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Values in the air. The role of social environment on subjective wellbeing

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Values in the air. The role of social environment on subjective wellbeing

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Abstract

We wonder whether life sense and life satisfaction are affected not only by personal biography but also by the cultural milieu that individuals experience in a given geographical area. To this purpose we calculate average values and beliefs of ESS (European Social Survey) respondents at regional level and find that the same variables have a significant impact on eudaimonic and cognitive subjective wellbeing (i.e. life sense and life satisfaction) of participants to the Survey on Health Ageing and Retirement in Europe (SHARE survey) in three main directions. First, the importance of positional competition (race for status) in the geographical area significantly reduces eudaimonic and cognitive wellbeing. Second, an aggregate index measuring social capital, solidarity and tolerance has positive and significant effects on eudaimonic wellbeing. Third, matching between individual and social values matters since individuals with higher social capital and other-regarding preferences are significantly happier in areas with higher values of the social capital aggregate index and suffer more from the race for success. Our findings have relevant implications in terms of economics of identity, role of (and policies on) migration and importance of local social capital for subjective wellbeing.

Keywords: subjective wellbeing, positional competition, social capital

JEL numbers: I31 General Welfare, Well-Being.

The ladder of success is never crowded at the top.

Napoleon Hill

1.Introduction

A recent original branch of the literature argues that individuals are sense searchers and not just utility maximisers (Chater and Loewenstein, 2016, Akerlof and Cranton, 2000). This broadened economic paradigm helps to predict an important part of human behavior (identity choices) that has no apparent economic rationale and, more generally, choices that seem to respond to nonpecuniary factors more than (or in addition to) to monetary incentives. Following this line of reasoning it can be inferred that choices such as migration flows, and political preferences, are likely to be affected not just by strict monetary factors, but also by non monetary drivers related to the social environment of the chosen place of residence, where conformity between one's own values and those of the local cultural milieu can play an important role. If the above mentioned non pecuniary variables drive choices, they must as well matter and have significant effects on subjective wellbeing.

More specifically on this point, we argue that life sense and satisfaction (cognitive and eudaimonic wellbeing) are affected not just by personal biography but also by the cultural environment in which the respondent lives. In addition to it, we postulate that matching between individual and local values matters. The research questions investigated in our research hinge on these premises. In order to test them empirically we construct social environment variables by using a companion (European Social Survey, ESS) dataset where we calculate average beliefs and value indicators of EES respondents at NUTS level. We then use the same indicators as additional regressors in an estimate of the determinants of eudaimonic wellbeing for respondents to the SHARE (Survey on Health, Ageing and Retirement of the Elders in Europe) survey.

Our paper opens a new direction of research and contributes to the literature in three main respects. First, it identifies a novel and original set of variables (capturing aspects of the local cultural milieu) among the drivers of eudaimonic and cognitive subjective wellbeing. Second, it contributes to the more established relative income literature that has demonstrated how comparisons of the individual's

relevant life satisfaction drivers with the average peer levels affect subjective wellbeing. Third, it provides a contribution to the literature of the economics of identity.

Our innovation in the field of the "relative income" literature concerns the way others enter in the individual's utility function. This literature finds a significant effect on subjective wellbeing of differences between one's own income and the income of a variously defined peer group (Ferrer-i-Carbonell, 2005, Senik, 2004 and Jiang et al., 2009). Even in its evolution considering relative values for different drivers of life satisfaction (i.e. unemployment levels or respondent's weight such as in Clark, 2008 and Clark et al. 2009) this literature remains within the basic and important principle of the "race" with our reference group where a relatively better (worse) performance makes us generally happier (less happy).[1] What we introduce here is a related but different concept. We focus on average values of the local community and we argue that some of them may have significant effects on the resident's wellbeing. Differently from the standard "relative income" literature, in our research hypothesis, the others are therefore not competitors in the race for status but a community whose shared values may create or not an environment that is favourable to our own wellbeing.

This last point also identifies the link of our research with the economics of identity postulating that our utility is affected in different ways by matching, dissonance or the interplay between our own values and those of the organization and/or community in which we live. This principle implies that our utility may change not just because we consume a good or service but also because we feel ourselves at ease or not into a given social environment. To make it clearer, if an individual finds herself/himself in a social environment that is opposite to her/his value and beliefs (a pacifist in a club of warmongers or an animalist in club of hunters), uneasiness may be so severe to produce a significant reduction of her/his life satisfaction. As a consequence, the same individual can make

[1] The literature actually shows that the effect of relative income on life satisfaction is mediated by the perception of vertical mobility so that it may turn up to become positive when the latter is very high (Senik, 2004; Jiang et al., 2009 and Becchetti and Savastano, 2009).

choices that have no apparent reason in terms of pecuniary incentives and standard utility maximization but that reduce such distance.

Empirical findings indicating that an individual's life sense is affected by a nonpecuniary factor such as the cultural environment in which she/he lives are supportive of the hypothesis that identity factors matter and that sense of life of the individual is affected by the "identity" of the place in which she/he lives (Helliwell et al. 2007). In order to test more directly this hypothesis we propose a sorting and matching test in our paper where we check whether a subgroup of SHARE individuals with a given set of values is relatively happier than the complementary sample to live in a region where those values are shared in a higher proportion by those living in the area.

From a methodological point of view the use of a separate survey for the calculation of social environment ensures that this crucial variable is created by using out of sample information, thereby avoiding overlaps with the personal biography of SHARE respondents. The limit of poor representativeness of the variable at NUTS3 level for those areas when the number of EES respondents in the sample is limited is reduced by eliminating from the sample areas with less than 70 EES respondents. The use of 211 different NUTS (with ESS survey weights for each observation in order to enhance representativeness, see section 3 for methodological details) to construct the social environment indicator ensures enough variability and allows to overcome the remaining limits in calculating average values at EES level.

Our findings support the hypothesis that the local cultural milieu matters in three main directions. First, the importance of the race for success (positional competition) at local level has a negative and significant effect on respondents' wellbeing. This finding is consistent with the literature emphasizing that the race for success is a zero sum game producing anxiety and negative externalities (Veblen, 1899; Frank, 1984 and 1985). Second, an aggregate index of social capital and other-regarding preferences capturing values such as solidarity, trust and tolerance has a significant and positive effect on cognitive and eudaimonic satisfaction. We interpret this finding in the light of the well-known

behavioral literature on social dilemmas (prisoner's dilemmas, trust investment games) where other-regarding preferences and trust make it easier to achieve Pareto superior solutions with respect to the Nash equilibrium coordination failure. Third, we find evidence of a sorting and matching effect where individuals with higher values of the other-regarding/solidarity index enjoy more a relatively more other-regarding local cultural milieu than the complementary sample.

2. Research hypotheses

Our empirical analysis hinges on three main research hypotheses.

Ho(1): the local cultural milieu matters: the local importance of positional competition has a significant effect on life sense

Ho(2): the local cultural milieu matters: the local importance of other-regarding preferences has a significant effect on life sense

Ho(3): the matching between individual and local values has a significant effect on life sense of individuals

All of the three hypotheses formulated above argue that the local cultural milieu matters, even though in different ways. That is, individuals' utility is not just affected by their own personal biography (income, health, education, marital status, etc.) or by objective geographical indicators (ie. GDP, unemployment, etc.) but also by the values that are in the air in the geographical area in which they live.

The first hypothesis focuses on the role of competition on positional status. As is well known in the literature since Veblen (1899) on, positional competition is a zero sum game that produces stress and anxiety. Being more similar to a winner-takes-it-all game than to a multi-winner game it ends up affecting negatively the average wellbeing of participants to the race, the more the latter is considered

important in their lives from a social perspective.[2] We therefore expect that subjective wellbeing of respondents will be lower in areas where the race for success is considered on average more important and where stronger focus on positional competition is in the air.

The second hypothesis states that, if social and economic relationships are essentially structured as social dilemmas in thin markets, as represented in classical prisoner's dilemmas or trust investment games (Berg et al. 1995), it is much better to live in areas where individuals have other-regarding preferences or higher levels of trust. This is because purely self-regarding behavior in social dilemmas such as the two mentioned above leads to a Nash equilibrium that is Pareto dominated by the equilibrium that can be obtained if players follow cooperative strategies.[3] This Pareto superior equilibrium can however become the Nash equilibrium in presence of other-regarding preferences, or if the large presence of individuals with other-regarding values creates social norms that produce stigma (and therefore disutility) for individuals who depart from the cooperative strategy. As a consequence, individuals living in areas where other-regarding values are relatively more in the air are more likely to overcome coordination failure problems and therefore live happier lives as they enjoy higher social and economic outcomes arising from cooperation (for a formal sketch of this hypothesis see Appendix A).

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[2] This is the case if we assume that success means being at the top in a given social ranking (money, career, fame). Success can even turn out to be a negative sum game if we assume that only one, or the very few top ranked individuals, enjoy satisfaction from the ranking, while all the others suffer from it and the total amount of negative effects is higher than the satisfaction for the top ranked. This can be the case of sport ranks when (reversing the well-known De Coubertain's say) it is said in the press and becomes common belief that it is only the win that matters. If this reasoning is followed to the extreme, there is only one player getting satisfaction from the race among all participants.

[3] A brilliant intuition on this point comes from the well-known Hume's aphorism anticipating the main characteristics of social dilemmas that will be theorized by game theories after more than two centuries. «*Your corn is ripe to-day; mine will be so tomorrow. It is profitable for us both, that I should labour with you to-day, and that you should aid me to-morrow. I have no kindness for you, and know you have as little for me. I will not, therefore, take any pains upon your account; and should I labour with you upon my own account, in expectation of a return, I know I should be disappointed, and that I should in vain depend upon your gratitude. Here then I leave you to labour alone: You treat me in the same manner. The seasons change; and both of us lose our harvests for want of mutual confidence and security. .» (Hume Treatise on Human Nature, 1740, book III).*

The third hypothesis is that, if the local cultural milieu matters, individuals should find themselves more at ease in geographical areas where values in the air are closer to their own values. This hypothesis is directly related to the novel perspective of the economics of identity that integrates the traditional view of the individual's utility function. According to this perspective utility does not just depend on consumption of goods and services but also on the proximity/distance between one's own values and local values. The latter is not necessarily related to any kind of fruition of material goods and is more akin to the fellow-feeling principle of Adam Smith in the Theory of Moral Sentiments (1761). According to Adam Smith individuals enjoy relationships in proportion to the common consent that they have with the people they meet. Common consent depends in turn not only on experiences lived together but also and mainly on shared values.

