

The Power of the Family¹

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Abstract

We study the importance of culture, as measured by the strength of family ties, on economic behavior and attitudes. We define our measure of family ties using individual responses from the World Value Survey regarding the role of the family and the love and respect that children are expected to have for their parents in over 70 countries. We show that strong family ties imply more reliance on the family as an economic unit providing goods and services and less on the market and on the government for social insurance. With strong family ties home production is higher and families larger, labor force participation of women and youngsters, and geographical mobility lower. To assess causality we look at the behavior of second generation immigrants in the US and we employ a variable based on the grammatical rule of pronoun drop as an instrument for family ties. Our results overall indicate a significant influence of the strength of family ties on economic outcomes.

Keywords: family ties; culture; immigrants.

JEL-Classification: Z10, Z13

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1 Introduction

The family is one of the most important institutions in our society and the nature of the links between family members varies dramatically across nationalities. Do strong family ties foster certain types of economic behavior and preferences for public policies, like social services? While sociologists and political scientists have paid some attention to this question, economists have not, with few exceptions.

The idea that culture may matter for economic outcomes is not new or original, but only recently economists have started to quantify its importance¹. The empirical evidence so far has been limited to the importance of trust or to generic measures of culture². Our contribution to this area of research is threefold: first, we focus on a specific measure of culture related to family relationships; second we devote much effort to disentangling causality issues by looking at second generation immigrants in the US and in other countries, and, finally, we employ an instrument for family ties based on differences regarding language structures. The goal of this paper is to understand to what extent cultural values regarding the family affect important economic variables, such as home production, labor force participation of household members and the role of women in the family and in society. We also study how the strength of family ties affects preferences for publicly provided social services and insurance, since a tight family may substitute for them.

We construct our cultural measure of family ties using individual responses from the World Value Survey on the role of the family and the love and respect that children are expected to have for their parents in over 70 countries. We begin with a within-country analysis and we find that in families with strong ties there is more reliance on home production and less participation in market activities, especially in the case of youngsters and women. In particular, the role of women in the family and in society is different. According to the sociological literature, strong family ties imply a stricter division of labor with the male working in the market and the female working at home performing a variety of services, probably including maintaining family ties strong. Consistent with

¹Such a view dates back to at least Max Weber and Adam Smith and received attention more recently by Fukuyama (1995) and Banfield (1958). See Guiso, Sapienza and Zingales (2006) for a review on the importance of culture on economic outcomes.

²Antecol (2000), Giuliano (2007) and Fernandez and Fogli (2007) use as a measure of culture economic variables in the country of origin and link them to the behavior of second generation immigrants on the ground that those variables are a combination of country's economic conditions and beliefs, but only the latter are relevant for second generation immigrants as they live in a country with a different economic environment.

this, female education and labor force participation should be lower with strong family ties. Since strong family ties produce social insurance, less is needed from the government. Family ties and the insurance that they provide can work only if extended families live close to each other and therefore geographical mobility is lower. People belonging to strong family ties trust their family members but distrust people outside the family.

Strong family ties are by no mean associated with only economic "bads" on all grounds. With strong family ties participation in market activities is lower, but home production is higher. Since home production is by and large not included in GDP statistics, the latter could display a downward bias as a measure of total production (based on both home and market activities) in countries with strong family ties. Even though lower market participation may imply a lower income, family ties reduce its variance by providing insurance. On balance, are people happier or not in cultures with strong family ties? Is there a trade off between participation in market activities with their ups and downs and uncertainty, and happiness or life satisfaction? This is of course an exceptionally difficult question to answer. We find that indeed strong family ties are correlated positively with happiness, at least to the extent that happiness data can be trusted.

We then try to move forward beyond these within country correlations to establish causality. As a main identification strategy, we use second generation immigrants in the U.S. We attribute to them the average value of family ties of their country of origin, as a proxy of their "cultural values" and we investigate how they all behave in a common economic environment, the US. Using second generation immigrants is not free of problems. Although the selection problem is mitigated compared to the first generation (these immigrants are born and raised in the United States), second generations are still not a random sample of the population. We also face the problem that family values in the country of origin may be proxying for some other factors that shape some unmeasured characteristics responsible for the immigrant's observed behavior. We address the problem of selection and omitted variables in a variety of ways. First, we control for several characteristics of the ethnic communities where second generation immigrants live, including the average level of ethnic human capital of the first and second generation. Second, we control for the level of development and the level and quality of human capital in the country of origin, using the best available measures. Third, as an additional test for exogeneity, we use a linguistic instrument related to the structure of different languages which is shown to be correlated to views about family ties, but most likely exogenous to the economic conditions. Finally, in order to be sure that we are not capturing something specific to the destination country (perhaps weak family ties immigrants find it easier to adjust to the US economic environment) we also consider immigrants in 27 other destination countries.

Looking at immigrants going to multiple destinations also has the advantage of reducing the selection problem, as the form of selection should vary across destination countries. The fact that our results generalize is reassuring.

Our paper is related to two lines of research. One is the work by political scientists, sociologists and some economists on the socio economic role of the family. Banfield (1958) identified "amoral familism" as one of the main causes of Southern Italy's underdevelopment, and Putnam (1993) and Fukuyama (1995) emphasized how the lack of reciprocal trust is detrimental to development. Gambetta (1990) shows how a critical characteristic of mafia "families" is that one can trust only family members, and that the mafia family structure enforces trust in a society lacking it. Esping-Andersen (1999) has argued that differences in welfare systems and employment across different European countries can be traced back to different family structures. Familistic societies are characterized by the "male-bread winner and female housewife model," the family is also seen as the institution able to internalize social risk by pooling resources across generations as opposed to the State and the Market. Reher (1998) argues that beliefs regarding respect for parents are normally associated with specific forms of living arrangements; similarly geographic mobility is limited as young people tend to live around their family nest. Coleman (1988) argues that family ties can facilitate or inhibit social actions. On the one hand, the young generation receives support from the old one; on the other hand, this sense of belonging to a small community can inhibit individual innovation and openness to new ideas in general. Economists have also noted how in developing countries, especially in Africa, extended family links have substituted for missing credit markets, as discussed for instance in La Ferrara (2003)³; there is also a large literature on the relationship between family-controlled firms and institutions (La Porta, Lopez-de-Silanes and Shleifer, 1999); and on the relationship between family structure, inheritance norms and the performance of family businesses (Perez-Gonzales, 2004). Bentolilla and Ichino (2006) study how countries with different family ties (namely Italy and Spain with strong family ties, the US and the UK with weaker ties) cope with unemployment shocks, finding that stronger family ties provide more insurance⁴.

The second line of research is a recent literature measuring the importance of culture in the determination of economic outcomes. It includes the impact of culture on development (Tabellini, 2006) and trade (Guiso, Sapienza and Zingales (2005)), the importance

³Our focus will not be on very poor countries.

⁴Sociologists have also looked at the importance of family structure, kinship ties and the quality of parent-child relationship in the study of poverty in lower-class settlements of various countries (Lewis, 1959; Winter, 1975).

of religious beliefs for growth (Barro and McCleary, 2003 and 2006), but also microeconomic studies showing that long lasting cultural differences can determine outcomes such as living arrangements (Giuliano, 2007), fertility and female labor force participation (Fernandez and Fogli, 2005). The closest paper to the present one is the work by Bertrand and Schoar (2006). Using cross-country evidence the authors show that strong family ties societies have smaller firms, more self-employment and a large fraction of family controlled firms among listed firms.

This paper is organized as follows. Section 2 presents evidence on within country differences using evidence drawn from close to 80 countries. Section 3 focuses on second generation immigrants in the US. Section 4 discusses our instrument for family ties based upon the linguistic structure of a country and other robustness checks. Section 5 concludes.

2 Within country evidence

2.1 Data

2.1.1 Data description

We use the 1995-97 and 1999-2000 waves of the World Value Surveys (WVS) and the Multinational Time Use Study. The World Value survey is a compilation of national surveys on values and norms on a wide variety of topics, carried out four times (1981-84, 1990-1993, 1995-97 and 1999-2004.) The coverage varies depending on the wave, starting with 22 countries in 1980 and reaching 81 countries in the fourth wave. The questionnaires contain information on different types of attitudes, religion and preferences, as well as information on standard demographic characteristics (sex, age, education, labor market status, income, etc.). We use the last wave, which is representative of 85% of the world's population (there are on average about 1,000-1,200 individual respondents per country). The majority of the surveys in our sample are from 1999-2001, but we also included 13 countries⁵ that were surveyed in the 1995 wave, in order to provide the broadest possible cross-national comparison. Our sample consists of 78 countries with a broad variety of income levels, religions and geography.

We use the Multinational Time Use Study to analyze the impact of family ties on home production. This survey is a cross-nationally harmonized set of time use surveys composed of identically recorded variables. Each case in the dataset corresponds to one diary day. Only records with complete diaries (expressed in minutes and that added up

⁵These 13 countries are Azerbaijan, Australia, Armenia, Brazil, Taiwan Province of China, Columbia, Dominican Republic, El Salvador, Republic of Georgia, New Zealand, Norway, Switzerland and Uruguay.

to 24 hours) are included. Diaries with more than 60 minutes of unclassified or missing time are excluded. The sample of countries is however small: 12 countries covered for the 1990s. Descriptive statistics for all our outcomes of interest are found in the Appendix.

2.1.2 A measure of family ties

We measure the strength of family ties by looking at three WVS variables capturing beliefs on the importance of the family in an individual's life, the duties and responsibilities of parents and children and the love and respect for one's own parents. The first question assesses how important the family is in one person's life and can take values from 1 to 4 (with 1 being very important and 4 not important at all). The second question asks whether the respondent agrees with one of two statements (taking the values of 1 and 2 respectively): 1) Regardless of what the qualities and faults of one's parents are, one must always love and respect them, 2) One does not have the duty to respect and love parents who have not earned it. The third question prompts respondents to agree with one of the following statements (again taking the values of 1 or 2 respectively): 1) It is the parents' duty to do their best for their children even at the expense of their own well-being; 2) Parents have a life of their own and should not be asked to sacrifice their own well being for the sake of their children.

We combine these measures in two ways. First we take the sum of all of them; given the way the variables are coded, a higher number corresponds to weaker family ties. Second, we extract the first principal component from the whole dataset with all individual responses for the original variables. Table 1 displays the correlation at the country level between the three original cultural variables, their sum and the first principal component. All the variables are highly and positively correlated among each other. Note also that the principal component is almost perfectly correlated with the sum of the three variables, indicating that the principal component assigns very similar weight to all the variables. Given the very high correlation between the sum and the principal component we will use as main cultural variable the first principal component.

2.1.3 Who has weak family ties?

Figure 1 displays the values of our measure of the weakness of family ties (expressed using the first principal component) at the country level (panel a). The ranking of the different countries is broadly consistent with perceptions and insights from the sociological and political science literature. Germany, Netherlands and the Northern European countries are the countries with the weakest ties, while African, Asian and Latin American countries lie in the lowest range. If we limit our analysis to the OECD countries (panel b), we find

that Mexico, Poland, US, Canada and Southern European countries (with the exception of Greece) are among the countries with the strongest ties, while as before Northern Europe, Netherlands and Germany are the group with the weakest ties. We also calculate the average of family ties by geographical region (Figure 1c): African, Latin American, Asian and Southern European countries (plus Ireland⁶) have the strongest family ties. The Northern European group has the lowest family ties followed by Continental Europe, Central and Eastern Europe and the group including US, Canada, UK, Australia and New Zealand, that is the group of English speaking Anglo Saxon OECD countries. The relatively weak family ties of many Central and Eastern European former communist countries may be the result of Communist collectivist ideology and propaganda (see Alesina and Fuchs-Schulden (2007)).⁷ The analysis that follows, however, will use only within country-evidence.

2.1.4 Specification

For our within-country empirical analysis, we run a series of regressions of the following type:

$$Y_{ij} = \beta_0 + \beta_1 WFT_{ij} + \beta_2 X_{ij} + \beta_3 \gamma_j + \epsilon_{ij}$$

where the left hand side variable Y_{ij} represents the realization of a certain variable for individual i in country j . We use either probit or ordered logit or OLS depending on the nature of Y_{ij} . WFT_{ij} is our variable of interest defined as "weakness of family ties", thus the value of this variable is decreasing with the strenght of family ties. X_{ij} are our controls which vary depending on the left hand side variable. Our choice of controls is standard and follows the relevant literature, but two observations are important. First, we control for the religion of the respondent using as many religious denominations are available in the WVS. This is important because religious beliefs may influence many of the various left hand side variables (for instance the role of women in society and their labor participation.) Second, in the baseline specification we do not control for the respondent's income because by doing so we would lose many (about 16,000) observations. However we do control for the level of education which is correlated with income. In any event, we have rerun all of our regressions controlling for income and all of our results are qualitatively unchanged. None of the relevant coefficients on family ties loses significance

⁶We include Ireland with Southern European countries as it is considered a strong family ties society by Reher (1998).

⁷One may wonder how these regional averages relate to economic development. We also plot the residuals of a regression of family ties on the level of development of a country. The regional order remains the same, with two exceptions: Southern Europe shows stronger family ties than Latin America; moreover Eastern European countries appear to have weaker ties than Northern Europeans, indicating that GDP per capita is not what is driving our results.

with one minor exception, mentioned below. In order to eliminate the impact of other country characteristics, all the regressions include country fixed effects, which are likely to underestimate the effect of family ties to the extent that their impact has been absorbed in the national culture.

