having to ask their partner's permission
- When parents are in need, daughters should take more caring responsibility than sons
- A pre-school child is likely to suffer if his/her mother works
- If parents divorce it is better for the child to stay with the mother than with the father
- When jobs are scarce, men should have more right to a job than women