Helliwell and Putnam (2004) using large sample of data from three different surveys explore the link among social context, measured as the strength of family, neighborhood, religious and community ties, and subjective well-being, happiness, and health. They find a strong correlation between social capital and subjective well-being that works through many independent channels. Helliwell et al. (2009) repeat and enriched the research considering the first three waves of the Gallup World Poll survey controlling for differences across countries, cultures and regions in the factors assumed to influence wellbeing. Accordingly, they find strong evidence for the relevance of social context variables in explaining within and across countries variations of wellbeing (for an extensive review see Helliwell et al. 2017). Within this literature the originality of our perspective is in the matching between individual and local values and in the consideration of the effect on subjective wellbeing of new unexplored values such as positional competition.

2.1 The choice of our dependent variables

The dependent variables used to test our hypotheses are two well-known proxies of subjective wellbeing represented by life sense and life satisfaction.

Measuring subjective wellbeing (SWB) and understanding its drivers is a topic attracting increasing attention for several reasons in the research literature, as it is on the political and institutional debate. First, policymakers, exactly as companies looking at customer satisfaction and not just at objective data on sales, are interested in understanding and measuring the overall satisfaction of voters in order to maximize consensus and remain in power. Second, subjective wellbeing estimates have proven to be useful to calculate the monetary value of nonmarket goods with the compensating variation approach - e.g., to calculate the value of air pollution (Welsch, 2002 and Luechinger, 2009), flood disasters (Luechinger and Raschky, 2009), noise nuisance (van Praag and Baarsma, 2005) and terrorist activity (Frey et al., 2009). Third, subjective wellbeing indicators have been demonstrated to be good predictors of objective variables. This is the case of the effect of job satisfaction on employment status, likelihood of job change and job quit and productivity, (Judge, 1992; Staw and Barsade, 1993 and Judge et al., 2001), and the case of poor sense of life (low eudaimonic wellbeing) and of the effect of low self-assessed health on mortality (Becchetti et al., 2017; Idler and Kasl, 1995; McCallum et al., 1994; Benjamins et al., 2004; Idler and Angel, 1990 and Appels et al., 1996) and insurgence of chronical illnesses (Becchetti et al, 2016).

In our paper we decide to focus on two different measures of subjective wellbeing (life sense and life satisfaction) for the reasons that follow. According to contemporary psychology subjective wellbeing can be observed under two perspectives, one focusing on the hedonic, while the other on the eudaimonic dimension (King and Napa, 1998). The distinction between the two is rooted in the ancient Greek philosophy. Hedonists identify wellbeing as the experience of physical and mental pleasures, while the eudaimonic view conceptualizes wellbeing in terms of meaning and purpose in life, where individuals aim at realizing themselves in accordance with their true soul or nature (McMahan and Estes, 2011). The former, related to the concept of happiness and contentment where positive and negative affects constitute the solely source of individual wellbeing, is considered to be a circumstantial subjective condition that varies and rapidly adjusts in response to good and bad experiences, within a mechanism of hedonic adaptation (Kahneman et al. 1999; Myers, 2000). The

latter instead relates to a state of being understood as an ongoing process that can be achieved through effort and by living a moral life (Waterman, 1993; Ryan and Deci, 2001). In this sense it is a much more stable objective psychological state, where also negative experiences might have positive effects on it. Steger et al. (2008) have observed that eudaimonic approaches to wellbeing are likely to be associated with long-term and enduring wellbeing, while the sense of satisfaction derived from the experience of pleasures exhausts in the short run. Carrol and Zuckerman (1977) also show that in some respects hedonic approaches to wellbeing might produce detrimental effects, as in the case of drug use for sensation-seekers. Understanding the differences between the two and assuming one or the other as the ultimate view of human wellbeing have deep informative implications for the policy debate, specifically in terms of adoption of tailored interventions that aim at fostering wellbeing. Norrish and Vella-Brodrick (2008) conclude that encouraging a holistic eudaimonic approach to wellbeing, where individuals have to use their strengths and efforts to tackle life challenges, is highly beneficial to human wellbeing. Specifically, they showed that eudaimonic rather than hedonic dimensions of individual well-being were more significantly correlated with each measure of wellbeing.

In the current state of research, subjective wellbeing has been studied mostly by surveying life satisfaction, a cognitive measure that reflects the overall personal judgment about one's own life remaining halfway between hedonic and eudaimonic measures. The life meaning dimension that captures instead the eudaimonic aspect of subjective wellbeing received so far less attention and is more likely to be related to factors affecting identity. These findings, together with the existing gap in the literature, motivate our choice to adopt the eudaimonic wellbeing indicator (life sense) together with life satisfaction as a proxy of SWB in our study. Our research hypotheses will therefore be tested on the interesting and relatively less explored eudaimonic dimension in comparison to the standard and more commonly used cognitive dimension of life satisfaction.

3. Methodology. Source of data and main variables of interest

As already mentioned above, our empirical analysis is developed by combining different information sources. The first is represented by waves 2, 4, 5 and 6 of the "Survey of Health, Ageing and Retirement in Europe (SHARE)".[4] This survey collects baseline socio-demographic information, such as economic and marital status, education years, and detailed information on health conditions, with more specific modules on daily activities, social and family networks and subjective wellbeing, for more than 65,000 respondents aged 50 and over living in one of the twenty countries involved in the project (Austria, Germany, Sweden, Netherlands, Spain, Italy, France, Denmark, Greece, Switzerland, Belgium, Czech Republic, Poland, Ireland, Hungary, Portugal, Slovenia, Estonia and Luxembourg).

In the SHARE database our main variable of interest is the self-assessed respondents' level of eudaimonic happiness captured by the question *"How often do you think your life has meaning?",* for which four possible mutually exclusive options ("*often, sometimes, never, rarely")* are provided. With respect to standard cognitive subjective wellbeing scale measures, such as life satisfaction that ranges from 0 to 10, this measure, anchoring numerical values to specific adjectives, presents a clear advantage as it reduces the possibility of abstraction, ensuring consistency across respondents. Another distinctive feature of our main variable of interest is the wording in terms of frequency, which allows to overcome problems related to approaches that ask for an overall judgment at a specific point in time. In these types of backward-looking methods, the current situation of the

[4] The Survey on Health, Ageing and Retirement (SHARE) project, first launched in 2004, is a longitudinal cross-national survey on individuals aged 50 or older, with the core objective focused on studying ageing in Europe. With 6 waves made available, the database provides information on health, socio-economic status and social networks of around 130 thousands of individuals harmonized with the U.S. Health and Retirement Study (HRS) and the English Longitudinal Study of Ageing (ELSA). The project adopts rigorous methodologies that ensure coherency and consistency across national designs. Further details on SHARE, references and research papers using these data are available on the SHARE website (http://www.share-project.org/).

respondent can have a too high weight that can, in turn, affect substantially the overall judgment (Kahneman and Fredrickson, 1993; Redelmeier and Kahneman, 1996; Schwarz and Clore, 1983). This problem can be smoothed by adopting the frequency type question. Along with the measure of meaning in life, we use the SHARE data modules providing information on health status and self-assessed condition on daily activities carried out by respondents, and on their social capital. The full set of variables from the SHARE database is listed in Table 1.

Our second source of data is the "European Social Survey" (ESS) database[5]. This cross national survey carried out every two years since 2001 measures the social attitudes, beliefs and behaviors of populations in more than thirty nations, on a wide range of social themes. As SHARE and ESS survey years may not coincide, we considered one-year lagged variables from waves 3, 5, 6 and 7 to perform the analysis. In this way, each SHARE wave has been merged with ESS data referred to the previous year. For our purpose we focus specifically on the EES module that investigates people feelings and emotions in their daily life and what they consider to be important for their lives, collecting in total a set of 13 variables (the full list of variables is available in Table 1). These variables are measured through the use of Likert or self-anchoring scales.[6] Information provided by the ESS has been used to describe the regional social climate of the area where respondents live, by means of weighted average values at NUTS2 and NUTS3 levels (see below for details). In order to calculate average ESS values at NUTS level we use a combined weight obtained by multiplying post-stratification

[5] The European Social Survey (ESS) is an academically driven survey conducted every two years since 2002 across European countries. Cross-sectional samples are newly selected at each wave. The main focus is to investigate attitudes, beliefs and behaviors of different European population. Data are granted free of charge for research purposes in the European Social Survey Cumulative File, ESS 1-7 (2016). Data file edition 1.0. NSD - Norwegian Centre for Research Data, Norway - Data Archive and distributor of ESS data for ESS ERIC. For a detailed description of the data refer to European Social Survey (2016). ESS 1-7, European Social Survey Cumulative File, Study Description. Bergen: NSD - Norwegian Centre for Research Data for ESS ERIC.

[6] Likert scale type questions ask respondents to state their level of agreement with respect to a particular sentence, on a scale that usually goes from 0, i.e. *"totally disagree"*, to 10, i.e. *"totally agree"*. Self-anchoring type questions instead ask directly respondents to give a score to a particular question-item on a scale from 0 to 10, where 0 and 10 are usually expressed in terms of the most negative and the most positive options, respectively.

weights with country-specific population size weights, both provided by the ESS database[7]. The post-stratification weights are adjusted design weights that replicate the distribution of the cross classification of age-group, gender, and education in the population and the marginal distribution for a given region in the population, while population size weights take into account the fact that most countries in the ESS have different population sizes but similar sample sizes. Population size weights ensure that each country is represented proportionally according to its true population size.

The last source of data used is the Eurostat regional database[8]. We extract a set of variables at NUTS2 and NUTS3 levels to describe the main aspects of the socio-demographic dimension of the region where respondents live, for the years of the surveys. In particular we use the household disposable income and the unemployment rate of the working-age population (from 15 to 74 years) to control for economic factors, plus the population density per square kilometer.