Note that all our results in this part can be interpreted as mere correlations, whenever we use the word "impact" or "effect" of family ties on attitudes and outcomes it is only to simplify the exposition. We will turn to causality below.

2.2 Market activities versus household production

Our hypothesis is that families with strong ties provide many home produced goods and services, like child care, home cooking in family meals, caring for the elderly, children education etc. This of course requires time away from market activities and lower participation in the labor force especially for women and youth who stay at home longer.

What people do when they do not work in the market is a topic that has received much empirical attention recently in the context of a discussion of a decline in hours worked in the market in some European countries relative to the US.⁸ Burda, Hammermesh and Weil (2006) show that men and women work exactly the same amount with variable shares of market versus non market activities in different countries, a result consistent with the correlation shown above: when women participate less in the labor force they work more at home. Home production by women is also higher in strong family ties societies. For instance, Spanish women devote one more hour to home production per day than Swedish women; on the other hand while 92 percent of Swedish men ever engage in household activities, the fraction is much lower for Spain and Italy where only 70% of men tend to do so (Eurostat, 2004.)

Table 2 reports the results of probit regressions of female (15-64 years old) and youth labor force participation (15-29 years old). The coefficient on *WFT* is significant with the expected sign, implying more labor force participation of women and youth with weaker family ties. The reported coefficients are the effect of a marginal change in the corresponding regressor on the probability of being part of the labor force. The probability of participating in the labor force for women moving from the bottom 5th percentile to the top 5th percentile of *WFT* would increase by 16%, that is almost a third in the average of female labor force participation. For a young person the probability of participating in the labor force would increase by about 7%.

⁸See Prescott (2004) Blanchard (2004) and Alesina Glaeser and Sacerdote (2005) for instance. Note how in Scandinavian countries with weak family ties, hours worked in the market per person have declined much less than in France, Germany and Italy with strong family ties, despite a higher rate of taxation.

The coefficients on the other controls are sensible. In the regression for women the education variables⁹ have the expected sign and size. More educated women participate more into the labor force. The positive sign of primary and secondary education in the youth regression could be due to the fact that the omitted category includes all those attending college (tertiary education) and therefore not in the labor force, just yet. When we exclude students from the regressions, our coefficients on primary and secondary education are negative and significant as expected (column 3). The omitted category in the religion indicator is Atheists. Note how all coefficients on religious denominations are negative although mostly not significant, except for Catholic, Muslim and Hindu for which they are negative and statistically significant in the women participation regression. The only religion for which both women and youth labor force participation is significantly lower is Hindu.

In Table 3 we regress (OLS) the amount of housework for people 15 to 49 years old on age, age squared, gender and education and our measure of weak family ties. Housework (measured in minutes per day, with each case in the dataset corresponding to one diary day) is defined as the sum of the following activities: washing, hanging and ironing clothes, making beds, any form of house cleaning, other manual domestic work, and putting shops away¹⁰. In order to run this regression, we merged the individual data on home production coming from the Time Use Survey with our measure of family ties aggregated at the country level. As we now have individual data on the time use and country level data on the weakness of family ties, we cannot control for country fixed effects. However, we control for some other country characteristics that could drive home production such as per capita GDP and years of education¹¹ (Columns 2 and 3); the standard errors are clustered at the country of origin level. Weak family ties are correlated with less home production. In this case moving from strong to weak family ties (in the lowest/highest 5th percentile) decreases the amount of home production by forty percent of the average home production in the sample. The other coefficients are very sensible, for instance the large positive coefficient on women for home production.

As a further robustness check we also control for other cross-country differences that could be relevant in the determination of home production. Following Nickel et al. (2006) and Jaumotte (2003), we first control for a series of tax variables: the marginal tax rates facing married women at zero hours of work and when they are earning 67% of average

⁹The dummies for education include completed elementary education and completed secondary education. The excluded group is given by people with some or completed college.

¹⁰We do not also consider child care as home production since this could be affected by different types of welfare systems. The results however are robust to the inclusion of this activity in the definition of home production.

¹¹The data for years of schooling are obtained from Barro-Lee (2003).

earnings given their spouses are earning 100% of average earnings, the marginal tax rate facing a single earner and the average tax wedge¹². We also control for the strictness of employment protection laws¹³ and for variables capturing public expenditure on children and parental leave¹⁴. Overall, the inclusion of all these variables does not change our results. Note that we do not have all these additional controls for our sample. The data are available for only 8 of our countries. For that reason, we first rerun our basic regression for the restricted sample (column 4) and then we include the additional controls. Column 5 controls for the marginal tax rates variables, column 6 for real expenditures on cash services, parental leave and family services and columns 7 and 8 for the employment protection index and the average tax wage, respectively. The results stay the same in all the specifications, with the controls having the expected sign.

2.3 The role of women

The nature of family links could affect the perceived role of women in society. To evaluate the latter we use the following 3 questions from the WVS: “When jobs are scarce, men should have more right to a job than women.” In the original survey the variable could take the values 1(agree), 2 (neither) and 3(disagree). The second and third variables are phrased as follows “A working mother can establish just as warm and secure a relationship with her children as a mother who does not work”, and “Being a housewife is just as fulfilling as working for pay”. Those two variables can take the values from 1 (agree) to 4 (strongly disagree). We recode these three variables so that a higher number represents a higher degree of agreement with each statement.

In Table 4 we present our regressions of the three answers concerning the role of women (columns 1 to 3) on our measure of the weakness of family ties, country fixed effects and several individual characteristics, including a quadratic for age, a dummy for being male, dummies for the level of education and religion. We run OLS regressions but since our left hand side variables are categorical (for the attitudes variables), we successfully check the robustness of our results running an ordered logit regression. The coefficient on weak family ties has the expected sign for all three attitudinal questions (in two out of three they

¹²The average tax wedge is the average labor tax rate, the sum of the average payroll, income and consumption tax rates. The data are taken by Faggio and Nickell (2006).

¹³The employment protection index comes from Faggio and Nickell (2006) and it refers to regular employment.

¹⁴These variables include real expenditure on cash benefits (annual public expenditures in real dollars on family cash benefits per child age 0-14 divided by 1,000); real expenditures on parental leave (annual public expenditure in real dollars on maternity and parental leave per child aged 0-3 divided by 1,000), real expenditures on family services (annual public expenditures in real dollars on family services per child aged 0-14 divided by 1,000).

are statistically significant at conventional levels). Moving from strong to weak family ties will improve substantially the attitudes toward a less traditional role of women in society (it will reduce the probability of thinking that if jobs are scarce they should go to men by 15%, a 40% of the average attitude in the sample.) The other controls also have the expected signs. Men tend to have a more traditional view about women's role. Religious people of most denominations tend to have a more traditional view of women, relative to non-religious individuals.

2.4 Family versus government insurance

An especially important home produced service is insurance against income fluctuations of family members, both cyclical and related to the life cycle. If this is the case there is less need of government provided insurance with strong family ties. We consider the answer to the following question: "Could you please tell me which type of society you think this country should aim to be in the future. For each pair of statements, would you prefer being closer to the first or the second alternative? A society with extensive social welfare, but high taxes (first statement) versus a society where taxes are low and individuals take responsibility for themselves (second statement). The possible values go from closer to the first statement (1) to closer to the second (5). In Table 5 we show the results. Weak family ties are positively correlated with a preference for an extensive social welfare. The other controls are consistent with the results in the literature (see for instance Alesina and La Ferrara (2005)). Women, youngster and people with lower income are more pro-government redistribution. We also include as a robustness check a measure of political attitudes (measured on a scale from 1 to 10 representing whether a person is more left versus right wing) and our results are unaffected. In this regression, the income variable is especially important; when we rerun the same regressions on the smaller sample which allows us to include the income of the respondent, our result on the weak family ties variable is actually much stronger.

2.5 Trust

Social capital, as measured by the level of generalized trust in a society, has been considered an important determinant of economic outcomes, including growth, economic development and international trade¹⁵. The nature of family links is one of the main reasons for the lack of social capital in a society¹⁶. We define a variable called trust, based

¹⁵See Guiso, Sapienza and Zingales (2006).

¹⁶Banfield (1958) identified "amoral familism" as one of the main causes of Southern Italy's lack of social capital and therefore underdevelopment, similarly Gambetta (1990) shows how a critical characteristic

on the following question: “Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?” The variable is equal to 1 if participants report that most people can be trusted and 0 otherwise.¹⁷ Column 1 of Table 6 shows that weak family ties imply more trust¹⁸. The sign and significance of the controls are consistent with those found in the literature (see Alesina and La Ferrara (2005)); for instance men trust more than women and less educated people trust less. Moving from strong to weak family ties will increase the general level of trust by three percentage points, about 10% of the sample average level of trust. The magnitude of the impact of family ties is smaller compared to the previous variables however it is of the same order of magnitude as that of education. For example increasing the level of education from primary to secondary will increase the level of trust by 2.5 percentage points, about 9% of the sample average of trust in the sample.

2.6 Happiness

We look at two questions representing measures of self-reported happiness or satisfaction in life. One is: "Taking all things together, would you say you are very happy, quite happy, not very happy, not all happy" (respondents answered on a 1 to 4 scale with 1=very happy and 4=not very happy at all. We recode this variable so that a higher number corresponds to happiness). The second is : "All things considered, how satisfied are you with your life as a whole these days?" The variable goes from being dissatisfied (1) to being satisfied (10). Self-reported happiness measures have been used by many authors as proxies for well-being¹⁹. Many however remain skeptical about the use of these variables.

Table 7 suggests that people with strong family ties societies are happier and more satisfied with their life. The sign and significance of the controls are consistent with those found in the literature (see Di Tella et al., 2001). For instance, women, young, married and more educated people are happier, while being unemployed makes people more unhappy. Moving from strong to weak family ties increases happiness (life satisfaction) by 0.37 (0.91), about 12% (14%) of the sample average level of happiness (life satisfaction). Thus,

of the mafia "family" is that one can trust only family members, and that the mafia family structure enforces trust in a society lacking it.

¹⁷We are aware of the criticism to the concept of trust versus trustworthiness which emerges from experiments by Glaeser et al. (2000), but this is an issue which we do not pursue here.

¹⁸This is the only regression for which controlling for the respondent income makes a bit of a difference. If both income and education are controlled for the variable *WFT* loses statistical significance at the usual levels while maintaining, however, the expected sign. The coefficient on *WFT* remains significant if income is included and education is not.

¹⁹See for instance, Di Tella, Mc Cullock and Oswald (2001), Frey and Stutzer (2002), Blanchflower and Oswald (2004), Alesina, Di Tella and McCulloch (2004) and Layard (2005).

strong family ties imply less participation in market activities, lower income (at least lower market income without taking into account home production) but also higher happiness. This consideration may contribute to explain the "puzzle" whereby, in some cases, when comparing income levels and happiness, one finds that the correlation between the two is far from perfect, a result discussed, for instance, in Layard (2005). We have also investigated whether weak family ties make men or women happier, since family ties are correlated with different gender roles. We find no differential effect for men and women²⁰.

3 Evidence from second-generation immigrants in the US

3.1 The problem of causality

Heterogeneity in family ties may be a result of differences in institutions or economic conditions. If cultural values were fairly stable over time, then the impact of economic and institutional conditions on cultural variables in general and family ties in particular would be secondary. Bertrand and Schoar (2006) indeed show that measures of family ties have been stable over time even for countries experiencing big economic transformations.

Note that our evidence in the previous section is based upon within country results. This implies that, say, differences in publicly provided social services at the national level are held constant, since we have fixed effects in the regression. The same applies to any other national characteristic. This, however, does not solve completely the problem of reverse causality. For instance, a woman who does not find work because of bad luck, laziness or any other individual characteristic may spend more time at home and feel (or convince herself) that family is important.

We formally assess causality studying the impact of different forms of family ties in the original countries on a host of economic outcomes of second generation immigrants in the US. We restrict our analysis to second generation immigrants, as selection and disruption due to immigration are less relevant for this group (they are born and raised in the US.)²¹ We restrict the definition of "second-generation" to native-born individuals whose fathers were born abroad as it is standard in the literature (see Card, DiNardo and Estes, 1998).

We associate to each immigrant our measure of family ties defined as the average set of beliefs regarding family ties in the country of origin²². In other words, we assign to each

²⁰Results on this point are available.

²¹The use of immigrants (first or second generation) to study the importance of culture on economic behavior is becoming relatively standard in the analysis of culture (see Antecol (2000), Carroll, Rhee and Rhee (1994), Fernandez and Fogli (2005) and Giuliano (2007) amongst others).

²²Note that our sample mainly consists of individuals between 15 and 29 year old, which means that,

immigrant a sort of "cultural baggage" that he/she brings with him/herself to the US and transmits to the second generation²³. Thus the beliefs attributed to any immigrant are those of the country of origin, not those that he/she expresses and that therefore could be caused by his/her special circumstances with these different cultural baggages. With these different cultural baggages, second generation immigrants live in the same place, the United States.

There are some problems in taking the unconditional average of our measure of culture at the country level: first, different characteristics of the country population could drive our results (a richer country could be more likely to develop weaker family ties, similarly for a country with a higher level of education or younger population); second, there could be a concern of measurement error if the World Value Survey opinion polls are not really representative of the country population. To cope with these problems, we also computed the country measure of family ties after controlling for individual characteristics (age, sex and education). Our conditional measure of culture is given then by the coefficients on the country fixed effects. The correlation between the two measures is very high (0.99) and the results of our regressions do not change when we use the conditional measure.²⁴

3.2 Data

Our main dataset is the March Supplement of the Current Population Survey (CPS), the only recent available dataset in which individuals were asked (starting from 1994) about their parents' country of origin. We pool eleven years of data to have a higher number of observations. Given the available data in the CPS we can study the following outcomes: female and youth labor force participation, female college education, geographical mobility

since we are considering data from the 1994 to 2005 of the CPS, they are born sometime between 1965 and 1990, so their fathers arrived in the US before that time. Ideally we would like to associate to those individuals the cultural values of their father's countries of origin for the period of their arrivals in the US. Unfortunately, data on beliefs that go so far back in time do not exist. The only thing we can do, given data availability, is to associate to those immigrants the values that people from their father's country of origin hold today. This is a limitation, but not so dramatic, for several reasons. First, as emphasized before, several recent studies found that cultural differences between nations remained quite stable over time (Inglehart and Baker (2000)), moreover values appear pretty stable even for those countries experiencing dramatic economic changes (see Schwartz, Bardi and Bianchi (2000) for the case of Central and Eastern Europe). The assumption that culture evolves slowly over time is standard in the literature (see Tabellini, 2006.) Moreover, at least for the period between 1980 and 2000, Bertrand and Schoar (2006) found that norms on family values have been pretty stable over time and show little adjustment to economic conditions.

²³As emphasized by Bisin and Verdier (2001), Bisin, Topa and Verdier (2004) and Benabou and Tirole (2006) beliefs are partially determined by the actual environment and partially inherited from previous generations, what we called "culture". With the immigrant exercise we try to isolate this cultural component.

²⁴The results are available from the authors.

and living arrangements as measured by the probability of living as young adult in one's parents place, and family size.

3.3 Specification

For consistency with the regressions of the previous section, we run the following model in OLS or probit depending on the nature of the left hand side variable:

$$Y_{iks} = \alpha_0 + \alpha_1 WFT_k + \alpha_2 X_i + \delta_s + \varepsilon_{iks}$$

where Y_{iks} is the left hand side of interest for individual i , living in state s and whose father comes from country k . X_i includes a series of individual controls which vary depending on the outcome of interest and are standard in the literature²⁵, WFT_k is our measure of the weakness of family ties which varies by immigrant's country of origin and δ_s is a full set of state dummies. Standard errors are clustered at the country of origin level. In the baseline regression we include income in constant 1994 dollars but for consistency with the cross-country analysis we have also run our regressions without it²⁶. The results (available upon request) regarding the effect of family ties are practically identical.

3.4 Youth and female labor force participation

Table 8 presents our results for youth labor force participation. To be consistent with the previous session we define a dummy equal to one if person i is in the labor force (labor force participation is defined by looking at the number of hours worked last week or weeks worked last year); the sample includes young individuals between the ages of 15 and 29. The two regressions give identical results, so we report only the specification that looks at the number of weeks worked. In Column (1) we run the probit specification just controlling for age, age squared and gender, in Column (2) we add education²⁷ and marital status and in Column 3 income. All the controls have the expected sign. Labor force participation increases with age and education and it is lower for women. Weak family ties increase labor participation for youngsters.

Table 9 presents our results for female labor force participation (the sample includes women 15-64 years old.) Women belonging to weak family ties societies participate more in the labor market. The coefficient, however, becomes not significant once we add the

²⁵See Blau (1992) and Blau and Kahn (2005) for fertility and labor force participation, and DaVanzo (1983) for geographical migration.

²⁶In doing so, we gain some observations.

²⁷We include two dummies, one for people with up to 12 years of schooling and one for people with some college. The excluded group is given by people with completed college and more.

controls, including education. Our interpretation is as follows: with strong family ties, given their effects on the perception of the women’s role in the family, women have lower education, and because of that participate less in the labor force. We further explore this hypothesis in Table 10, by looking at the probability of women going to college. We regress this probability on our measure of family ties, a female dummy and an interaction between these two variables. If women tend to go to college more in weak family societies, we should expect a positive sign on the interaction term coefficient. This is indeed the case.

3.5 Youth geographical mobility, living arrangements and family size

In countries with strong family ties youth tend to live with their parents for a longer period of their life and have a lower level of geographical mobility. In Tables 11 and 12, we regress our measure of geographical mobility (a dummy equal to 1 if the person moved within states, between states or abroad) and the probability of living at home with their parents, respectively, on a quadratic for age, a female dummy, marital status, a dummy for being unemployed and family income . The variable on the weakness of family ties is always significant and with the expected sign; youth belonging to immigrant groups coming from strong family ties societies tend to migrate less and stay more with their parents. This is also consistent with Giuliano (2007), who uses as proxies for culture both country dummies and measures of living arrangements in the country of origin. Her sample is limited to only European countries: here we extend our analysis to youth coming from all the regions of the world. All the controls have the expected sign. Interestingly enough, more men than women live at home: perhaps women are less happy than men living at home given the gender roles in family with strong ties.

Moving from strong to weak family ties would increase youth participation in the labor market by 20%, more than a third of the sample average. When we do not include education as a control, the weakness of family ties increases women’s probability of participating in the labor market by 10%, about 17% of the sample average. The impact on youth geographical mobility and the probability of living at their parents’ place is even bigger: moving from strong to weak family ties increases geographical mobility by 4 percentage points (40% of the sample average), and the probability of living at home by 11% (about 50% of the sample average)²⁸.

Our last outcome of interest is family size (Tables 13.) This variable counts the number of own family members residing with each individual. As for the previous specification,

²⁸These magnitudes are in line with results by Giuliano (2007).

our variable on family ties is always negative and significant. Moving from strong to weak family ties societies would decrease the average number of people in a family by 0.57, about 20% of the sample average.

4 Robustness checks

4.1 Alternative cultural variables

Previous papers (Antecol (2000), Fernandez and Fogli (2007) and Giuliano (2007)) use the mean economic variables of interest in the country of origin as a measure of culture (i.e. they regress female labor force participation of second generation immigrants on the average level of female labor force participation of the country of origin.) Those measures were meant to summarize economic, institutional and cultural conditions in the country of origin. This approach was based upon the idea that if country of origin variables mattered in the new environment (the destination country) the effect had to go through the cultural baggage of the immigrant. As a first robustness check, we test whether the inclusion of these alternative measures of culture reduce the importance of our measure of family ties. In particular, we include both contemporaneous and past country of origin variables as alternative measures of culture. As discussed in Fernandez and Fogli (2007) it is not clear, a priori, if we should attach to second generation immigrants measures of culture that are contemporaneous or measures of culture that immigrants' parents brought when they arrived in the US. Columns (4) to (6) in all previous tables include as regressors measures of economic outcomes of interests in the country of origin, whenever available.

Our measure of family ties remains statistically significant even after including these variables²⁹ and it appears to capture better the beliefs relevant to determine immigrants' economic outcomes than the variable representing the same economic outcomes in the country of origin.

4.2 Family ties or "traditional" values toward women?

One may worry that our attitudes toward the family are simply picking up other attitudes, especially those toward the more or less traditional role of women in society. We

²⁹Our variable of family ties lose significance only when we include the measure of family size in the original countries for 1990 and 1980. This could simply be due to the much smaller number of observations, due to lack of information on this variable in the original country. The coefficient remains of similar magnitudes and sign. Note also that we cannot include country of origin variables in the regressions for geographical mobility and living arrangements. For living arrangements those data are available for a very limited set of European countries, and there are no data on geographical mobility for the original countries.

investigate this question in Tables 14 and 15, where we include both attitudes (on weak family ties and toward a traditional role of women in society) in the regression³⁰. Our results survive conditioning on attitudes toward women. In contrast, there is no statistically significant relationship between immigrants outcomes and attitudes toward women after conditioning on the strength of family ties.

4.3 Level of income in the country of origin

Our measure of family ties in the country of origin could be correlated with country factors that shape other unmeasured characteristics of immigrants responsible for the observed behavior. One of the main variables could be the level of GDP in the country of origin: one alternative story is that immigrants belonging to strong family ties societies are coming from poorer countries, therefore the outcomes that we observe in the US among second generation immigrants are just the result of the transmission of a lower level of initial income for strong family ties immigrants. In Table 16 we control for the level of GDP in the country of origin. We look at the level of GDP in 1970 (which should roughly corresponds to the timing of arrival of the fathers of second generation immigrants in our sample)³¹. Our results do not change with the inclusion of this variable.

4.4 Human Capital

One important omitted variable related to our outcomes of interest is unobserved human capital. Although we control for the level of education, it is possible that our results are driven by a lower parental level of education, lower level of human capital in the community in which immigrants live or lower level of human capital in their country or origin. There is indeed strong evidence that children’s schooling attainment is highly correlated with that of their parents, which, as for income, could be an explanation for our outcomes of interest. In this section we will show, in a variety of ways, that transmission of human capital does not explain away our results on family ties.

³⁰As measures of traditional attitudes toward women in society, we take the average at the country level of the answers to the following two questions from the World Value Survey regarding the role of woman as a mother and as housewife. The two questions are phrased as follows: “A working mother can establish just as warm and secure a relationship with her children as a mother who does not work” and “Being a housewife is just as fulfilling as working for pay” . The answers to both questions go from 1 (strongly disagree) to 4 (agree).

³¹The results do not change if we include more recent years of GDP.

4.4.1 Ethnic human capital across and within generations

We first check the robustness of our results to the inclusion of parental human capital and the average level of "ethnic" human capital of the network to which immigrants belong. These are standard controls in the literature of immigrant's assimilation or the role of networks. Borjas (1992, 1995) was the first to introduce the concept of "ethnic" human capital. He defined "ethnic" human capital as the mean level of human capital of the ethnic group of the fathers' country of origin of second generation immigrants, i.e. the average human capital of the first generation coming from a specific country, and showed that educational attainment and wages of second generation immigrants in the 1970 Census crucially depend on it³². We calculate this variable from the 1970 Census, because the immigrants who were in the US in this period were very likely to be the fathers of second generation immigrants in our sample³³. Our results are robust to the inclusion of this variable (Table 17.)

As a second robustness check, we also construct a measure of the average level of human capital of the second generation ethnic group to which each individual belongs. By including this measure we are able to capture the importance of peers and neighborhood effects for immigrants outcomes (see Borjas (1992, 1995.)) Even in this case results do not change (Table 18.)

4.4.2 Quantity versus quality of education in the country of origin

Controlling for the individual and ethnic level of human capital should already rule out the possibility that our variable is picking up unobserved human capital; however it could be that ethnic human capital does not capture well the human capital in the country of origin. In this section we check the robustness of our results to the inclusion of two other variables of human capital. The standard Barro-Lee measure, capturing the number of years of education in the country of origin, and a measure of school quality, first introduced by Hanushek and Kimko (2000)³⁴. Hanushek and Kimko (2000) show that, for a sample of about 80 countries, schooling quality, as measured by student performance on international tests, is positively related to economic growth rates for the period 1960-1990, and it is more relevant than mean years of schooling. Our results do not change

³²This control has also been used by Card (1998), Luttmer (2001), Fernandez and Fogli (2005) and Blau (2006).

³³We calculate the average level of education (defined as the average of the educational variable in the Census, taking values from 1 to 9, with 1 being no education and 9 more than college) for men between 15 and 45 years old. Those men should approximately correspond to the fathers of our second generation immigrants.

³⁴Fernandez and Fogli (2007) used this variable as a control for the quality of education, finding that it is not relevant to explain female labor force and fertility among second generation women in the US.

with the introduction of these two different measures of human capital in the country of origin (Tables 19 and 20.)

4.4.3 Investment in human capital for women and for men

According to our story, in strong family ties societies women tend to stay at home, invest less in education and work less. If our cultural interpretation is correct we would therefore expect a positive impact of our measure of family ties on educational choices for women, but not for men. On the other hand, if our measure of family ties is a proxy for human capital there is no reason to expect a differential effect in the educational choices of men rather than women.

In Table 21 we run two separate regressions for the probability of obtaining or completing college for men and women on our measure of family ties and the standard controls. We found that our cultural variable is significant only for women and not for men.

4.5 An alternative estimation strategy

An alternative way of testing the importance of family ties is to run a different specification where in the first-stage we regress immigrants' economic outcomes of interest on country of origin dummies, whereas in the second stage we regress the country dummies coefficients on family ties and other country of origin variables. With this approach we are first able to estimate an average effect of coming from different countries of origin, and then evaluate the relative importance of our measure of family ties with respect to other country of origin characteristics, including GDP, human capital and the quality of education. The results of the second-stage regression are reported in Table 22. Our cultural variable remains significant in the second-stage regression even after including other country of origin controls³⁵.

4.6 A Mexican effect?

Our results could be driven by second generation mexicans, the biggest immigrant group in our sample. We repeat our specification excluding Mexicans from the analysis and the results do not change. Results are available.

³⁵Only the variable measuring the probability of living at home loose significance when we control for the Barro-Lee level measures of human capital.

4.7 An instrument based upon language

In the previous section we do our best to control for all the reasonable omitted variables, that could be responsible for our results. As an additional test for exogeneity we also instrument our family ties variable using a grammatical rule denoting the use of pronoun as an instrument for culture. This variable considering the grammatical rule on pronoun drop has been used for the first time by Licht et al. (1994) as an instrument for cultural emphasis on embeddedness versus autonomy. When they instrument culture with pronoun drop the authors find a significant influence of culture on governance.