Our EES observations are distributed over 211 European NUTS regions. The general rule followed was to group observations at NUTS3 for each region having at least 80 observations. Regions with less than 80 observations have been further aggregated at NUTS2 or NUTS1 level. In total we have 80 NUTS3 regions (i.e. provinces), 106 NUTS2 regions, 25 NUTS1 regions (i.e. macro-areas).

4. Descriptive statistics

We start by looking at the distribution of our main variable of interest, eudaimonic wellbeing, at NUTS level. The geographical map of values shows that higher values (dark blue areas) are concentrated in the Central-North Europe (Finland, Denmark, Germany, Austria and Benelux), while lower average values (light blue areas) are in Italy, Spain, France and Eastern Europe (Figure 1). The

[7] This procedure is strongly recommended in the user guide "Weighting European Social Survey Data", page 3, (2014), especially when conducting cross-country comparison analyses.

[8] Eurostat is the primary statistical office of the European Union. It works in close harmonization with the different national statistical offices of the Member States. For this research we used the Eurostat regional database that provides users with disaggregated variables at NUTS1, 2 and 3 level.

geographical pattern of life satisfaction is quite similar showing that there is not substantial difference in the geographical distribution of answers on cognitive and eudaimonic wellbeing (Figure 2).

Descriptive statistics on the variables used for the econometric analysis that follows show that our SHARE sample is almost gender balanced (44 percent of respondents are male) (Table 1). Respondents have on average around 11 education years. 56 percent of sample respondents are retired, while 27 percent are still working and 3 percent are unemployed. Concerning marital status 68 percent of respondents are married, while 15 percent of them are widowed. The rest of the sample is composed by separated, divorced, those who live with a partner but are not married and those who never married. As of health status, even though the majority of respondents declared to suffer from long term diseases (51 percent), only 11 percent felt to have poor health conditions. The other categories biased towards more positive statements (fair, good, very good and excellent) represent 28, 36, 17 and 8 percent of the sample, respectively. Regarding lifestyle habits, 20 percent declared to have high alcohol consumption, that is, they declared to have 6 or more drinks, at least 3 times a week, during the last 3 months. 26 percent are regular smokers, and, based on the body mass index (BMI), 62 percent of the sample result to be either obese or overweight. For what regards life expectancy, the SHARE survey uses a particular question, in which respondents, regardless of their age, are asked to state the probability with which they think they will be alive in 10 years. The average stated probability is 62 percent.[9] The level of trust in other people averages slightly lower than 6 over 10, with almost one-fourth of respondents reporting very low levels, i.e. equal to 4 or lower. A similar picture emerges from the last 2 variables describing actual solidarity. Only 28 percent of the interviewed declared to have provided practical help to other family members or friends outside their households during the previous 12 months. The same percentage applies to those who financially

[9] In our econometric analysis the variable will be used in a set of regressor including age and therefore its coefficient will measure its impact on the dependent variable conditional on age.

supported relatives or friends during the last year with a gift of 250.00€ or higher. Out of the total sample, less than 10% reported to have done both.

Eurostat variables measuring average demographic and economic indicators at NUTS level confirm the wide dispersion of such variables among European regions. Unemployment rate in the working age population (15-74) is on average at 9 percent but its standard deviation is more than half of it, with a minimum of 2.1 percent (for the Zeeland region in the Netherlands in 2007), that is even below the conventional level of full employment accounting for frictional unemployment, and a maximum of 36 percent (for Andalusia, in the southern Spain in 2013). Average yearly household disposable income is at around 14 thousand euros, with a four-time difference between the lowest and the highest income region (6,400 to 25,3000 euros, with the lowest values registered in the Southern Great Plain region, Hungary in 2007 and Podkarpackie, south-east Poland in 2011, and the highest value in Luxembourg in 2015). Population density ranges from the almost desert region of Norrbotten County, in the north of Sweden, with 2.5 inhabitants per km^2 in 2004, to the most densely populated region with 7408 inhabitants per km^2, the Brussels region, in 2015.

Our main variable of interest affecting life sense, the importance of success, ranges from a minimum of 2.13 to a maximum of 5.35. In Figure 4 we show its distribution across regions finding that it is higher in Italy and East European countries.

5. Construction of the Index of Social Capital and Other-Regarding Preferences (ISCORP) at regional level

The ESS survey presents several variables capturing different aspects of social capital and other-regarding values. The richness of this set of questions and their specific structure (i.e. Likert scale questions coded 1-6 from the lowest to the highest level of agreement) allows us to construct a regional standardized index composed by seven variables (ISCORP). More specifically, we collect

from the ESS database information on average values of respondents at NUTS level. We look at trust (trust in people, trust in politicians), loyalty to friends which is as well related to social capital in the sense of being trustworthy or not betraying trust received from friends, tolerance (important to understand different people), other-regarding preferences (importance of care for others' wellbeing), importance attached to equal treatment and opportunities and, last, religiosity that should be a source of the above mentioned factors (trust, tolerance, other regarding preferences). For each of these questions, we first created the regional weighted average, as described in section 3. We then summed up the scores and divided the total values by 7, the number of questions used. Eventually, we standardized the scores and obtained the final index.[10] Figure 3 shows that the darker blue areas (regions with higher ISCORP index) are concentrated in the center of Europe (Italy, Germany and Scandinavian countries).

5. Econometric analysis

In order to test our hypothesis about the influence of the social environment on individual eudaimonic happiness we estimate the following specification

10 A similar approach has been adopted in Caliendo et al. (2015) for the construction of an index of Locus of Control (LOC). Our approach differs in the method used to select the relevant variables composing the index as we looked at correlation coefficients instead of factor analysis.

(1) $Life\ Sense_t$

$$= \alpha_0 + \alpha_1 RaceForSuccess_t + \alpha_2 ISCORP_t + \sum_k \gamma_k DAgeClass_t + \alpha_3 Male_t$$

$$+ \alpha_4 LogPerCapitaTotIncome_t + \alpha_5 EduYears_t + \sum_j \delta_j DMaritalStatus_t$$

$$+ \sum_l \theta_l DJobStatus_t + \sum_n \varphi_n LongTermDisease_t + \sum_n \varphi_o SelfHealth_t$$

$$+ \alpha_6 AliveInTenYears_t + \alpha_7 HighAlcoholConsumption_t + \alpha_8 Smoker_t$$

$$+ \alpha_9 ObeseAndOverweight_t + \alpha_{10} PopulationDensity_t + \alpha_{11} HHDisposableIncome_t$$

$$+ \alpha_{12} UnemploymentRate(15-74)_t + \sum_k \lambda_k Values_t + \sum_m \lambda_m DCountry_t$$

$$+ \sum_f \lambda_f DWave_t + \varepsilon_t$$

where the dependent categorical variable is eudaimonic wellbeing (*"How often do you think your life has meaning?")* and is measured as described in section 3. On the right hand side we introduce the average importance of success (*RaceForSuccess*) at NUTS level measured from ESS respondents in order to test our first research hypothesis related to the importance given to positional competition at regional level. We then include the index of Social Capital and Other-Regarding Preferences at regional level (ISCORP) built as described in the previous section to test for our second research hypothesis. Among controls we use five-year age class dummies, a dummy for male gender, the log of per capita household income and years of education.[11] Marital status dummies include the following conditions: married, living with regular partner, separated, divorced, widowed (with single status being the omitted benchmark). Job status dummies include the conditions of employed, home maker and retired (with the unemployed status being the omitted benchmark). Given that our sample includes individuals aged 50 and above we introduce several controls for health conditions. Among

[11] We perform a robustness check using equivalised income measures using the OECD equivalence scale. Results are substantially unchanged and omitted for reasons of space.

them a dummy for a diagnosis of long term disease, dummies for each categorical level of self-assessed health[12] and the self-assessed probability of being alive in ten years (*AliveInThenYears*).

We further introduce controls measuring objective wellbeing at NUTS level taken from Eurostat. These controls include population density, average household disposable income and unemployment rate at NUTS level. Wave dummies capturing time effects and country dummies are also added as additional controls. The inclusion of country dummies is of particular importance since they also correct for cultural or linguistic factors affecting declarations on life sense without the need of using more complex approaches such as those of vignettes.[13]

Regression findings presented in Table 2 (column 1) show that the impact of the average importance of success at NUTS level (measured as mean value of ESS respondents) has a strong and significant negative effect on life sense in our SHARE sample, net of the impact of all considered controls (biographical factors, objective NUTS level economic indicators, wave and country dummies). In terms of economic significance a unit change from the mean value of the regressor reduces by around 4 percent the probability that the respondent's life often makes sense (the highest possible value of the dependent variable).

The significance of the ISCORP index shows that our second research hypotheses is as well not rejected. Individuals enjoy higher life sense, after controlling for all the other regressors, when they live in geographical areas where social capital and other-regarding values are into a higher proportion common heritage.

The effect of biographical factors is strong and in the expected direction. Life sense is significantly higher (lower) when respondents have an employment or are retired vis-à-vis the unemployment

[12] As shown by Becchetti and Bachelet (2018) self-assessed health is a significant predictor of health conditions, even after controlling for diagnosed health status. For this reason we add the variable to our standard objective health controls.

[13] On this literature see, among others, Vittersø, Biswas-Diener and Diener, 2005 and Suh, Diener and Updegraff, 2008.

status (i.e,. are looking for a job that they do not find). The employment coefficient is almost twice as big as the retirement coefficient. This finding supports the hypothesis that employment contributes more to eudaimonic wellbeing than retirement for individuals aged 50 and above.[14]

Success of relational life has a positive effect on life sense. Concerning marital status, sense of life declines from married respondents, to those having regular partner, separated, widowed and divorced. This is consistent with the hypothesis that relational goods contribute positively to sense of life proportionally to the level of success in the relationship itself. Relational or life shocks (death of partner) reduce such sense even though the latter remains higher than for those that have never built long-term relationships. Ageing progressively reduces life sense, consistently with the fact that it reduces also individual capabilities and functionalities even if we control for diseases. Education is strongly positive and significant confirming what known in the literature concerning its stronger effect on eudaimonic wellbeing than on life satisfaction.[15] Income has a positive effect as expected, while male gender has a negative and significant effect on eudaimonic wellbeing. As expected the sick/disabled status and the presence of a long term illness have a negative effect.