The relationship between language and culture has been a major issue of concern for applied psychology and anthropology. Hill and Mannheim (1992) suggest that grammatical categories transmit and reproduce culture and social categories. Similarly Kashima and Kashima (1998) try to test the correlation between global cultural characteristics of cultures and rules of language used in those cultures³⁶.

We use the intuition of Kashima and Kashima (1998), that language may embed a particular conception about relationships among people. They suggest that the linguistic practice of pronoun drop, particularly the omission of the first-person singular pronoun (e.g., "I" in English), is linked to the psychological differentiation between the speaker and the context of speech. Societies more individualistic in nature tend to emphasize the importance of the individual in the context of speech, so they tend to keep the first-person singular pronoun. More collectivistic societies, on the other hand, tend to drop the first pronoun.

Our hypothesis is that societies with weak family ties are more individualistic, therefore should be associated with pronoun drop. This intuition is confirmed from the very high correlation between family ties and the linguistic variable on pronoun drop: the correlation is 0.55. The list of countries belonging to the two different language structures is also described in Table A5. The instrument is very unlikely to be related to the economic outcomes of second generation immigrants, who also have English as their primary language. Table 23 reports the results of the instrumental variable regressions. All the results are consistent with the corresponding OLS models, exhibiting only slightly higher coefficients. Table 24 reports the coefficients on the variable on pronoun drop coming from our first stage regressions.

³⁶Some colorful evidence (Semin and Rubini (1990)) also shows that there is a relationship between individualism-collectivism and verbal abuses.

4.8 Behavior of second generation immigrants in 27 European countries: evidence from the European Social Survey

We conclude by examining whether similar results exist when we look at second generation immigrant outcomes in countries other than the US. This final test is useful to check whether there is something related to the country of destination, that may explain the results on immigrants regarding family ties (perhaps weak family ties immigrants find it easier to adjust to the US economic environment). Looking at immigrants going to multiple destinations has also the advantage of reducing the problem due to selection, as the form of selection should vary across destination countries. We use data from the European Social Survey, a cross-sectional survey conducted in a large sample of mainly European countries. There are 27 destination countries³⁷. The survey has been conducted three times (in 2002, 2004 and 2006). We use the second and third wave as they contain information about the fathers' country of origin (not present in the first wave), crucial to identify second-generation immigrants. Unfortunately this dataset has a limited number of observations for each immigrant group, therefore the results should be taken with caution.

As before, we associate to each immigrant the measure of family ties constructed from the World Value Survey, i.e. we associate to each immigrant living in one of the 27 countries of the survey the average beliefs of his/her country of origin. Unfortunately there are no questions that allow us to study living arrangements and geographical mobility, but we can look at youth and female labor force participation, and family size.

Results are reported in Table 25, where we follow the standard specification. In Column 1, we look at youth labor force participation, only controlling for age and gender. In Column 2 we add marital status and education. As we already mentioned, the number of observations is very small, but nevertheless our results still hold, although with a lower level of significance. In Columns 3 and 4 we report the results for female labor force participation. Note that, as in the CPS, the variable on the weakness of family ties becomes not significant once we add education, indicating that a lower female participation in the market is driven by a lower investment in human capital. In Columns 5-7 we report the results for family size, where Column 7 adds country of destination fixed effects (we could include this control only in the regression on family size as we have a much larger number of observations). This last column is particularly telling, because, even when we take immigrants from 60 countries and we observe them in 27 different countries of

³⁷Austria, Belgium, Bulgaria, Switzerland, Cyprus, Czech Republic, Germany, Denmark, Estonia, Spain, Finland, France, Great Britain, Greece, Hungary, Ireland, Iceland, Luxembourg, Netherland, Norway, Poland, Portugal, Sweden, Slovenia, Slovak Republic, Turkey, Ukraine.

destination, we still find that our measure of family ties is an important determinant of family size. With all the limitations of this analysis, we nonetheless note that the results are completely consistent with the findings from the United States.

5 Conclusions

The family is a key socio economic unit in society and the nature of its organization varies greatly across nationalities. In some cultures/nationalities family ties are weak and members only feel obligated up to a point to be linked to others members of the family. In other cultures family ties are strong. We measure family ties based on answers from the World Value Survey and we show that strong family ties imply more home production of goods and services and less participation in market activities especially for women and youngsters which stay at home longer. This is associated with larger families, a more "traditional" role for women, with less education and more work at home. Strong family ties are also associated with less geographical mobility since ties are more useful if people live close to each other. Family with strong ties trust family members more, distrust people outside the family less and are inward looking. On the positive side, people belonging to strong family ties societies appear to be happier and satisfied with their life.

In order to mitigate problems of reverse causation and endogeneity of cultural traits to economic outcomes we use second-generation immigrants in the US as a test that holds constant the economic environment but allows variation in immigrants' culture. We also use an instrument based on linguistic characteristics, on the assumption that the language structure is correlated (as it is) to beliefs about individualistic versus groups relationships. Overall both the size and the statistical significance of the coefficients imply a large effect of the nature of family relationships on economic structures. These considerations are important for the design of public policies since the same set of interventions may have very different effects in countries with different family ties.

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Table 1
Correlations among Family Values

	Family Important	Parental Duties	Respect and love parents	Principal component	Sum
Family Important	1.0000				
Parental Duties	0.3558	1.0000			
Respect and Love Parents	0.5585	0.5225	1.0000		
Weak Family Ties (First Principal Component)	0.6910	0.8514	0.8506	1	
Sum	0.5364	0.8391	0.9012	0.9740	1

Correlations are calculated at the country level

The variable *Weak Family Ties* is constructed by taking the first principal component of the following three variables:

[1] *Family important*: it assesses how important is the family in one person's life and can take values from 1 (very important) to 4 (not important at all).

[2] *Parental Duties*: the respondent agrees with one of the two statements: Regardless of what the qualities and faults of one's parents are, one must always love and respect them (taking the value of 1) and One does not have the duty to respect and love parents who have not earned it (taking the value of 2).

[3] *Respect and Love Parents*: the respondent agrees with one of the two statements: It is the parents' duty to do their best for their children even at the expense of their own well-being (taking the value of 1) and Parents have a life of their own and should not be asked to sacrifice their own well being for the sake of their children (taking the value of 2).

Table2
Family ties, Youth and Female Labor Force Participation

	(1) Women LFP	(2) Youth LFP	(3) Youth LFP (excluding students)
Weak family ties (Principal Component)	0.015 (0.003)***	0.008 (0.003)**	0.009 (0.001)***
Primary Education	-0.224 (0.008)***	0.108 (0.009)***	-0.184 (0.011)***
Secondary Education	-0.093 (0.007)***	0.131 (0.008)***	-0.070 (0.005)***
Age	0.084 (0.002)***	0.213 (0.012)***	-0.026 (0.006)***
Age squared	-0.001 (0.000)***	-0.004 (0.000)***	0.000 (0.000)***
Catholic	-0.031 (0.013)**	-0.009 (0.014)	0.001 (0.006)
Protestant	-0.018 (0.015)	-0.009 (0.017)	0.001 (0.007)
Orthodox	0.010 (0.021)	-0.028 (0.027)	-0.001 (0.012)
Jews	-0.072 (0.053)	0.006 (0.058)	0.033 (0.010)***
Muslim	-0.069 (0.017)***	-0.025 (0.019)	-0.035 (0.011)***
Hindu	-0.065 (0.030)**	-0.105 (0.037)***	-0.035 (0.036)
Buddhist	-0.032 (0.026)	-0.027 (0.035)	-0.031 (0.026)
Other	0.017 (0.015)	-0.003 (0.016)	-0.008 (0.007)
Married	-0.124 (0.009)***		
Single	0.096 (0.011)***		
Male		0.274 (0.006)***	0.259 (0.005)***
Observations	40763	26138	19926

Notes:

[1] *Women LFP*: a variable equal to one if a woman participates into the labor force and zero otherwise, the age range is 15-64. *Youth LFP*: a variable equal to one if youth participates into the labor force and zero otherwise, the age range is 15-29.

[2] The variable *Weak Family Ties* is described in Table 1.

[3] All regressions are cross-section (4th wave) probit regressions and control for country fixed effects. Marginal effects are reported. Robust standard errors in parenthesis, * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 3
Family Ties and Home Production

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Weak family ties (Princ. Comp. country average)	-7.546 (4.074)*	-8.171 (2.751)**	-7.482 (3.040)**	-10.057 (5.189)*	-12.052 (2.962)***	-7.025 (3.632)*	-14.201 (3.912)***	-10.362 (4.550)*
Age	8.311 (0.694)***	8.197 (0.722)***	8.166 (0.726)***	8.545 (0.851)***	8.514 (0.848)***	8.601 (0.836)***	8.534 (0.844)***	8.587 (0.856)***
Age squared	-0.102 (0.009)***	-0.100 (0.009)***	-0.100 (0.009)***	-0.103 (0.011)***	-0.103 (0.011)***	-0.104 (0.011)***	-0.103 (0.011)***	-0.104 (0.011)***
Secondary educ.	-7.639 (2.048)***	-6.099 (2.341)**	-5.453 (2.495)*	-7.110 (2.791)**	-6.588 (3.018)*	-7.359 (2.611)**	-6.703 (2.671)**	-7.745 (2.738)**
Tertiary educ.	-16.005 (2.180)***	-13.313 (2.486)***	-12.360 (2.638)***	-14.046 (2.805)***	-13.334 (3.154)***	-14.155 (2.630)***	-13.598 (2.620)***	-14.813 (2.903)***
Employed	-29.473 (3.573)***	-29.157 (3.557)***	-29.066 (3.575)***	-29.779 (4.329)***	-29.859 (4.349)***	-29.979 (4.361)***	-29.809 (4.435)***	-29.629 (4.350)***
Female	53.616 (6.595)***	53.726 (6.574)***	53.745 (6.583)***	55.657 (8.360)***	55.702 (8.357)***	55.604 (8.350)***	55.686 (8.335)***	55.723 (8.356)***
Real GDP		-0.000 (0.000)***		-0.001 (0.001)	0.000 (0.001)	0.001 (0.001)	0.000 (0.001)	-0.000 (0.001)
Years of educ. (Barro-Lee)			-1.588 (0.495)***	0.108 (1.795)	-1.473 (2.010)	-4.490 (1.805)**	-0.457 (1.524)	0.638 (1.771)
Marginal tax rate, single (100)					67.404 (18.455)***			
Marginal tax rate, spouse (100,0)					-7.280 (10.194)			
Marginal tax rate, spouse (100,67)					-10.768 (25.977)			
Real expenditure on cash benefits per child (0-14)						4.348 (2.776)		
Real expenditure on parental leave per child (0-3)						0.622 (0.498)		
Real Expenditure on family services per child (0-14)						-1.192 (4.237)		

Employment Protection Index							4.414	
Average tax wedge							(1.258)***	33.360
Observations	132588	132588	132588	102555	102555	102555	102555	(12.146)**
R-squared	0.21	0.21	0.21	0.24	0.24	0.24	0.24	0.24

Notes:

[1] *Home production*: Home production is defined as the sum of the following activities: washing, hanging and ironing clothes, making beds, any form of house cleaning, other manual domestic work, and putting shop away. The results are robust if we also include eating, cooking and kid care. Home production is measured in minutes per day. Only records with complete diaries (expressed in minutes and that added up to 24 hours) are included.

[2] All regressions are OLS regressions. Standard errors are clustered at the country level. * significant at 10%; ** significant at 5%; *** significant at 1%. Tax variables (taken by Faggio and Nickell (2006)) include the marginal tax rates facing married women at zero hours of work and when they are earning 67% of average earnings given their spouses are earning 100% of average earnings, the marginal tax rate facing a single earner. The average tax wedge is the average labor tax rate (the sum of the average payroll, income and consumption tax rates). The employment protection index (Faggio and Nickell (2006)) refers to regular employment. Variables capturing public expenditure on children and parental leave include real expenditure on cash benefits (annual public expenditures in real dollars on family cash benefits per child age 0-14 divided by 1,000); real expenditures on parental leave (annual public expenditure in real dollars on maternity and parental leave per child aged 0-3 divided by 1,000), real expenditures on family services (annual public expenditures in real dollars on family services per child aged 0-14 divided by 1,000) and they are taken by Jaumotte (2003)

Table 4
Family Ties and the Role of Women in the Society

	(1)	(2)	(3)
	Job Scarce	Woman Housewife	Working Mom
Weak Family Ties (Principal Component)	-0.017 (0.001)***	-0.052 (0.003)***	-0.001 (0.003)
Male	0.095 (0.003)***	0.065 (0.006)***	-0.162 (0.006)***
Primary Education	0.165 (0.004)***	0.168 (0.009)***	-0.155 (0.008)***
Secondary Education	0.078 (0.004)***	0.065 (0.008)***	-0.079 (0.007)***
Age	0.001 (0.000)***	0.002 (0.001)*	0.003 (0.001)***
Age Squared	0.000 (0.000)**	0.000 (0.000)**	-0.000 (0.000)***
Catholic	0.033 (0.006)***	0.044 (0.013)***	-0.000 (0.012)
Protestant	0.029 (0.007)***	0.044 (0.015)***	-0.026 (0.014)*
Orthodox	0.023 (0.011)**	-0.019 (0.023)	-0.027 (0.021)
Jews	0.056 (0.023)**	0.031 (0.048)	0.042 (0.045)
Muslim	0.114 (0.010)***	0.066 (0.019)***	-0.100 (0.018)***
Hindu	0.098 (0.018)***	0.056 (0.034)	-0.028 (0.030)
Buddhist	0.038 (0.014)***	0.013 (0.021)	-0.014 (0.020)
Other	0.039 (0.008)***	0.026 (0.015)*	-0.068 (0.014)***
Observations	92262	82588	84967
R-squared	0.21	0.10	0.09

[1] *Job scarce*: a categorical variable that is the answer to the question: “When jobs are scarce, men should have more right to a job than women.” The variable can take the values 1(agree), 2 (neither) and 3(disagree). *Woman housewife*: a categorical variable that is the answer to the question: “Being a housewife is just as fulfilling as working for pay”, going from 1(strongly disagree) to 4 (agree); *Working mom*, a categorical variable that is the answer to the question “A working mother can establish just as warm and secure a relationship with her children as a mother who does not work” going from 1(strongly disagree) to 4 (agree).