Given that our SHARE sample includes respondents aged 50 and older we use additional variables to capture health status more in depth. More specifically, we consider self-assessed health and find that it affects positively and significantly life sense as expected. In our fully augmented specification we as well control for unhealthy life styles including dummies for high alcohol consumption, smoking and being overweight or obese (Table 2, figure 4).

We test whether our results change if we replace our eudaimonic measure of subjective wellbeing (life sense) with a cognitive measure of it (life satisfaction) (Table 3). The impact of our two main

[14] When running a similar specification where retirement is the omitted benchmark (instead of unemployment) the employed status is positive and significant thereby showing that the first status has a significantly higher effect on life sense vis-à-vis the second. This is consistent with the fact that a test on the equality of the retirement and employment coefficients in our base specification is rejected.

[15] In a recent empirical paper Nikolaev (2017) shows that part of this difference is explained by the increase in expectations and reduction of satisfaction for leisure produced by education.

variables of interest (race for success and the ISCORP index) is confirmed. Regression findings show slight differences in the impact of controls. Among marital status variables the separated and divorced conditions are no more significantly different from the omitted benchmark of the never married status. This implies that a relational failure is better than never trying in terms of life sense but not in terms of life satisfaction. The effect of retirement is much closer to that of the employment status implying that retirement has more impact on life satisfaction than on life sense. The magnitude of the effect of education is smaller vis-à-vis that on life sense confirming findings from Nikolaev (2017).

5.1. Sorting and matching

In order to observe whether the interplay between individual identity and the local cultural milieu matters (research hypothesis 3) we divide our sample in two sub-groups, depending on their trust and solidarity habits. To that aim we create an index describing social capital and other-regarding preferences at individual level, exploiting 3 variables from the SHARE survey. The first factor derived from the question on personal trust in other people, which varies from 0 to 10, is a dummy variable being 1 for high level of reported trust (i.e. a values greater or equal to 8) and 0 for the lowest end distribution (values lower or equal to 4). The other items considered are two dummy variables capturing solidarity of individuals in actual terms. The first has value 1 for those who declared they provided help to family members or friends outside the household during the previous 12 months, and 0 otherwise, while the second has value 1 for those who supported family members or friends outside the household with financial or material gift worth 250.00€ or more during the previous year, and 0 if not. We sum up these 3 variables and consider as other-regarding individuals all those whose score was at least 1. We call this the high ISCORP group, the rest being the complementary sample or the second (low ISCORP) group. We then re-estimated our full model on the two groups separately. Results reported in Table 4 panel A do not reject our hypothesis as the coefficient of our regional (ISCORP) index measuring social capital and other regarding preferences has a positive and

significant effect on the reported level of subjective wellbeing (both eudaimonic happiness and life satisfaction) of the high ISCORP group only.

To further refine this type of analysis we also perform a rubustness check using a propensity score matching (PSM) approach. The idea behind this procedure is that solidarity of individuals might depend itself on other personal or contextual characteristics, therefore making the two groups of people previously identified incomparable, and the estimates biased. PSM allows us to match individuals belonging to the supportive group with the most similar individuals of the other group, depending on a set of observable characteristics, personal and contextual. In this way we obtain two groups of more homogeneous people, where individuals in the first (high ISCORP) group have their "twin" in the second group (low ISCORP-PSM group). In other words, each observation in the first group is matched with an observation in the second group which is similar in terms of socio-demographic characteristics and area of residence, and therefore (given socio-demographic characteristics and area of residence) has the same a priori probability to engage in pro-solidarity behaviors, but actually does not. This allows to isolate the effect of a positive match between personal identity and the social context where the individual lives. The fact that strongly significant differences still persist between the two groups after this more rigorous analysis (Table 4 panel B), confirms that actually the interplay between personal identity and social context matters in shaping individual subjective wellbeing. To evaluate the economic significance of our effect, for reasons of space we report marginal effects for the propensity score matching only, presented in Table 4 panel B.1 and B.2 for eudaimonic happiness and life satisfaction, respectively and find that a unit increase in the ISCORP index raises the probability to report the highest level of eudaimonic happiness and the highest level of life satisfaction by 3.5 and 2.5 percentage points, respectively. The importance attached to positional competition instead works in the opposite direction. It reduces the probability to report the highest level of eudaimonic happiness by 12.2 percentage points, and the highest level of life satisfaction by 6.3 points. These findings confirm our hypothesis built on the economic of

identity theory, as people with higher other regarding preferences tend to suffer more, and the distance with their values widens, in a social environment where others are perceived as competitors.

5.2 Robustness checks

In order to test the validity of our results we perform four different robustness checks. In order to check whether changes in significance and size of the regressors between the first and the last fully augmented specification in Table 2 are due to the introduction of the new regressors or the reduction in sample size (due to the missing value on some health variables added in the fully augmented specification), we re-estimate the reduced specifications of Table 2 on the smaller number of observations of the fully augmented sample of Table 2, column 4. Results presented in Table 5 show that the effect of our main variables of interest remains consistent with our previous findings, both with respect to eudaimonic happiness and life satisfaction.

We as well wonder whether our main results are influenced by outlier countries. To tackle the problem we perform a DFBETA test following the approach adopted by Frey and Stutzer (2000) and Otterbach (2010). We first estimate our full model including country and wave dummy variables to obtain the estimated coefficient of our main variable of interest, the importance of being successful. We therefore re-estimate the same model, omitting a different country at each time. The DFBETAs are then computed with the following formula

$$DFBETA_{i,k} = \frac{\beta_k - \beta_{k(-i)}}{se_{k(-i)}}$$

where, β_k is the coefficient the of regression in the overall sample, $\beta_{k(-i)}$ the coefficient of the regression when we omit the i-th country from the sample, and $se_{k(-i)}$ its standard error. Our results remain significant and consistent with our previous findings. The highest DFBETAs related to positional competition are 1.88 and 1.10 for life meaning and life satisfaction, respectively. Those

related to the index of social capital and other regarding preferences are -1.67 and -1.01, respectively, all below the critical value of 1.96 in absolute term (Belseley, Kuh, and Welsh, 1980). (Tables 6A, 6B, 6C and 6D).

Our last robustness check consists of testing whether the race for success effect is independent from objective measures of competition in local product markets. We therefore introduce in our fully-augmented model two indexes of competitiveness, the OP-gap (Olley and Pakes, 1996), with respect to capital and labor productivity. These indexes[16] are static measure that, at any point in time, capture the correlation between firm size and productivity, where positive correlation signals efficient allocation of resources and high competitiveness. Bartelsman et al. (2013) have shown that the OP-gap can be interpreted also as a measure of welfare as it moves monotonically with respect to per-capita consumption. This argument is faithfully reflected in the spatial distribution of the OP-gap, where Nordic countries have higher levels with respect to transition economies.

Results from this specification augmented with objective competition measures are reported in Table 7 and show that our findings regarding the importance of being successful and the principal component representing other-regarding preferences are robust to the inclusion of the two indexes. Furthermore, the OP-gap calculated with respect to capital has a negative and significant effect on life meaning. This suggests that our hypothesis on the local importance of positional competition cannot be rejected and has an independent effect additional to that of objective competition measures. As well, the direction of the effect is the same as that of the index measuring the economic competitiveness.

As a last robustness check we perform a bootstrap estimation with 500 repetitions to see whether our results are robust to the removal of the normality assumption. The check is performed on the full

[16] The indexes are provided by CompNet. The authors presenting the database, warn about the lack of full comparability of data and indicators in cross-country analysis, and therefore recommend the use of a special database constructed with the sample of firms with at least 20 employees and including in the analysis other set of controls at country level. In our analysis we control for two standard economic variables, GDP and unemployment rate.

model only. Results are reported in Tables B and B1 in the Appendix, with eudaimonic happiness and life satisfaction as dependent variables respectively and confirm our base findings.

6. Conclusions and policy implications

In our empirical work we formulate and test an original research question related to the significance of the local cultural environment on subjective wellbeing. More specifically, we assume that the two main local values affecting our dependent variable are the importance of positional competition and other-regarding preferences. We as well test whether proximity/dissonance between individual and local values significantly contributes to life sense and life satisfaction.

Our research question innovates with respect to the literature on this field in several respects. First, it tests whether local cultural factors different from personal biography or objective geographical measures may affect subjective wellbeing. Second, it contributes from an original perspective to the literature on the role of relative comparisons on subjective wellbeing by focusing not on monetary or nonmonetary variables of peers but on the local cultural environment. Third, it provides a direct test for the literature of the economics of identity assuming that individual's utility may improve/worsen just because of proximity/distance between local and personal values without any reference to consumption of goods and services.

Our findings are consistent with our three research hypotheses. Higher importance of positional competition at local level negatively affects subjective wellbeing, while higher importance of other-regarding preferences affects it positively. In addition, life sense and satisfaction of individuals giving higher importance to other-regarding preferences are positively affected by living in regions where such values are on average more important, while, consistently, they feel relatively worse in areas where race for success is more important.

Our findings indicate that nonmonetary factors may as well be important in driving "voting with feet" choices if the positive contribution to life sense and satisfaction given by higher proximity between

one's own value and local values is higher than the "transaction" costs of migration from one region to another. They as well indicate that limits to mobility across regions and countries may negatively affect subjective wellbeing if what said above matters.

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Figure 1 Average eudaimonic wellbeing in SHARE survey regions (waves 2, 4, 5 and 6)

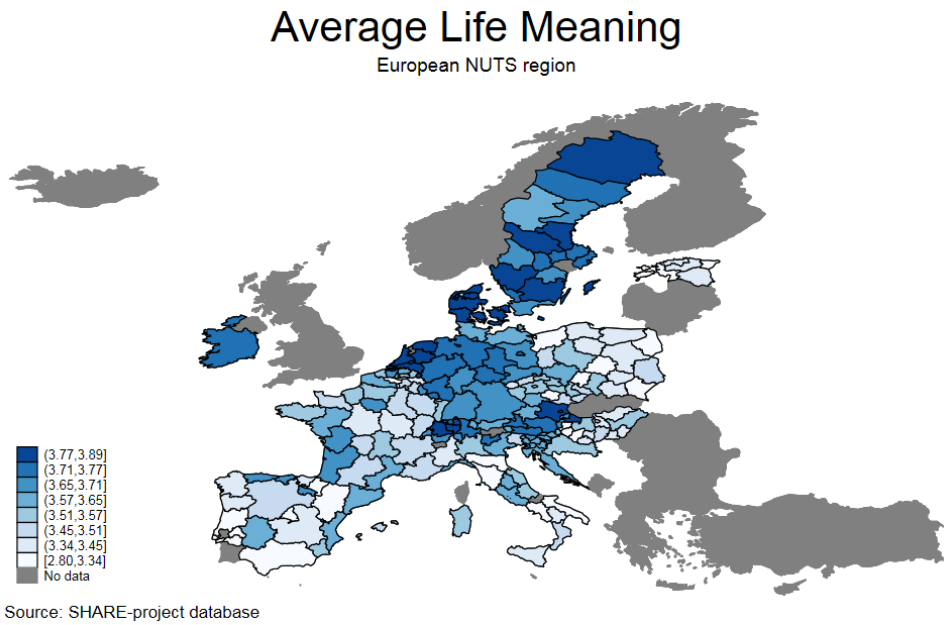

Figure 2 Average cognitive wellbeing in SHARE survey regions (waves 2, 4, 5 and 6)

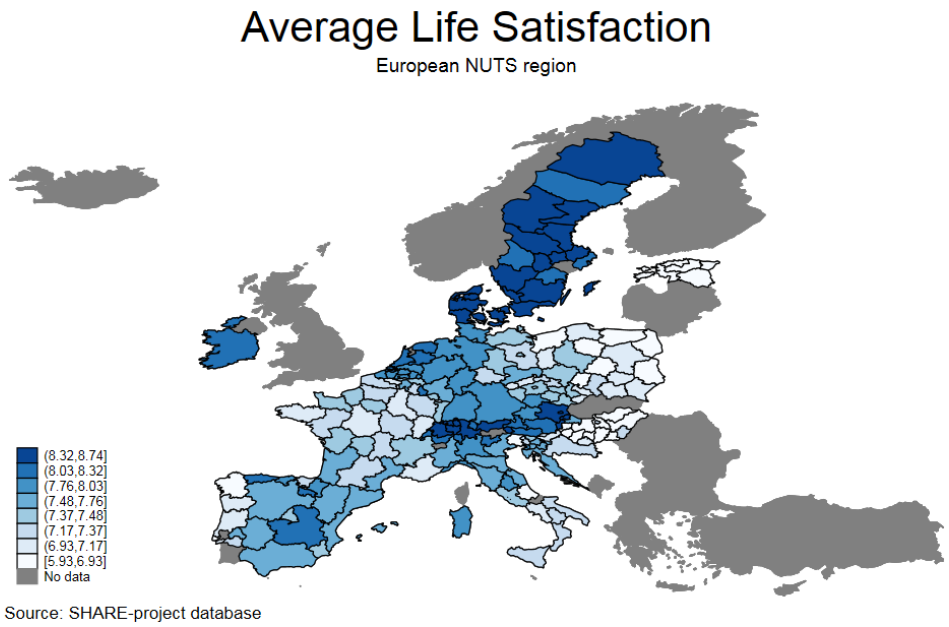

Table 1 Descriptive statistics

Eurostat variables	Obs	Mean	Std. Dev.	Min	Max
Population density	143728	399.952	980.299	2.500	7408.000
Household disposable income (NUTS2)	111171	14002.010	4106.791	6400.000	25300.000
Unemployment rate (age 15 - 74) (NUTS2)	145320	9.182	5.507	2.100	36.200

ESS variables	Obs	Mean	Std. Dev.	Min	Max
Important to be successful	142135	3.891	0.422	2.134	5.351
Trust in politicians	142135	3.281	0.975	0.680	5.753
Trust in people	142135	4.916	0.755	2.387	7.218
Religiosity	142135	4.112	1.117	0.000	7.682
Important that people are treated equally	142135	4.959	0.258	4.000	6.000
Important to understand different people	142135	4.630	0.256	3.481	5.551
Important to be loyal to friends	142135	5.146	0.209	3.584	6.000
Important to care for other wellbeing	142135	4.807	0.284	3.813	5.755
Important to live in a secure and safe place	142135	4.785	0.403	3.226	5.911
Important to follow rules	142135	3.739	0.413	2.165	5.142
Important to have a strong government	142135	4.758	0.321	3.039	5.866
Important to be rich	142135	2.930	0.397	1.254	4.623
Important to care for environment	142135	4.986	0.261	3.755	5.830

SHARE Variables	Obs	Mean	Std. Dev.	Min	Max
Age class					
0-55	229807	0.154	0.361	0	1
56-60	229807	0.167	0.373	0	1
61-65	229807	0.177	0.381	0	1
66-70	229807	0.158	0.365	0	1
71-75	229807	0.131	0.338	0	1
76-80	229807	0.102	0.302	0	1
81-85	229807	0.068	0.251	0	1
86-90	229807	0.033	0.177	0	1
91-95	229807	0.009	0.096	0	1
95+	229807	0.002	0.041	0	1
Male	229810	0.437	0.496	0	1
Years of education	108580	10.797	4.324	0	26
Ln(Household Income)	227026	9.858	1.196	-6	16
Employment status					
Unemployed	226703	0.029	0.169	0	1
Employed	226703	0.270	0.444	0	1
Rretired	226703	0.558	0.497	0	1
Sick or disabled	226703	0.036	0.185	0	1
Homemaker	226703	0.093	0.290	0	1
Other job	226703	0.014	0.116	0	1
Marital status					
Married	96946	0.683	0.465	0	1
Registered partnership	96946	0.017	0.128	0	1
Separated	96946	0.013	0.115	0	1
Divorced	96946	0.082	0.275	0	1
Widowed	96946	0.151	0.358	0	1
Never married	96946	0.054	0.225	0	1
Long term disease	229081	0.514	0.500	0	1
Self-assessed health status					
Poor	229045	0.114	0.318	0	1
Fair	229045	0.276	0.447	0	1
Good	229045	0.358	0.479	0	1
Very good	229045	0.175	0.380	0	1
Excellent	229045	0.076	0.265	0	1
High alcohol consumption	228307	0.203	0.403	0	1
Smoke	124752	0.260	0.438	0	1
Overweight	221742	0.625	0.484	0	1
Alive in 10 years (self-assessed probability)	185976	62.327	29.847	0	100
Trust	148277	5.744	2.417	0	10
Give help in the last 12 months	189809	0.278	0.448	0	1
Give financial support in the last 12 months	155020	0.281	0.450	0	1

Figure 3 Average importance of being successful ESS survey (waves 3, 5, 6 and 7)

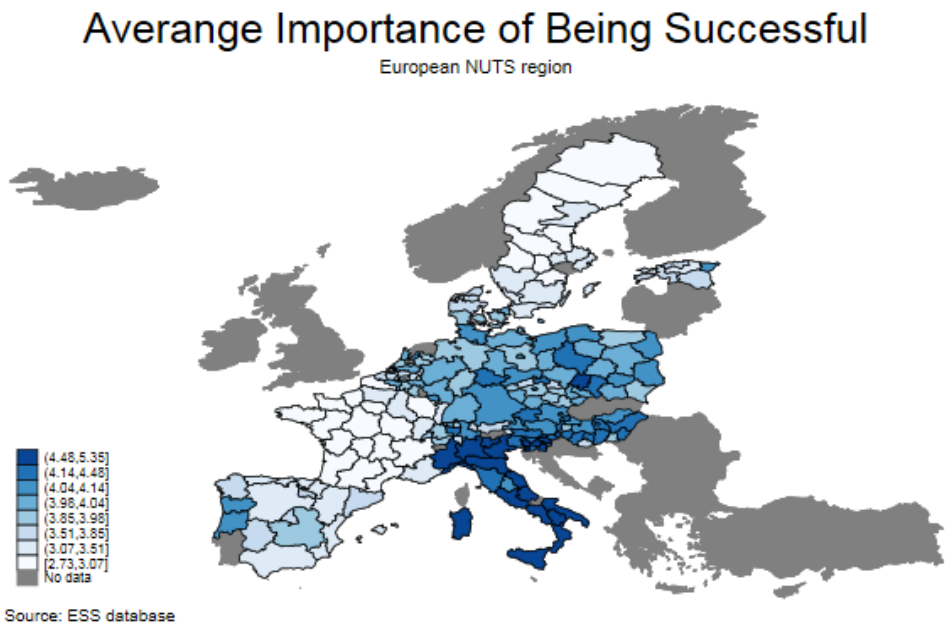

Figure 4 Index of Social Capital and Other Regarding Preferences (ISCORP). ESS survey (waves 3, 5, 6 and 7)

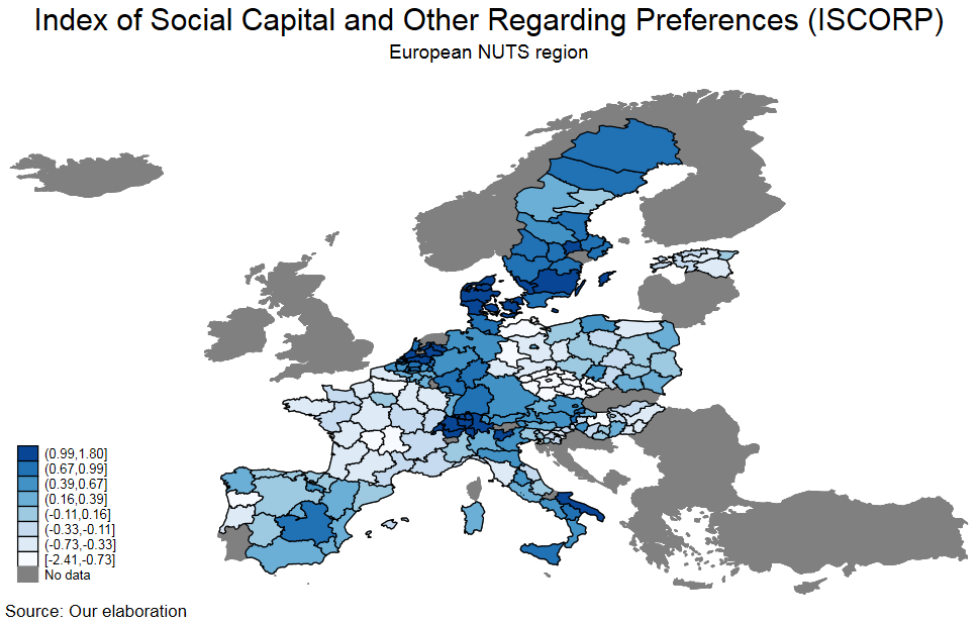

Table 2 The determinants of eudaimonic wellbeing: the role of positional competition and other-regarding values (dependent variable: life has meaning)