[2] The variable *Weak Family Ties* is described in Table 1.

[3] All regressions are cross-section (4th wave) OLS regressions and control for country fixed effects. Robust standard errors in parenthesis, * significant at 10%; ** significant at 5%; *** significant at 1%. The results are robust if we run ordered logit regressions.

Table 5
Family Ties and the Role of the Government

	(1)
	Extensive welfare or people responsibility
Weak family ties (Principal Component)	-0.021 (0.012)*
Male	0.043 (0.023)*
Primary Education	-0.023 (0.035)
Secondary Education	-0.022 (0.032)
Age	0.015 (0.005)***
Age squared	-0.000 (0.000)***
Catholic	0.043 (0.042)
Protestant	0.003 (0.060)
Orthodox	0.188 (0.068)***
Jews	-0.081 (0.234)
Muslim	-0.025 (0.057)
Hindu	-0.096 (0.123)
Buddhist	0.110 (0.056)**
Other	0.116 (0.054)**
Married	-0.038 (0.042)
Single	0.025 (0.052)
Observations	15253
R-squared	0.11

Notes:

[1] *Extensive welfare or people responsibility*: a categorical variable that is the answer to the question: “Could you please tell me which type of society you think this country should aim to be in the future. A society with extensive social welfare, but high taxes (first statement) versus a society where taxes are low and individuals take responsibility for themselves (second statement). The possible values go from closer to the first statement (1) to closer to the second (5).

[2] The variable *Weak Family Ties* is described in Table 1.

[3] All regressions are cross-section (4th wave) OLS regressions and control for country fixed effects. Robust standard errors in parenthesis, * significant at 10%; ** significant at 5%; *** significant at 1%. The results are robust if we run ordered logit regressions.

Table 6
Family Ties and Trust

	(1)
	Trust
Weak Family Ties (Principal Component)	0.004 (0.001)***
Male	0.013 (0.003)***
Primary Education	-0.093 (0.004)***
Secondary Education	-0.068 (0.004)***
Age	0.002 (0.000)***
Age squared	-0.000 (0.000)***
Catholic	0.002 (0.006)
Protestant	0.017 (0.008)**
Orthodox	-0.014 (0.011)
Jews	0.049 (0.024)**
Muslim	0.037 (0.009)***
Hindu	0.027 (0.016)*
Buddhist	0.012 (0.014)
Other	0.013 (0.007)*
Observations	89314
R-squared	0.10

[1] *Trust*: a dummy variable that is the answer to the question “Generally speaking, would you say that most people can be trusted (1) or that you need to be very careful in dealing with people (0)?” *New versus Old Ideas*: a categorical variable that is the answer to the question: “Ideas that have stood the test of time are generally the best” (1) versus “New ideas are generally better than old ones (10)”.

[2] The variable *Weak Family Ties* is described in Table 1.

[3] All regressions are cross-section (4th wave) OLS regressions and control for country fixed effects. Robust standard errors in parenthesis, * significant at 10%; ** significant at 5%; *** significant at 1%. The results are robust if we run probit and ordered logit regressions for column 1 and 2, respectively.

Table 7
Family Ties, Happiness and Life Satisfaction

	(1)	(2)
	Happiness	Life Satisfaction
Weak Family Ties (Principal Component)	-0.050 (0.002)***	-0.122 (0.008)***
Male	-0.036 (0.005)***	-0.093 (0.016)***
Primary Education	-0.145 (0.007)***	-0.519 (0.022)***
Secondary Education	-0.044 (0.006)***	-0.260 (0.020)***
Employed	-0.001 (0.006)	0.038 (0.020)*
Unemployed	-0.146 (0.010)***	-0.618 (0.033)***
Age	-0.016 (0.001)***	-0.056 (0.003)***
Age squared	0.000 (0.000)***	0.001 (0.000)***
Married	0.277 (0.008)***	0.652 (0.027)***
Single	0.125 (0.011)***	0.347 (0.034)***
Catholic	0.064 (0.010)***	0.141 (0.033)***
Protestant	0.099 (0.012)***	0.347 (0.038)***
Orthodox	0.032 (0.018)*	0.008 (0.065)
Jews	-0.031 (0.039)	0.099 (0.123)
Muslim	0.037 (0.015)**	0.123 (0.053)**
Hindu	0.053 (0.028)*	0.268 (0.085)***
Buddhist	0.019 (0.020)	0.184 (0.067)***
Other	0.057 (0.012)***	0.106 (0.039)***
Observations	88531	89317
R-squared	0.17	0.23

[1] *Happiness*: A categorical variable that is the answer to the question: “Taking all things together, would you say you are very happy (4), quite happy (3), not very happy (2), not all happy (1).” *Life satisfaction*: a categorical variable that is the answer to the question: “All things considered, how satisfied are you with your life as a whole these days?” (from being dissatisfied (1) to being satisfied (10)).

[2] The variable *Weak Family Ties* is described in Table 1.

[3] All regressions are cross-section (4th wave) OLS regressions and control for country fixed effects. Robust standard errors in parenthesis, * significant at 10%; ** significant at 5%; *** significant at 1%. The results are robust if we run ordered logit regressions.

Table 8
Family Ties and Youth Labor Force Participation
Second Generation Immigrants, 15-29 years old

	(1)	(2)	(3)	(4)	(5)	(6)
	Youth LFP	Youth LFP	Youth LFP	Youth LFP	Youth LFP	Youth LFP
Weak Family Ties (Princ. Comp., average in the country of origin)	0.100 (0.021)***	0.092 (0.022)***	0.084 (0.024)***	0.082 (0.027)***	0.083 (0.027)***	0.091 (0.024)***
Age	0.424 (0.034)***	0.404 (0.032)***	0.410 (0.029)***	0.403 (0.033)***	0.403 (0.033)***	0.403 (0.033)***
Age squared	-0.008 (0.001)***	-0.008 (0.001)***	-0.008 (0.001)***	-0.008 (0.001)***	-0.008 (0.001)***	-0.008 (0.001)***
Female	-0.078 (0.013)***	-0.084 (0.013)***	-0.080 (0.012)***	-0.082 (0.013)***	-0.082 (0.013)***	-0.082 (0.013)***
Up to 12 years of school.		-0.093 (0.026)***	-0.066 (0.025)***	-0.089 (0.027)***	-0.089 (0.027)***	-0.091 (0.026)***
Some college		-0.030 (0.028)	-0.016 (0.028)	-0.029 (0.028)	-0.029 (0.028)	-0.029 (0.028)
Married		0.023 (0.015)	0.028 (0.015)*			
Divorced		0.054 (0.023)**	0.065 (0.022)***			
Real household income			0.000 (0.000)***			
Youth LFP 1980 original country						0.000 (0.002)
Youth LFP 1990 original country					0.001 (0.002)	
Youth LFP 2000 original country				0.001 (0.002)		
Observations	22831	22831	22831	22675	22675	22675

- [1] *Youth LFP*: a variable equal to 1 if youth participates into the labor force and zero otherwise. The age group is 15-29
[2] *Weak Family Ties*: the mean value of the principal component analysis of the “weak family ties” variable in the immigrant’s country of origin
[3] All regressions are probit. Marginal effects are reported. Standard errors are clustered at the country of origin level and control for state fixed effects

Table 9
Family Ties and Female Labor Force Participation
Second Generation Immigrants

	(1)	(2)	(3)	(4)	(5)
	Female LFP	Female LFP	Female LFP	Female LFP	Female LFP
Weak Family Ties (Princ. Comp., average in the country of origin)	0.045 (0.015)***	0.015 (0.015)	0.010 (0.017)	0.021 (0.017)	0.021 (0.018)
Age	0.071 (0.005)***	0.062 (0.003)***	0.062 (0.003)***	0.062 (0.003)***	0.062 (0.003)***
Age squared	-0.001 (0.000)***	-0.001 (0.000)***	-0.001 (0.000)***	-0.001 (0.000)***	-0.001 (0.000)***
Up to 12 years of schooling		-0.199	-0.171	-0.201	-0.201
Some College		(0.014)*** -0.034	(0.012)*** -0.015	(0.016)*** -0.036	(0.016)*** -0.036
Married		(0.017)** -0.058	(0.019) -0.068	(0.018)** -0.058	(0.018)** -0.058
Divorced		(0.019)*** 0.064	(0.020)*** 0.073	(0.019)*** 0.064	(0.019)*** 0.064
Real hous. Income		(0.014)***	(0.015)*** 0.000	(0.014)***	(0.014)***
Female LFP 1990			(0.000)***		-0.001 (0.001)
Female LFP 2000				-0.001 (0.001)	
Observations	26547	26547	26547	26459	26459

[1] *Women LFP*: a variable equal to 1 if a woman participates into the labor force and zero otherwise. The age group is 15-64.

[2] *Weak Family Ties*: the mean value of the principal component analysis of the “weak family ties” variable in the immigrant’s country of origin.

[3] All regressions are probit. Marginal effects are reported. Standard errors are clustered at the country of origin level and control for state fixed effects

Table 10
College Education and Family Ties
Second generation immigrants

	(1)	(2)	(3)
	Some or completed college	Some or completed college	Some or completed college
Weak Family Ties (Princ. Comp., average in the country of origin)	0.095 (0.068)	0.085 (0.058)	0.120 (0.063)*
Female	0.058 (0.005)***	0.062 (0.005)***	0.058 (0.005)***
Female* (weak family ties)	0.039 (0.013)***	0.037 (0.012)***	0.035 (0.013)**
Age	0.317 (0.054)***	0.315 (0.056)***	0.303 (0.053)***
Age squared	-0.006 (0.001)***	-0.006 (0.001)***	-0.006 (0.001)***
Real Hous. Income		0.000 (0.000)***	
Girls to Boys ratio in Tertiary Education			0.124 (0.123)
Observations	22831	22831	20602
R-squared	0.30	0.32	0.30

[1] *Some or completed college*: a variable equal to 1 if a person has some or completed college education.

[2] *Weak Family Ties*: the mean value of the principal component analysis of the “weak family ties” variable in the immigrant’s country of origin.

[3] All regressions are probit regressions. Marginal effects are reported. Standard errors are clustered at the country of origin level and control for state fixed effects.

Table 11
Family Ties and Geographical Mobility
15-29 Years Old Second Generation Immigrants

	(1)	(2)	(3)	(4)
	Geographical mobility	Geographical mobility	Geographical mobility	Geographical mobility
Weak family ties (Princ. Comp., average in the country of origin)	0.020 (0.005)***	0.016 (0.005)***	0.017 (0.005)***	0.018 (0.005)***
Age	0.027 (0.004)***	0.031 (0.004)***	0.030 (0.004)***	0.028 (0.004)***
Age squared	-0.001 (0.000)***	-0.001 (0.000)***	-0.001 (0.000)***	-0.001 (0.000)***
Female	0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.002 (0.003)
Up to 12 years of schooling		-0.041 (0.006)***	-0.042 (0.006)***	-0.048 (0.007)***
Some college		-0.040 (0.003)***	-0.040 (0.003)***	-0.042 (0.003)***
Married		0.019 (0.004)***	0.019 (0.004)***	0.018 (0.004)***
Divorced		0.026 (0.009)***	0.026 (0.009)***	0.023 (0.009)***
Unemployed			0.025 (0.006)***	0.023 (0.006)***
Real income				-0.000 (0.000)***
Observations	21253	21253	21252	21252

[1] *Geographical mobility*: a variable equal to 1 if the person moved within states, between states or abroad

[2] *Weak Family Ties*: the mean value of the principal component analysis of the “weak family ties” variable in the immigrant’s country of origin.

[3] All regressions are probit. Marginal effects are reported. Standard errors are clustered at the country of origin level and control for state fixed effects

Table 12
Living at Home with Their Parents
Second Generation Immigrants
18-33 Years Old

	(1)	(2)
	Living at Home	Living at Home
Weak Family Ties (Princ. Comp., average in the country of origin)	-0.053 (0.029)*	-0.062 (0.026)**
Age	-0.200 (0.014)***	-0.193 (0.015)***
Age squared	0.003 (0.000)***	0.003 (0.000)***
Female	-0.111 (0.008)***	-0.100 (0.009)***
Up to 12 years of school.	-0.061 (0.015)***	0.023 (0.017)
Some College	0.037 (0.018)**	0.089 (0.018)***
Real Hous. Income		0.000 (0.000)***
Observations	19664	19664

[1] *Living at home*: a variable equal to 1 if a person lives with her/his parents and zero otherwise

[2] *Weak Family Ties*: the mean value of the principal component analysis of the “weak family ties” variable in the immigrant’s country of origin.