	(1)	(2)	(3)	(4)
Important to be successful	-0.237***	-0.179***	-0.311***	-0.525***
	(0.057)	(0.058)	(0.089)	(0.114)
ISCORP	0.097***	0.067*	0.112**	0.146**
	(0.034)	(0.034)	(0.053)	(0.059)
Age class 56-60	0.020	0.033	0.003	0.006
	(0.036)	(0.036)	(0.052)	(0.052)
Age class 61-65	0.074*	0.075*	-0.001	0.001
	(0.043)	(0.043)	(0.064)	(0.064)
Age class 66-70	0.022	0.056	0.072	0.074
	(0.049)	(0.049)	(0.077)	(0.077)
Age class 71-75	-0.153***	-0.074	-0.062	-0.059
	(0.051)	(0.052)	(0.082)	(0.083)
Age class 76-80	-0.283***	-0.173***	-0.053	-0.056
	(0.055)	(0.055)	(0.094)	(0.094)
Age class 81-85	-0.463***	-0.293***	-0.167	-0.170
	(0.063)	(0.063)	(0.112)	(0.112)
Age class 86-90	-0.713***	-0.555***	-0.393**	-0.387**
	(0.085)	(0.085)	(0.173)	(0.172)
Age class 91-95	-0.673***	-0.494***	-0.289	-0.279
	(0.164)	(0.164)	(0.273)	(0.275)
Age class 95+	-0.612	-0.609	-0.477	-0.461
	(0.501)	(0.511)	(0.924)	(0.926)
Male	-0.129***	-0.130***	-0.107***	-0.106***
	(0.023)	(0.023)	(0.038)	(0.038)
Education Years	0.057***	0.042***	0.037***	0.038***
	(0.003)	(0.003)	(0.005)	(0.005)
Ln(Household Income)	0.117***	0.102***	0.095***	0.092***
	(0.011)	(0.011)	(0.017)	(0.018)
Employed	0.589***	0.519***	0.529***	0.531***
	(0.055)	(0.055)	(0.073)	(0.073)
Retired	0.310***	0.334***	0.350***	0.353***
	(0.061)	(0.061)	(0.083)	(0.084)
Sick Disabled	-0.267***	0.035	0.116	0.113
	(0.069)	(0.070)	(0.093)	(0.093)
Homemaker	0.214***	0.218***	0.262**	0.271**
	(0.073)	(0.073)	(0.120)	(0.121)
Other Job Condition	0.255**	0.269**	0.479***	0.476***
	(0.120)	(0.121)	(0.182)	(0.182)
Married	0.543***	0.543***	0.523***	0.528***
	(0.046)	(0.046)	(0.069)	(0.069)
Regular Partnership	0.476***	0.476***	0.534***	0.541***
	(0.103)	(0.104)	(0.153)	(0.153)
Separated	0.286***	0.295***	0.331**	0.338**
	(0.101)	(0.100)	(0.142)	(0.142)
Divorced	0.144***	0.136**	0.097	0.101
	(0.055)	(0.055)	(0.080)	(0.080)

Widowed	0.239***	0.228***	0.201**	0.206**
	(0.055)	(0.055)	(0.088)	(0.088)
Long-term illness	-0.347***	0.045*	0.096**	0.096**
	(0.023)	(0.027)	(0.042)	(0.042)
Population Density	0.000***	0.000***	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Household Disposable Income	-0.000***	-0.000***	-0.000	0.000
(NUTS average)	(0.000)	(0.000)	(0.000)	(0.000)
Unemployment (15-74 age class)	-0.033***	-0.028***	-0.002	-0.005
(NUTS average)	(0.007)	(0.007)	(0.011)	(0.012)
Self assessed health (2)		0.713***	0.561***	0.560***
		(0.033)	(0.052)	(0.052)
Self assessed health (3)		1.126***	0.955***	0.953***
		(0.038)	(0.059)	(0.059)
Self assessed health (4)		1.431***	1.154***	1.151***
		(0.049)	(0.076)	(0.076)
Self assessed health (5)		1.805***	1.563***	1.558***
		(0.069)	(0.105)	(0.105)
Life expectancy			0.013***	0.013***
			(0.001)	(0.001)
High alcohol consumption			-0.052	-0.051
			(0.042)	(0.042)
Smoker			-0.190***	-0.188***
			(0.037)	(0.037)
Obese and overweight			0.126***	0.128***
			(0.037)	(0.037)
Important that government is strong				-0.034
				(0.141)
Important to live in secure and safe place				0.049
				(0.122)
Important to follow rules				0.231**
				(0.104)
Important to care for environment				-0.261*
				(0.147)
Important to be rich and have money				0.274***
				(0.104)
cut1	-3.953***	-2.709***	-1.292	-1.599
	(0.523)	(0.520)	(0.823)	(1.100)
cut2	-2.537***	-1.272**	0.185	-0.122
	(0.522)	(0.520)	(0.822)	(1.100)
cut3	-0.907*	0.405	1.887**	1.581
	(0.522)	(0.520)	(0.823)	(1.101)
Dummy waves	Yes	Yes	Yes	Yes
Dummy countries	Yes	Yes	Yes	Yes
Adj. R-squared	0.065	0.082	0.102	0.103
No. of Observation	38813	38800	17064	17064

Table 2.1 The determinants of eudaimonic wellbeing: the role of positional competition and other-regarding values: Marginal effects

Average marginal effects						
Model VCE : Robust						
Expression : Pr(lifemeaning==4), predict(outcome(4))						
	Delta-method					
	dy/dx	Std. Err.	z	P>z	[95% Conf.	Interval]
Important be successful	-0.098	0.021	-4.620	0.000	-0.139	-0.056
ISCORP	0.027	0.011	2.450	0.014	0.005	0.049

Table 3 The determinants of life satisfaction: the role of positional competition and other-regarding values (dependent variable: how satisfied with life)

	(1)	(2)	(3)	(4)
Important to be successful	-0.214***	-0.157***	-0.258***	-0.425***
	(0.047)	(0.047)	(0.071)	(0.091)
ISCORP	0.108***	0.070**	0.104**	0.130***
	(0.029)	(0.029)	(0.044)	(0.049)
Age class 56-60	0.088***	0.112***	0.060	0.062
	(0.027)	(0.028)	(0.040)	(0.040)
Age class 61-65	0.240***	0.259***	0.202***	0.207***
	(0.034)	(0.034)	(0.050)	(0.050)
Age class 66-70	0.258***	0.309***	0.279***	0.286***
	(0.040)	(0.040)	(0.062)	(0.062)
Age class 71-75	0.288***	0.415***	0.487***	0.497***
	(0.044)	(0.044)	(0.070)	(0.070)
Age class 76-80	0.299***	0.488***	0.619***	0.621***
	(0.049)	(0.049)	(0.082)	(0.082)
Age class 81-85	0.392***	0.673***	0.938***	0.944***
	(0.060)	(0.060)	(0.105)	(0.105)
Age class 86-90	0.464***	0.692***	0.780***	0.791***
	(0.089)	(0.088)	(0.161)	(0.160)
Age class 91-95	0.509***	0.815***	0.972***	1.006***
	(0.168)	(0.172)	(0.343)	(0.341)
Age class 95+	0.961*	1.158**	2.468***	2.502***
	(0.550)	(0.507)	(0.722)	(0.689)
Male	-0.012	-0.011	0.075**	0.073**
	(0.019)	(0.019)	(0.030)	(0.030)
Education Years	0.031***	0.011***	0.009**	0.010**
	(0.003)	(0.003)	(0.004)	(0.004)
Ln(Household Income)	0.120***	0.098***	0.092***	0.090***
	(0.010)	(0.010)	(0.015)	(0.015)
Employed	0.744***	0.688***	0.698***	0.697***

	(0.051)	(0.051)	(0.068)	(0.068)
Retired	0.563***	0.617***	0.594***	0.592***
	(0.056)	(0.057)	(0.076)	(0.076)
Sick Disabled	-0.125*	0.322***	0.363***	0.358***
	(0.067)	(0.069)	(0.090)	(0.090)
Homemaker	0.598***	0.612***	0.687***	0.689***
	(0.065)	(0.066)	(0.100)	(0.100)
Other Job Condition	0.512***	0.564***	0.595***	0.593***
	(0.111)	(0.110)	(0.165)	(0.165)
Married	0.449***	0.455***	0.456***	0.460***
	(0.039)	(0.039)	(0.057)	(0.057)
Regular Partnership	0.346***	0.354***	0.279***	0.284***
	(0.072)	(0.073)	(0.101)	(0.101)
Separated	-0.096	-0.093	0.028	0.038
	(0.088)	(0.088)	(0.128)	(0.128)
Divorced	-0.085*	-0.099**	-0.107	-0.104
	(0.047)	(0.047)	(0.067)	(0.067)
Widowed	0.043	0.038	0.054	0.057
	(0.048)	(0.048)	(0.076)	(0.076)
Long-term illness	-0.531***	-0.048**	0.023	0.021
	(0.019)	(0.021)	(0.032)	(0.032)
Population Density	0.000	0.000	0.000**	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Household Disposable Income	0.000*	0.000**	0.000*	0.000**
(NUTS average)	(0.000)	(0.000)	(0.000)	(0.000)
Unemployment (15-74 age class)	-0.008	0.000	-0.005	-0.004
(NUTS average)	(0.006)	(0.006)	(0.009)	(0.010)
Self assessed health (2)		1.030***	0.806***	0.808***
		(0.036)	(0.055)	(0.055)
Self assessed health (3)		1.621***	1.318***	1.317***
		(0.038)	(0.059)	(0.059)
Self assessed health (4)		2.002***	1.660***	1.657***
		(0.044)	(0.068)	(0.068)
Self assessed health (5)		2.399***	2.017***	2.015***
		(0.052)	(0.079)	(0.079)
Life expectancy			0.013***	0.013***
			(0.001)	(0.001)
High alcohol consumption			-0.006	-0.001
			(0.031)	(0.031)
Smoker			-0.118***	-0.117***
			(0.030)	(0.030)
Obese and overweight			0.099***	0.101***
			(0.029)	(0.029)
Important that government is strong				-0.071
				(0.114)
Important to live in secure and safe place				0.043
				(0.090)

Important to follow rules				0.384***
				(0.079)
Important to care for environment				-0.362***
				(0.115)
Important to be rich and have money				0.138
				(0.092)
Cut 1	-4.211***	-2.546***	-2.740***	-3.210***
	(0.503)	(0.510)	(0.728)	(0.905)
Cut 2	-3.793***	-2.124***	-2.267***	-2.737***
	(0.502)	(0.509)	(0.726)	(0.905)
Cut 3	-3.234***	-1.559***	-1.760**	-2.230**
	(0.501)	(0.508)	(0.725)	(0.905)
Cut 4	-2.493***	-0.800	-1.010	-1.480
	(0.500)	(0.507)	(0.724)	(0.904)
Cut 5	-1.978***	-0.267	-0.441	-0.912
	(0.500)	(0.507)	(0.724)	(0.904)
Cut 6	-0.614	1.166**	1.029	0.560
	(0.500)	(0.507)	(0.724)	(0.904)
Cut 7	-0.102	1.709***	1.570**	1.101
	(0.500)	(0.507)	(0.724)	(0.904)
Cut 8	0.763	2.624***	2.536***	2.070**
	(0.500)	(0.507)	(0.724)	(0.904)
Cut 9	2.172***	4.096***	4.066***	3.603***
	(0.500)	(0.507)	(0.724)	(0.904)
Cut 10	3.096***	5.046***	5.051***	4.589***
	(0.501)	(0.507)	(0.725)	(0.905)
Dummy waves	Yes	Yes	Yes	Yes
Dummy countries	Yes	Yes	Yes	Yes
Adj. R-squared	0.049	0.069	0.085	0.085
No. of Observations	38998	38984	17141	17141

Table 3.1 The determinants of life satisfaction: the role of positional competition and other-regarding values: Marginal effects

Average marginal effects

Model VCE : Robust

Expression : Pr(lifesat==10), predict(outcome(10))

Delta-method

	dy/dx	Std. Err.	z	P>z	[95% Conf.	Interval]
Important be successful	-0.041	0.009	-4.680	0.000	-0.058	-0.024
ISCORP	0.013	0.005	2.660	0.008	0.003	0.022

Table 4 panel A Other-regarding preferences Vs Non other-regarding preferences individuals. Eudaimonic happiness and life satisfaction

Dependent variable	Life sense		Life satisfaction	
Sample groups	Other-Regarding	Non Other-Regarding	Other-Regarding	Non Other-Regarding
Important to be successful	-0.712***	-0.352**	-0.568***	-0.232*
	(0.177)	(0.152)	(0.124)	(0.137)
ISCORP	0.206**	0.092	0.223***	0.019
	(0.088)	(0.081)	(0.072)	(0.067)
Dummy waves	Yes	Yes	Yes	Yes
Dummy countries	Yes	Yes	Yes	Yes
Adj. R-squared	0.100	0.099	0.085	0.082
No. of Observations	8944	8120	8991	8150

Table 4 panel B Propensity score matching. Eudaimonic happiness and life satisfaction

Dependent variable	Life sense		Life satisfaction	
Sample groups	Other-Regarding	Non Other-Regarding	Other-Regarding	Non Other-Regarding
Important to be successful	-0.712***	-0.317	-0.568***	-0.184
	(0.177)	(0.269)	(0.124)	(0.248)
ISCORP	0.206**	-0.040	0.223***	0.119
	(0.088)	(0.132)	(0.072)	(0.115)
Dummy waves	Yes	Yes	Yes	Yes
Dummy countries	Yes	Yes	Yes	Yes
Adj. R-squared	0.100	0.118	0.085	0.090
No. of Observations	8944	4262	8991	4275

Table 4 panel B.1 Propensity score matching. Eudaimonic happiness. Marginal effects

Average marginal effects						
Model VCE : Robust						
Expression : Pr(lifemeaning==4), predict(outcome(4))						
	Delta-method					
	dy/dx	Std. Err.	z	P>z	[95% Conf.	Interval]
Important be successful	-0.122	0.030	-4.020	0.000	-0.182	-0.063
ISCORP	0.035	0.015	2.350	0.019	0.006	0.065

Table 4 pabel B.2 Propensity score matching. Life satisfaction. Marginal effects

Average marginal effects						
Model VCE : Robust						
Expression : Pr(lifemeaning==10), predict(outcome(10))						
	Delta-method					
	dy/dx	Std. Err.	z	P>z	[95% Conf.	Interval]
Important be successful	-0.063	0.014	-4.580	0.000	-0.090	-0.036
ISCORP	0.025	0.008	3.090	0.002	0.009	0.040

Table 5 Sample size robustness check on life meaning

	(1)	(2)	(3)	(5)
Important to be successful	-0.362***	-0.334***	-0.311***	-0.525***
	(0.088)	(0.089)	(0.089)	(0.114)
ISCORP	0.120**	0.099*	0.112**	0.146**
	(0.052)	(0.053)	(0.053)	(0.059)
Dummy waves	Yes	Yes	Yes	Yes
Dummy countries	Yes	Yes	Yes	Yes
Adj. R-squared	0.065	0.085	0.102	0.103
No. of Observation	17064	17064	17064	17064

Table 5.1 Sample size robustness check on life satisfaction

	(1)	(2)	(3)	(4)
Important to be successful	-0.316***	-0.281***	-0.258***	-0.425***
	(0.071)	(0.072)	(0.071)	(0.091)
ISCORP	0.122***	0.090**	0.104**	0.130***
	(0.044)	(0.044)	(0.044)	(0.049)
Dummy waves	Yes	Yes	Yes	Yes
Dummy countries	Yes	Yes	Yes	Yes

Adj. R-squared	0.055	0.075	0.085	0.085
No. of Observations	17141	17141	17141	17141

Table 6panel A Sensitivity of our main findings to omission of sample countries

Life meaning

Omitted Country	Coefficient for importance of being successful	DFBETA
Sweden	-0.571***	0.376
Netherlands	-0.529***	0.035
Spain	-0.492***	-0.277
Italy	-0.483***	-0.352
France	-0.771***	1.876
Denmark	-0.508***	-0.145
Belgium	-0.439***	-0.705
Czech Republic	-0.491***	-0.281
Poland	-0.515***	-0.082
Hungary	-0.483***	-0.361
Portugal	-0.520***	-0.040
Estonia	-0.533***	0.064

Table 6 panel B Sensitivity of our main findings to omission of sample countries

Life satisfaction

Omitted Country	Coefficient for importance of being successful	DFBETA
Sweden	-0.391***	-0.335
Netherlands	-0.420***	-0.054
Spain	-0.389***	0.704
Italy	-0.427***	0.019
France	-0.535***	0.990
Denmark	-0.375***	-0.548
Belgium	-0.393***	-0.338
Czech Republic	-0.452***	0.277
Poland	-0.406***	0.952
Hungary	-0.396***	0.615
Portugal	-0.421***	1.027
Estonia	-0.543***	1.098

Table 6panel C Sensitivity of our main findings to omission of sample countries

Dependent variable: life meaning

Omitted Country	Coefficient for ISCORP	DFBETA
Sweden	0.154**	-0,128
Netherlands	0.137**	0,135
Spain	0.135**	0,167
Italy	0.122**	0,384
France	0.255***	-1,669
Denmark	0.138**	0,133
Belgium	0.131**	0,228
Czech Republic	0.073	1,083
Poland	0.129**	0,269
Hungary	0.180***	-0,551
Portugal	0.145**	0,016
Estonia	0.159**	-0,203

Table 6 panel D Sensitivity of our main findings to omission of sample countries

Dependent variable: life satisfaction

Omitted Country	Coefficient for ISCORP	DFBETA
Sweden	0.094*	0,684
Netherlands	0.120**	0,217
Spain	0.130***	0,009
Italy	0.098**	0,645
France	0.185***	-1,009
Denmark	0.122**	0,178
Belgium	0.123**	0,150
Czech Republic	0.093*	0,683
Poland	0.165***	-0,680
Hungary	0.171***	-0,791
Portugal	0.130***	0,011
Estonia	0.138**	-0,137

Table 7 The effect of the importance of success on eudaimonic wellbeing (when correcting for objective competition measures at NUTS level)

	(1)	(2)	(3)	(4)
Important to be successful	-0.312***	-0.230***	-0.419***	-0.514***
	(0.068)	(0.068)	(0.109)	(0.137)
ISCORP	0.151***	0.122***	0.185***	0.170**
	(0.041)	(0.041)	(0.065)	(0.072)
OP-gap labor	-5.917	-4.274	-2.033	-1.582

	(4.260)	(4.189)	(8.003)	(7.859)
OP-gap capital	0.355	-0.088	-1.041	-0.862
	(1.394)	(1.382)	(2.515)	(2.488)
Dummy waves	Yes	Yes	Yes	Yes
Dummy countries	Yes	Yes	Yes	Yes
Adj. R-squared	0.055	0.071	0.090	0.090
No. of Observations	28405	28397	12161	12161

Table 7.1 The effect of the importance of success on life satisfaction (when correcting for objective competition measures at NUTS level)

	(1)	(2)	(3)	(4)
Important to be successful	-0.190***	-0.089	-0.216**	-0.299***
	(0.056)	(0.057)	(0.088)	(0.111)
ISCORP	0.145***	0.110***	0.167***	0.132**
	(0.035)	(0.036)	(0.055)	(0.062)
OP-gap capital	-9.869***	-8.433***	-12.708***	-11.023**
	(2.819)	(2.923)	(4.635)	(4.522)
OP-gap labor	3.960***	3.709***	4.231***	3.882**
	(0.987)	(1.014)	(1.632)	(1.618)
Dummy waves	Yes	Yes	Yes	Yes
Dummy countries	Yes	Yes	Yes	Yes
Adj. R-squared	0.045	0.065	0.079	0.080
No. of Observations	28576	28567	12234	12234

Appendix

Appendix X Theoretical analysis of the research hypothesis 2

the local cultural milieu matters: the local importance of other-regarding preferences has a significant effect on life sense

Following the approach adopted by Becchetti and Salustri (2015) we formalize the hypothesis starting from a simple Prisoner's dilemma (PD) game with two players. The players , i = 1, 2 can decide whether to contribute or not to a public good where $S_{i,-i} \in \{vC, vNC\}^2$ is the set of available actions to each player and *vC and vNC* are, respectively, the cooperative and non cooperative strategy. In the payoff matrix of the game (see figure A1) *(b)* represents the public good generated when a player

chooses the cooperative strategy, *(c)*, is the cost for contributing to the public good when choosing such strategy, while *(a)* is the personal enjoyment that the player experiences by choosing the cooperative strategy in proportion to her/his other-regarding preferences.