[3] All regressions are probit. Marginal effects are reported. Standard errors are clustered at the country of origin level and control for state fixed effects

Table 13
Family Ties and Family size
Second Generation Immigrants

	(1)	(2)	(3)	(4)	(5)	(6)
	Family size	Family size	Family size	Family size	Family size	Family size
Weak Family Ties (Princ. Comp., average in the country of origin)	-0.325 (0.076)***	-0.275 (0.059)***	-0.305 (0.070)***	-0.230 (0.133)	-0.330 (0.172)*	-0.280 (0.161)
Age	-0.061 (0.009)***	-0.051 (0.008)***	-0.058 (0.009)***	-0.063 (0.006)***	-0.055 (0.009)***	-0.064 (0.004)***
Age squared	0.000 (0.000)***	0.000 (0.000)**	0.000 (0.000)***	0.000 (0.000)***	0.000 (0.000)*	0.000 (0.000)***
Up to 12 years of school.		0.335 (0.086)***	0.564 (0.094)***	0.576 (0.097)***	0.445 (0.112)***	0.593 (0.104)***
Some college		0.097 (0.039)**	0.261 (0.040)***	0.222 (0.074)***	0.129 (0.069)*	0.224 (0.087)**
Fam. size 1980 orig. country						0.020 (0.050)
Fam. size 1970 orig. country					-0.031 (0.093)	
Fam. size 1990 orig. country				0.067 (0.059)		
Hous. Real income			0.000 (0.000)***			
Observations	80964	80964	80964	31789	42467	29863
R-squared	0.32	0.33	0.36	0.28	0.33	0.29

[1] *Family size*: This variable counts the number of own family members residing with each individual.

[2] *Weak Family Ties*: the mean value of the principal component analysis of the “weak family ties” variable in the immigrant’s country of origin.

[3] All regressions are OLS. Standard errors are clustered at the country of origin level and control for state fixed effects.

Table 14
Family Ties versus Attitudes toward Women
Second Generation Immigrants

	(1) Youth LFP	(2) Female LFP	(3) Geographical mobility	(4) Family size	(5) Some or completed college	(6) Living at home
Weak family ties (Princ. Comp., average in the country of origin)	0.076 (0.024)***	0.006 (0.016)	0.015 (0.006)***	-0.294 (0.076)***	0.085 (0.065)	-0.047 (0.029)
Working mom (average in the country of origin)	0.039 (0.056)	0.039 (0.037)	0.010 (0.012)	0.013 (0.154)	-0.010 (0.075)	-0.092 (0.044)**
Age	0.412 (0.030)***	0.063 (0.003)***	0.028 (0.004)***	-0.058 (0.009)***	0.315 (0.056)***	-0.196 (0.014)***
Age squared	-0.008 (0.001)***	-0.001 (0.000)***	-0.001 (0.000)***	0.000 (0.000)***	-0.006 (0.001)***	0.003 (0.000)***
Up to 12 years of schooling	-0.063 (0.024)***	-0.172 (0.012)***	-0.049 (0.007)***	0.578 (0.099)***		0.021 (0.017)
Some college	-0.015 (0.028)	-0.017 (0.019)	-0.043 (0.004)***	0.270 (0.044)***		0.089 (0.018)***
Married	0.030 (0.016)*	-0.068 (0.021)***	0.017 (0.004)***			
Divorced	0.064 (0.022)***	0.074 (0.015)***	0.021 (0.009)**			
realincome	0.000 (0.000)***	0.000 (0.000)***	-0.000 (0.000)***	0.000 (0.000)***	0.000 (0.000)***	0.000 (0.000)***
Female	-0.081 (0.013)***		-0.003 (0.003)	-0.080 (0.035)**	0.060 (0.005)***	-0.099 (0.010)***
Female*(weak family ties)					0.032 (0.012)**	
Unemployed			0.021 (0.006)***			
Observations	22519	25519	20975	76884	22519	19269
R-squared				0.36	0.31	

[1] Variables and estimation strategies follow the previous tables.

[2] *Working mom*, the average in the country of origin of the answers to the following question “A working mother can establish just as warm and secure a relationship with her children as a mother who does not work” going from 1 (strongly disagree) to 4 (agree).

Table 15
Family Ties versus Attitudes toward Women
Second Generation Immigrants

	(1) Youth LFP	(2) Female LFP	(3) Geographical mobility	(4) Family size	(5) Some or completed college	(6) Living at home
Weak family ties (Princ. Comp., average in the country of origin)	0.060 (0.042)	0.010 (0.023)	0.020 (0.007)***	-0.329 (0.094)***	0.112 (0.052)**	-0.074 (0.030)**
Woman housewife (average in the country of origin)	-0.054 (0.069)	-0.002 (0.031)	0.007 (0.012)	-0.088 (0.135)	0.065 (0.057)	-0.035 (0.034)
Age	0.412 (0.029)***	0.063 (0.003)***	0.028 (0.004)***	-0.058 (0.009)***	0.315 (0.056)***	-0.196 (0.014)***
Age squared	-0.008 (0.001)***	-0.001 (0.000)***	-0.001 (0.000)***	0.000 (0.000)***	-0.006 (0.001)***	0.003 (0.000)***
Up to 12 years of schooling	-0.066 (0.025)***	-0.172 (0.012)***	-0.049 (0.007)***	0.576 (0.100)***		0.020 (0.018)
Some college	-0.017 (0.029)	-0.017 (0.019)	-0.042 (0.004)***	0.269 (0.044)***		0.088 (0.019)***
Married	0.030 (0.016)*	-0.068 (0.021)***	0.018 (0.004)***			
Divorced	0.064 (0.022)***	0.074 (0.015)***	0.021 (0.009)**			
Real Income	0.000 (0.000)***	0.000 (0.000)***	-0.000 (0.000)***	0.000 (0.000)***	0.000 (0.000)***	0.000 (0.000)***
Female	-0.080 (0.013)***		-0.003 (0.003)	-0.080 (0.035)**	0.060 (0.005)***	-0.100 (0.010)***
Female*weak family ties					0.030 (0.012)**	
Unemployed			0.020 (0.007)***			
Observations	22519	25519	20975	76884	22519	19269
R-squared				0.36	0.31	

[1] Variables and estimation strategies follow the previous tables.

[2] *Woman housewife*: the average in the country of origin of the answers to the following question: “Being a housewife is just as fulfilling as working for pay”, going from 1 (strongly disagree) to 4 (agree);

Table 16
Family ties and economic outcomes of second generation immigrants
Controlling for GDP

	(1)	(2)	(3)	(4)	(5)	(6)
	Youth LFP	Female LFP	Geographical mobility	Family size	Some or completed college	Living at home
Weak family ties (Princ. Comp., average in the country of origin)	0.056 (0.012)***	0.000 (0.009)	0.022 (0.009)**	-0.322 (0.017)***	0.121 (0.015)***	-0.032 (0.010)***
Age	0.355 (0.007)***	0.058 (0.001)***	0.027 (0.005)***	-0.058 (0.001)***	0.306 (0.007)***	-0.199 (0.007)***
Age squared	-0.007 (0.000)***	-0.001 (0.000)***	-0.001 (0.000)***	0.000 (0.000)***	-0.006 (0.000)***	0.003 (0.000)***
Up to 12 years of college	-0.034 (0.010)***	-0.150 (0.008)***	-0.059 (0.009)***	0.601 (0.016)***		0.003 (0.009)
Some College	0.012 (0.009)	0.008 (0.007)	-0.069 (0.009)***	0.278 (0.017)***		0.056 (0.009)***
Female	-0.057 (0.005)***		-0.001 (0.003)	-0.062 (0.011)***	0.063 (0.006)***	-0.078 (0.006)***
Female*weak family ties					0.033 (0.017)**	
Real Income	0.000 (0.000)***	0.000 (0.000)***	-0.000 (0.000)***	0.000 (0.000)***	0.000 (0.000)***	0.000 (0.000)***
GDP, country of origin	0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	0.000 (0.000)***	-0.000 (0.000)
Observations	21828	24399	20325	69561	21828	18819
R-squared	0.34	0.19	0.04	0.34	0.31	0.32

[1] Variables and estimation strategies follow the previous tables.

Table 17
Family ties and economic outcomes of second generation immigrants
Controlling for the Ethnic Human Capital of the First Generation

	(1)	(2)	(3)	(4)	(5)	(6)
	Youth LFP	Women LFP	Geographical mobility	Family size	Some or completed college	Living at home
Weak family ties (Princ. Comp., average in the country of origin)	0.091 (0.023)***	0.017 (0.016)	0.016 (0.006)***	-0.242 (0.072)***	0.073 (0.036)**	-0.062 (0.026)**
Age	0.408 (0.033)***	0.062 (0.003)***	0.028 (0.004)***	-0.061 (0.008)***	0.310 (0.054)***	-0.193 (0.015)***
Age squared	-0.008 (0.001)***	-0.001 (0.000)***	-0.001 (0.000)***	0.000 (0.000)***	-0.006 (0.001)***	0.003 (0.000)***
Up to 12 years of schooling	-0.095 (0.022)***	-0.178 (0.014)***	-0.040 (0.005)***	0.493 (0.080)***		0.015 (0.015)
Some or completed college	-0.037 (0.027)	-0.020 (0.019)	-0.038 (0.003)***	0.223 (0.030)***		0.080 (0.016)***
Married	0.024 (0.015)*	-0.071 (0.020)***	0.017 (0.004)***			
Divorced	0.061 (0.021)***	0.070 (0.016)***	0.021 (0.009)**			
Female	-0.085 (0.012)***		-0.001 (0.004)	-0.079 (0.033)**	0.064 (0.005)***	-0.099 (0.009)***
Female*weak family ties					0.028 (0.012)**	
Real income	0.000 (0.000)***	0.000 (0.000)***	-0.000 (0.000)***	0.000 (0.000)***	0.000 (0.000)***	0.000 (0.000)***
Unemployed			0.023 (0.006)***			
Ethnic human cap. first gener.	0.021 (0.008)***	0.018 (0.008)**	0.003 (0.002)**	-0.194 (0.032)***	0.069 (0.009)***	0.001 (0.010)
Observations	22166	26091	20622	79805	22166	19186
R-squared				0.37	0.33	

[1] Variables and estimation strategies follow the previous tables.

Table 18
Family ties and economic outcomes of second generation immigrants
Controlling for the Ethnic Human Capital of the Second Generation

	(1)	(2)	(3)	(4)	(5)	(6)
	Youth LFP	Women LFP	Geographical mobility	Family size	Some or completed college	Living at home
Weak family ties (Princ. Comp., average in the country of origin)	0.105 (0.023)***	0.025 (0.018)	0.014 (0.005)**	-0.111 (0.072)	-0.018 (0.025)	-0.071 (0.022)***
Age	0.409 (0.031)***	0.062 (0.003)***	0.029 (0.004)***	-0.057 (0.009)***	0.314 (0.055)***	-0.192 (0.015)***
Age squared	-0.008 (0.001)***	-0.001 (0.000)***	-0.001 (0.000)***	0.000 (0.000)***	-0.006 (0.001)***	0.003 (0.000)***
Up to 12 years of schooling	-0.078 (0.021)***	-0.177 (0.014)***	-0.045 (0.006)***	0.487 (0.083)***		0.028 (0.015)*
Some or completed college	-0.023 (0.025)	-0.018 (0.018)	-0.041 (0.003)***	0.228 (0.032)***		0.092 (0.017)***
Married	0.026 (0.015)*	-0.070 (0.020)***	0.018 (0.004)***			
Divorced	0.063 (0.022)***	0.072 (0.015)***	0.023 (0.009)***			
Female	-0.081 (0.013)***		-0.002 (0.003)	-0.079 (0.032)**	0.064 (0.005)***	-0.100 (0.009)***
Female*weak family ties					0.037 (0.011)***	
Real income	0.000 (0.000)***	0.000 (0.000)***	-0.000 (0.000)***	0.000 (0.000)***	0.000 (0.000)***	0.000 (0.000)***
Unemployed			0.023 (0.006)***			
Ethnic human capital second gen.	0.038 (0.022)*	0.031 (0.017)*	0.008 (0.004)**	-0.456 (0.059)***	0.181 (0.017)***	0.016 (0.020)
Observations	22831	26547	21252	80964	22831	19664
R-squared				0.37	0.34	

[1] Variables and estimation strategies follow the previous tables.

Table 19
Family ties and economic outcomes of second generation immigrants
Controlling for Human Capital in the Country of Origin

	(1)	(2)	(3)	(4)	(5)	(6)
	Youth LFP	Female LFP	Geographical mobility	Family size	Some or completed college	Living at home
Weak family ties (Princ. Comp., average in the country of origin)	0.027 (0.011)**	-0.003 (0.008)	0.014 (0.008)*	-0.265 (0.015)***	0.095 (0.014)***	-0.025 (0.010)**
Age	0.356 (0.007)***	0.057 (0.001)***	0.028 (0.005)***	-0.058 (0.001)***	0.310 (0.007)***	-0.200 (0.007)***
Age squared	-0.007 (0.000)***	-0.001 (0.000)***	-0.001 (0.000)***	0.000 (0.000)***	-0.006 (0.000)***	0.003 (0.000)***
Up to 12 years of schooling	-0.034 (0.010)***	-0.151 (0.007)***	-0.060 (0.009)***	0.555 (0.014)***		0.006 (0.009)
Some college	0.008 (0.009)	0.003 (0.007)	-0.070 (0.009)***	0.253 (0.015)***		0.063 (0.009)***
Female	-0.056 (0.005)***		-0.000 (0.003)	-0.079 (0.010)***	0.063 (0.006)***	-0.077 (0.006)***
Female*weak family ties					0.034 (0.016)**	
Real Income	0.000 (0.000)***	0.000 (0.000)***	-0.000 (0.000)***	0.000 (0.000)***	0.000 (0.000)***	0.000 (0.000)***
Barro-Lee measure of human capital	0.011 (0.002)***	0.004 (0.002)***	0.002 (0.001)*	-0.023 (0.003)***	-0.002 (0.002)	-0.006 (0.002)***
Observations	22417	26093	20886	79515	22417	19322
R-squared	0.34	0.19	0.03	0.36	0.31	0.32

[1] Variables and estimation strategies follow the previous tables.

Table 20
Family ties and economic outcomes of second generation immigrants
Controlling for the Quality of Education in the Country of Origin

	(1)	(2)	(3)	(4)	(5)	(6)
	Youth LFP	Female LFP	Geographical mobility	Family size	Some or completed college	Living at home
Weak family ties (Princ. Comp., average in the country of origin)	0.037 (0.015)**	0.000 (0.012)	0.007 (0.011)	-0.110 (0.021)***	0.086 (0.017)***	-0.039 (0.014)***
Age	0.355 (0.007)***	0.058 (0.001)***	0.027 (0.005)***	-0.057 (0.001)***	0.306 (0.007)***	-0.200 (0.007)***
Age squared	-0.007 (0.000)***	-0.001 (0.000)***	-0.001 (0.000)***	0.000 (0.000)***	-0.006 (0.000)***	0.003 (0.000)***
Up to 12 years of schooling	-0.035 (0.010)***	-0.151 (0.008)***	-0.059 (0.009)***	0.572 (0.015)***		0.004 (0.009)
Some college	0.010 (0.009)	0.003 (0.007)	-0.068 (0.009)***	0.265 (0.016)***		0.059 (0.009)***
Female	-0.056 (0.005)***	0.000 (0.000)	-0.001 (0.003)	-0.068 (0.010)***	0.063 (0.006)***	-0.076 (0.006)***
Female*weak family ties					0.035 (0.017)**	
Real income	0.000 (0.000)***	0.000 (0.000)***	-0.000 (0.000)***	0.000 (0.000)***	0.000 (0.000)***	0.000 (0.000)***
Quality of education (Hanushek and Kimko (2000))	0.001 (0.001)	0.000 (0.001)	0.001 (0.000)*	-0.011 (0.001)***	0.000 (0.000)	-0.000 (0.001)
Observations	21938	25216	20422	74526	21938	18978
R-squared	0.34	0.19	0.03	0.35	0.31	0.32

[1] Variables and estimation strategies follow the previous tables.

Table 21
Family ties and economic outcomes of second generation immigrants
Probability of going to college for second generation immigrants, by gender

	MEN	WOMEN
	Some or completed college	Some or completed college
Weak family ties (Principal Component, average in the country of origin)	0.085 (0.059)	0.121 (0.053)**
Age	0.269 (0.061)***	0.360 (0.051)***
Age squared	-0.005 (0.001)***	-0.007 (0.001)***
Real income	0.000 (0.000)***	0.000 (0.000)***
Observations	11280	11551
R-squared	0.30	0.33

[1] *Some or completed college*: a variable equal to 1 if a person has some or completed college education;

[2] *Weak Family Ties*: the mean value of the principal component analysis of the “weak family ties” variable in the immigrant’s country of origin.

[3] All regressions are probit. Marginal effects are reported. Standard errors are clustered at the country of origin level and control for state fixed effects

Table 22
Family ties and economic outcomes of second generation immigrants
Second stage regressions of economic outcomes on the weakness of family ties and country of origin controls

PANEL A: WITHOUT COUNTRY OF ORIGIN CONTROLS

	(1)	(2)	(3)	(4)	(5)	(6)
	YLF	FLF	Female college	Geog. Mob.	Fam. Size	Living at Home
Weak family ties (Princ. Comp., average in the country of origin)	0.105 (0.024)***	0.055 (0.017)***	0.180 (.040)***	0.097 (0.026)***	-0.556 (0.118)***	-0.066 (0.023)***
Observations	50	54	54	47	54	51
R-squared	0.28	0.17	0.28	0.23	0.30	0.15

PANEL B: CONTROLLING FOR GDP IN THE COUNTRY OF ORIGIN

	(1)	(2)	(3)	(4)	(5)	(6)
	YLF	FLF	Female college	Geog. Mob.	Fam. Size	Living at Home
Weak family ties (Princ. Comp., average in the country of origin)	0.108 (0.033)***	0.052 (0.024)**	0.240 (0.053)***	0.138 (0.034)***	-0.686 (0.163)***	-0.063 (0.029)**
GDP	-0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)*	0.000 (0.000)	0.000 (0.000)
Observations	42	44	44	40	44	42
R-squared	0.28	0.15	0.34	0.31	0.33	0.14

PANEL C: CONTROLLING FOR HUMAN CAPITAL IN THE COUNTRY OF ORIGIN

	(1)	(2)	(3)	(4)	(5)	(6)
	YLF	FLF	Female college	Geog. Mob.	Fam. Size	Living at Home
Weak family ties (Princ. Comp., average in the country of origin)	0.055 (0.027)**	0.024 (0.020)	0.181 (.052)***	0.105 (0.034)***	-0.578 (0.151)***	-0.040 (0.029)
Barro Lee	0.015 (0.005)***	0.010 (0.003)***	0.000 (0.009)	-0.002 (0.006)	0.005 (0.027)	-0.008 (0.005)
Observations	45	49	49	43	49	46
R-squared	0.44	0.32	0.29	0.24	0.31	0.19

PANEL D: CONTROLLING FOR THE QUALITY OF EDUCATION IN THE COUNTRY OF ORIGIN

	(1)	(2)	(3)	(4)	(5)	(6)
	YLF	FLF	Female college	Geog. Mob.	Fam. Size	Living at Home
Weak family ties (Princ. Comp., average in the country of origin)	0.090 (0.046)*	0.020 (0.031)	0.166** (0.076)	0.094 (0.049)*	-0.438 (0.228)*	-0.074 (0.039)*
Quality of educ.	0.001 (0.002)	0.001 (0.001)	0.001 (0.003)	0.000 (0.002)	-0.006 (0.008)	0.001 (0.001)
Observations	40	43	42	39	42	41
R-squared	0.28	0.18		0.25	0.32	0.15

Notes

[1] This table reports the results of a second stage regression. In the first stage, immigrants' outcomes of interest are regressed on country of origin dummies; while in the second stage, country dummies coefficients are regressed on family ties and other country of origin variables.

Table 23
Instrumental variable regressions
Instrumenting Family Ties with Language Pronoun Drop

	(1)	(2)	(3)	(4)	(5)	(6)
	Youth LFP	Women LFP	Geographical mobility	Family size	Some or completed college	Living at home
Weak family ties (Princ. Comp., average in the country of origin)	0.138 (0.054)**	0.028 (0.033)	0.042 (0.012)***	-0.399 (0.211)*	0.033 (0.079)	-0.117 (0.039)***
Age	0.355 (0.019)***	0.057 (0.005)***	0.028 (0.004)***	-0.058 (0.009)***	0.310 (0.055)***	-0.202 (0.011)***
Age squared	-0.007 (0.000)***	-0.001 (0.000)***	-0.001 (0.000)***	0.000 (0.000)***	-0.006 (0.001)***	0.003 (0.000)***
Up to 12 years of school.	-0.023 (0.015)	-0.149 (0.011)***	-0.060 (0.010)***	0.550 (0.101)***		-0.005 (0.013)
Some college	0.018 (0.017)	0.004 (0.017)	-0.071 (0.009)***	0.249 (0.046)***		0.053 (0.013)***
Real hous. Income	0.000 (0.000)***	0.000 (0.000)***	-0.000 (0.000)***	0.000 (0.000)***	0.000 (0.000)***	0.000 (0.000)***
Female	-0.056 (0.009)***		-0.001 (0.003)	-0.077 (0.034)**	0.070 (0.007)***	-0.076 (0.010)***
Female*(weak family ties)					0.081 (0.032)**	
Observations	22329	26048	20782	79242	22329	19313

[1] Language pronoun drop: a variable equal to one if a language does not drop the first pronoun and zero otherwise. For a list of languages see Table A5

[2] Standard errors are clustered at the country level, regressions control for state fixed effects * significant at 10%; ** significant at 5%; *** significant at 1%

Table 24
IV Regressions
First Stage Coefficients

	Youth LFP	Migration	Female LFP	Family Size	Living at Home	Fertility
Pronoun	.535***	.539***	.397***	.314***	.507***	.388***
Drop	(.0055)	(.0057)	(.0048)	(.0026)	(.0058)	(.0036)

Table 25
Family ties and economic outcomes of second generation immigrants
Evidence from the European Social Survey

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Youth LFP	Youth LFP	Female LFP	Female LFP	Family size	Family size	Family size
Weak family ties (Princ. Comp., average in the country of origin)	0.198 (0.112)*	0.204 (0.114)*	0.128 (0.072)*	0.100 (0.073)	-0.150 (0.069)**	-0.161 (0.070)**	-0.186 (0.090)**
Age	0.065 (0.131)	0.026 (0.130)	0.082 (0.014)***	0.080 (0.015)***	-0.012 (0.010)	-0.006 (0.010)	-0.005 (0.010)
Age squared	-0.000 (0.003)	0.001 (0.003)	-0.001 (0.000)***	-0.001 (0.000)***	-0.000 (0.000)**	-0.000 (0.000)***	-0.000 (0.000)***
Primary		-0.078 (0.182)		-0.376 (0.071)***		0.112 (0.072)	-0.036 (0.089)
Secondary		0.018 (0.089)		-0.189 (0.052)***		0.212 (0.067)***	0.179 (0.058)***
Married		-0.123 (0.122)	-0.017 (0.058)	-0.007 (0.059)			
Single		-0.149 (0.086)*	-0.084 (0.089)	-0.075 (0.090)			
Female	-0.158 (0.079)**	-0.178 (0.079)**					
Country of destination fixed effects	no	no	no	no	no	no	yes
Observations	188	185	441	437	4479	4324	4324
R-squared					0.05	0.05	0.08

[1] Data on second generation immigrants are taken from the 2004 and 2006 wave of the European Social Survey. The European Social Survey includes 27 countries: Austria, Belgium, Bulgaria, Switzerland, Cyprus, Czech Republic, Germany, Denmark, Estonia, Spain, Finland, France, Great Britain, Greece, Hungary, Ireland, Iceland, Luxembourg, Netherlands, Norway, Poland, Portugal, Sweden, Slovenia, Slovak Republic, Turkey, Ukraine.

[2] Columns 1-4 are probit regressions. Marginal effects are reported. Columns 5-7 are OLS regressions. Standard errors in parenthesis. * significant at 10%; ** significant at 5%; *** significant at 1%.

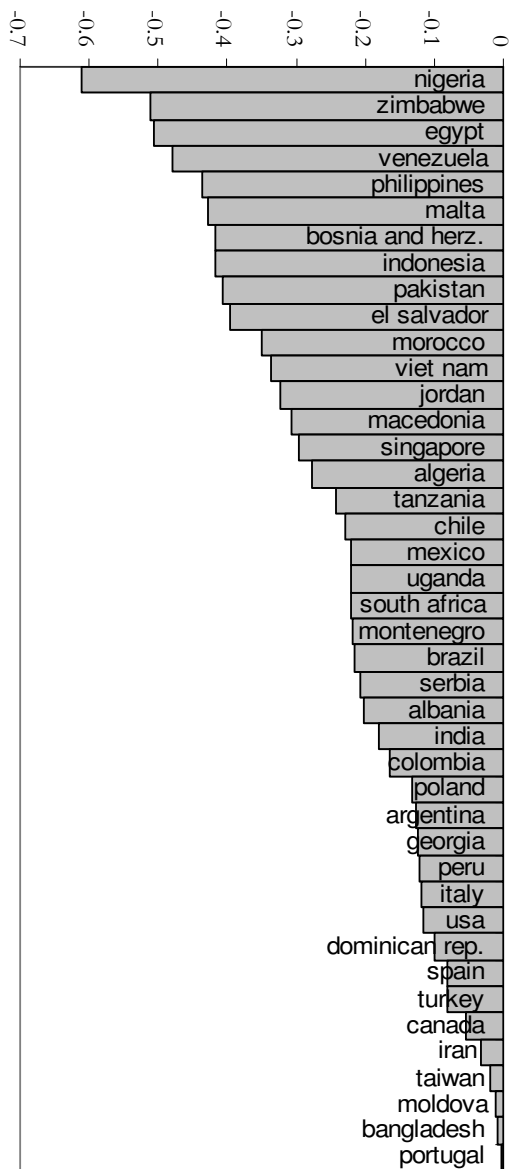
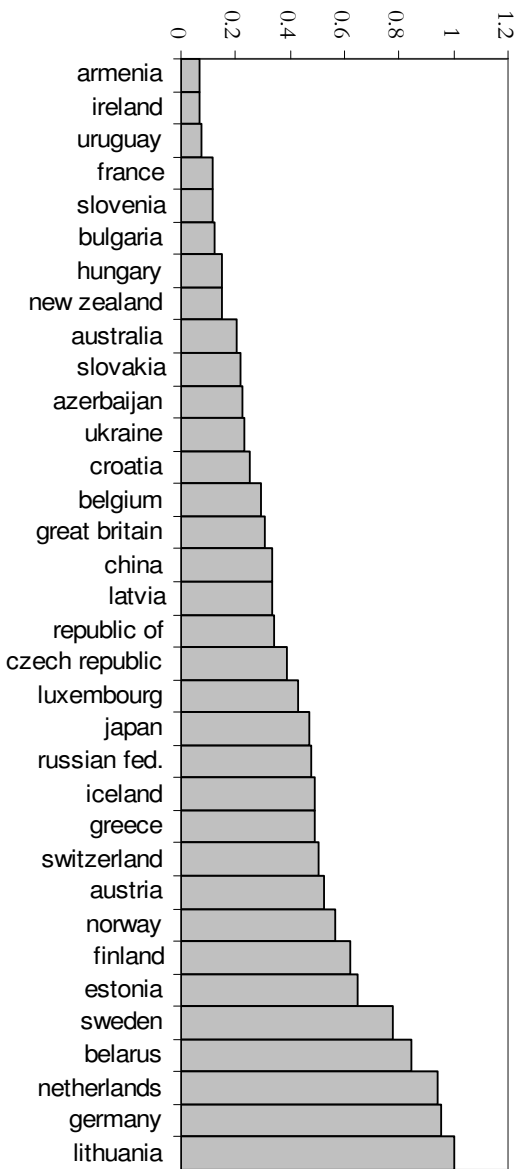


Figure 1a
Weakness of Family Ties, whole sample

Figure 1b
Weakness of Family Ties, OECD countries

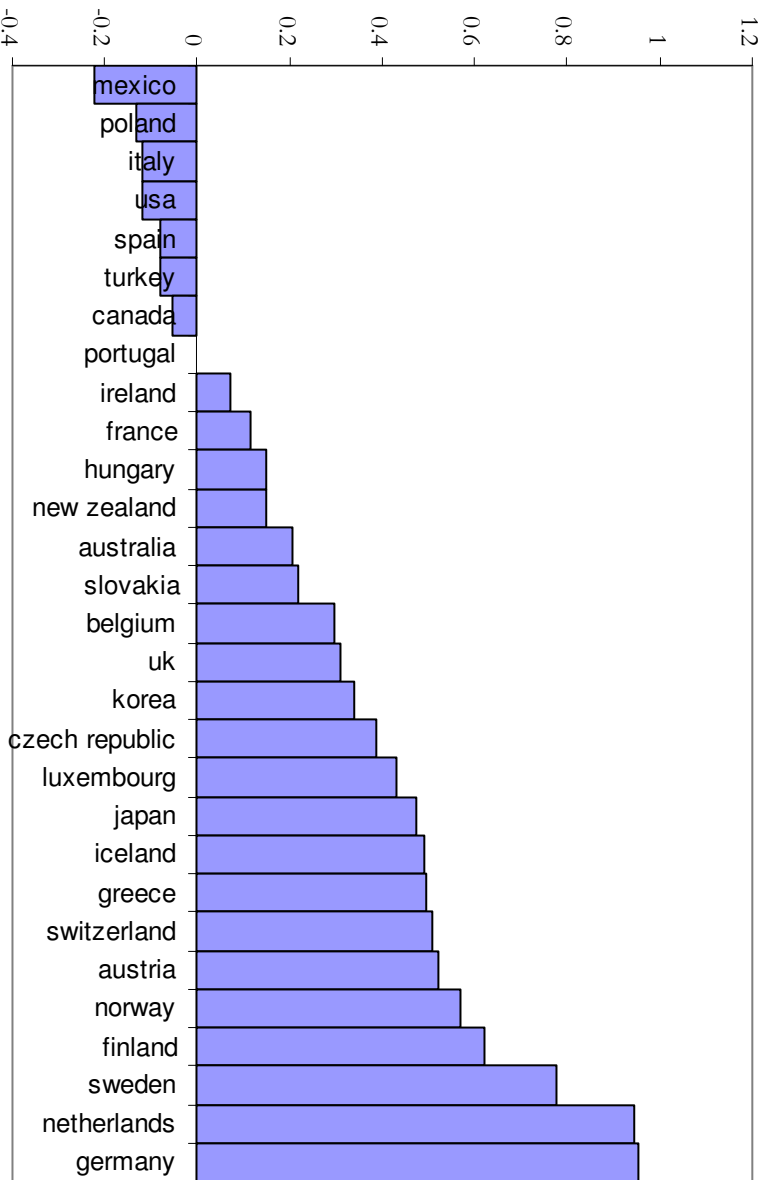
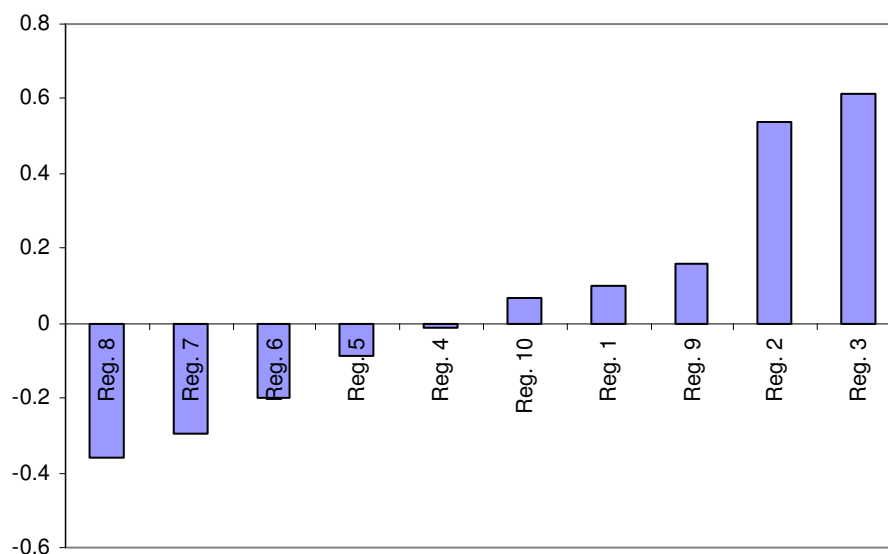


Figure 1c
Weakness of Family Ties, by Region



Region 1	US, UK, Canada, Australia, New Zealand
Region 2	Austria, Belgium, France, Germany, Luxembourg, Netherlands, Switzerland
Region 3	Norway, Sweden, Finland, Iceland
Region 4	Ireland, Italy, Greece, Malta, Portugal, Spain
Region 5	Japan, China, Bangladesh, Taiwan, India, Indonesia, Rep. of Korea, Pakistan, Philippines, Singapore, Vietnam
Region 6	Argentina, Brazil, Chile, Colombia, Dominican Rep., El Salvador, Mexico, Peru, Uruguay, Venezuela
Region 7	Iran, Jordan, Egypt, Algeria, Morocco
Region 8	South africa, Nigeria, Zimbabwe, Tanzania, Uganda
Region 9	Belarus, Albania, Georgia, Bulgaria, Moldova, Russian Fed., Ukraine, Czech Republic, Slovakia, Estonia, Latvia, Hungary, Lithuania, Croatia, Slovenia, Macedonia, Poland, Montenegro, Serbia, Bosnia and Herzegovina,
Region 10	Turkey, Armenia, Azerbaijan

Appendix A

Table A1
World Values Survey- Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Family Important	116914	1.123	0.383	1	4
Respect Parents	110068	1.169	0.375	1	2
Parents Responsibility	110594	1.193	0.395	1	2
Family Ties (sum)	106762	3.461	0.724	3	8
Family ties (PC)	106762	0.000	1.118	-0.72	6.48
Trust	114203	0.269	0.443	0	1
Happiness	112832	3.041	0.749	1	4
Life Satisfaction	117264	6.525	2.580	1	10
When job scarce	118519	0.357	0.479	0	1
Working mom	104888	2.981	0.852	1	4
Woman housewife	101349	2.806	0.883	1	4
People/Govern. Responsibility	111898	5.875	3.022	1	10
Private Ownership	90468	5.086	2.935	1	10
Old/New Ideas	73735	1.950	0.536	1	3
Competition	89379	3.654	2.551	1	10
Age	118224	40.981	16.271	15	101
Employed	116280	0.518	0.500	0	1
Unemployed	116280	0.093	0.290	0	1
Out of Labor Force	116280	0.352	0.478	0	1
Male	118519	0.480	0.500	0	1
Female Labor Force Particip.	53754	0.574	0.4944	0	1
Youth Labor Force Particip.	34567	0.653	0.4760	0	1
Fertility	44049	1.795	1.630	0	8
Primary Education	118519	0.369	0.483	0	1
Secondary Education	118519	0.418	0.493	0	1
College and more	118519	0.204	0.403	0	1
Catholic	103620	0.353	0.478	0	1
Protestant	103620	0.137	0.343	0	1
Orthodox	103620	0.089	0.285	0	1
Jews	103620	0.014	0.117	0	1
Muslim	103620	0.191	0.393	0	1
Hindu	103620	0.019	0.136	0	1
Buddhist	103620	0.015	0.122	0	1
Other Religions	103620	0.088	0.283	0	1
No Religion	103620	0.094	0.292	0	1

Table A2
Multinational Time Use Study – Summary Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Age	145086	32.64	9.70	15	49
Home production	145086	48.67	77.23	0	900
Employed	133950	0.69	0.46	0	1
Secondary education	132588	0.34	0.47	0	1
Tertiary education	132588	0.29	0.45	0	1
Female	145086	0.53	0.50	0	1

Countries included in the survey are: Canada, Denmark, France, Netherlands, Norway, United Kingdom, United States, Italy, Germany, Austria, Bulgaria, South Africa

Table A3
Second Generation Immigrants
Current Population Survey 1994-2005
Descriptive Statistics

CPS variables					
Variable	Obs	Mean	Std. Dev.	Min	Max
Family Size	80964	2.909	1.719	1	16
Youth Lab. Force Par.	22831	.5915	.4915	0	1
Female Lab. Force Par.	26547	.6661	.4714	0	1
Stay home	19664	0.417	0.493	0	1
Geographical mobility	21268	0.062	0.241	0	1
Going to college	22831	0.362	0.481	0	1

Country of origin variables					
Variable	Obs	Mean	Std. Dev.	Min	Max
Fam. size 1990	14290	4.877	0.520	2.2	5.4
Fam. size 1980	13551	5.231	0.467	2.3	6.6
Fam. size 1970	15656	4.824	0.679	2.6	6.6
Girls/Boys ratio 1990	20602	0.830	0.231	0.2	1.42
Girls/Boys ratio 2000	18534	1.013	0.186	0.54	1.83
Women Parl. 1990	22325	11.089	3.919	0	38.4
Women Parl. 2000	22344	16.883	5.479	0	42.7
Youth LFP 1980	22675	69.550	7.442	59.27	95.72
Youth LFP 1990	22675	71.634	8.110	58.79	96.05
Youth LFP 2000	22675	75.142	7.254	64.96	96.1

Table A4
First Generation Immigrants
Census 1990
Descriptive Statistics

Women all

Variable	Obs	Mean	Std. Dev.	Min	Max
Number of children ever born	240384	1.726	1.757	0	12
Up to 12 years of college	240384	0.602	0.490	0	1
Some College	240384	0.215	0.411	0	1
Employed	236691	0.577	0.494	0	1
Unemployed	236691	0.056	0.231	0	1
OLF	236691	0.367	0.482	0	1
Married	240384	0.636	0.481	0	1
Divorced	240384	0.093	0.291	0	1
Fertility country of origin 1990	233035	3.147	1.144	1.4	7.1

Married Women

Variable	Obs	Mean	Std. Dev.	Min	Max
Children ever born	94625	2.375	1.725	0	12
Wife-Age	94625	37.012	8.808	15	54
Wife-Up to 12 years of school	94625	0.624	0.484	0	1
Wife-Some College	94625	0.168	0.374	0	1
Husband-Age	94625	40.646	10.065	15	90
Husband-Up to 12 years of school	94625	0.566	0.496	0	1
Husband-Some college	94625	0.159	0.365	0	1
Fertility country of origin 1990	90806	3.347	1.087	1.4	7.1

Table A5
List of Countries with and without pronoun drop
(sample of second generation immigrants)

Languages with Pronoun Drop	Argentina, Brazil, Chile, China, Colombia, Dominican Republic, Egypt, El Salvador, Greece, India, Indonesia, Iran, Italy, Japan, Rep. Korea, Macedonia, Mexico, Nigeria, Pakistan, Peru, Philippines, Poland, Portugal, Russia, Singapore, Spain, Taiwan, Turkey, Uruguay, Venezuela
Languages without Pronoun Drop	Australia, Austria, Belgium, Canada, Czech Republic, Finland, France, Germany, Hungary, Ireland, Netherlands, New Zealand, Norway, South Africa, Sweden, Switzerland*, United Kingdom

*We include Switzerland in the non-pronoun drop category as two of the two official languages (French and German) belong to that category. We check the robustness of our estimates by excluding Switzerland from our sample.