Figure A1 the standard PD game

		Player 2	
		vC	*vNC*
Player 1	*vC*	$b + a - c$, $b + a - c$	$\frac{1}{2}b + a - c$, b
	vNC	b, $\frac{1}{2}b + a - c$	0,0

Becchetti and Salustri (2015) show that the two-player game has always a unique NE, which is (vNC,vNC) if 1/2b+a < c, and (vC,vC) otherwise, that is, for high enough costs of choosing the cooperative strategy, we are in the Prisoner's dilemma region and the Nash equilibrium (vNC,vNC) where both players choose not to cooperate is Pareto dominated by the joint choice of cooperation (vC,vC).

Consider however what may happen in a geographical area where all individuals have strong other-regarding preferences (an additional a_R component). We assume that, for this reason, in such region cooperation is the social norm and therefore the choice of the non cooperative strategy entails the violation of such social norm producing a disutility (-sn).

Given the above described characteristics of the game the payoff for each player therefore depends both on his/her action and on the action of the other player, that is,

$$U_i(S) = \begin{cases} b - c + a + a_R, & if\ S_{i,-i} = (vC, vC) \\ \frac{1}{2}b - c + a + a_R, & if\ S_{i,-i} = (vC, vNC) \\ b - sn, & if\ S_{i,-i} = (vNC, vC)\ or\ (vNC, vNC) \end{cases} \qquad (1)$$

The payoff matrix therefore turns into

Figure A2 the PD game in the high ISCORP region

		Player 2	
		vC	*vNC*
Player 1	*vC*	$b + a + a_G - c$, $b + a + a_G - c$	$\frac{1}{2}b + a + a_G - c$, $b - sn$
	vNC	$b - sn$, $\frac{1}{2}b + a + a_G - c$	$-sn, -sn$

The game has a unique Nash equilibrium which is *(vNC, vNC)* as long as $a + a_{-i} < c -$ sn, and *(vC, vC)* otherwise. Hence in a high other-regarding preference geographical area the region of the Prisoner's dilemma shortens considerably, the amount of public good produced is significantly higher and life satisfaction and life sense is also higher, provided that the latter is related to the provision of public goods and to coherence with local social norms.

The result can be generalized for a game with *N* players, where in a low other-regarding preference region it is trivial to check that the NE is *(vNC, vNC) if* (1/n)b + a < c and *(vC, vC)* otherwise, while, in a high other-regarding preference region the NE is *(vNC, vNC) if* (1/n)b + a + a_R< c- sn and *(vC, vC)* otherwise. Here again the region of the Prisoners's dilemma shortens considerably in the high-other regarding preference region.

Table A. NUTS codes and frequency of observations in the SHARE sample

NUTS code		Freq.	Percent	Cum.
AT11	Burgenland (A)	727	0.45	0.45
AT12	Niederoesterreich	1827	1.14	1.6
AT13	Wien	2839	1.77	3.37
AT21	Kaernten	709	0.44	3.81
AT22	Steiermark	1909	1.19	5.01
AT31	Oberoesterreich	1383	0.86	5.87
AT32	Salzburg	360	0.23	6.1
AT33	Tirol	571	0.36	6.45
AT34	Vorarlberg	448	0.28	6.73
BE10	Bruxelles région capitale	1335	0.83	7.57
BE21	Antwerpen	184	1.15	8.72
BE22	Limburg (B)	450	0.28	9
BE23	Oost-Vlaanderen	930	0.58	9.58
BE24	Vlaams-Brabant	638	0.4	9.98
BE25	West-Vlaanderen	537	0.34	10.32
BE31	Brabant-Wallon	877	0.55	10.87
BE32	Hainaut	1492	0.93	11.8
BE33	Liege	1945	1.22	13.01
BE34	Luxembourg (B)	399	0.25	13.26
BE35	Namur	576	0.36	13.62
CH01	Lake Geneva region	1671	1.04	14.67
CH02	Espace Mittelland	2207	1.38	16.05
CH03	Nordwestschweiz	1137	0.71	16.76
CH04	Zurich	1348	0.84	17.6
CH05	Eastern Switzerland	142	0.89	18.49
CH06	Central Switzerland	735	0.46	18.95
CH07	Ticino	265	0.17	19.11
CZ010	Hlavni mesto Praha	1956	1.22	20.34
CZ020	Stredocesky kraj	1597	1	21.34
CZ031	Jihocesky kraj	1383	0.86	22.2
CZ032	Plzensky kraj	944	0.59	22.79
CZ041	Karlovarsky kraj	358	0.22	23.01
CZ042	Ustecky kraj	1362	0.85	23.87
CZ051	Liberecky kraj	480	0.3	24.17
CZ052	Kralovehradecky kraj	1907	1.19	25.36
CZ053	Pardubicky kraj	638	0.4	25.76
CZ063	Vysocina	1156	0.72	26.48
CZ064	Jihomoravsky kraj	1665	1.04	27.52
CZ071	Olomoucky kraj	779	0.49	28.01
CZ072	Zlinsky kraj	1558	0.97	28.98
CZ080	Moravskoslezsky kraj	2984	1.87	30.85
DE1	Baden-Wuerttemberg	1193	0.75	31.59
DE2	Bayern	1782	1.11	32.71
DE3	Berlin	300	0.19	32.89

DE4	Brandenburg	406	0.25	33.15
DE5	Bremen	96	0.06	33.21
DE6	Hamburg	160	0.1	33.31
DE7	Hessen	734	0.46	33.77
DE8	Mecklenburg-Vorpommern	241	0.15	33.92
DE9	Niedersachsen	932	0.58	34.5
DEA	Nordrhein-Westfalen	1798	1.12	35.62
DEB	Rheinland-Pfalz	472	0.3	35.92
DEC	Saarland	83	0.05	35.97
DED	Sachsen	604	0.38	36.35
DEE	Sachsen-Anhalt	356	0.22	36.57
DEF	Schleswig-Holstein	427	0.27	36.84
DEG	Thuerigen	313	0.2	37.03
DK00	Danmark	3852	2.41	39.44
DK01	Hovedstaden	1126	0.7	40.15
DK02	Sjaelland	746	0.47	40.61
DK03	Syddanmark	1273	0.8	41.41
DK04	Midtjylland	1133	0.71	42.12
DK05	Nordjylland	591	0.37	42.49
EE001	Pohja-Eesti	5851	3.66	46.14
EE004	Laane-Eesti	2789	1.74	47.89
EE006	Kesk-Eesti	2356	1.47	49.36
EE007	Kirde-Eesti	2706	1.69	51.05
EE008	Louna-Eesti	4537	2.84	53.89
ES11	Galicia	202	0.13	54.01
ES12	Principado de Asturias	84	0.05	54.07
ES13	Cantabria	57	0.04	54.1
ES21	Pais Vasco	137	0.09	54.19
ES22	Comunidad Foral de Navarra	96	0.06	54.25
ES23	La Rioja	60	0.04	54.29
ES24	Aragon	164	0.1	54.39
ES30	Comunidad de Madrid	722	0.45	54.84
ES41	Castilla y Leon	442	0.28	55.12
ES42	Castilla-La Mancha	427	0.27	55.38
ES43	Extremadura	140	0.09	55.47
ES5	Este	5895	3.69	59.16
ES51	Cataluna	893	0.56	59.71
ES52	Comunidad Valenciana	642	0.4	60.12
ES53	Illes Balears	45	0.03	60.14
ES61	Andalucía	1191	0.74	60.89
ES62	Region de Murcia	236	0.15	61.04
ES70	Canarias	201	0.13	61.16
FR10	Ile de France	637	0.4	61.56
FR21	Champagne-Ardenne	357	0.22	61.78
FR22	Picardie	446	0.28	62.06
FR23	Haute-Normandie	456	0.29	62.35
FR24	Centre	735	0.46	62.81

FR25	Basse-Normandie	525	0.33	63.13
FR26	Bourgogne	438	0.27	63.41
FR30	Nord - Pas-de-Calais	246	0.15	63.56
FR41	Lorraine	811	0.51	64.07
FR42	Alsace	497	0.31	64.38
FR43	Franche-Comte	344	0.22	64.59
FR51	Pays de la Loire	231	0.14	64.74
FR52	Bretagne	865	0.54	65.28
FR53	Poitou-Charentes	546	0.34	65.62
FR61	Aquitaine	361	0.23	65.85
FR62	Midi-Pyrenees	863	0.54	66.39
FR63	Limousin	301	0.19	66.57
FR71	Rhône-Alpes	537	0.34	66.91
FR72	Auvergne	439	0.27	67.18
FR81	Languedoc-Roussillon	283	0.18	67.36
FR82	Provence-Alpes-Cote d'Azur	1035	0.65	68.01
HR03	Jadranska Hrvatska	580	0.36	68.37
HR04	Kontinentalna Hrvatska	1914	1.2	69.57
HU101	Budapest	509	0.32	69.89
HU102	Pest	341	0.21	70.1
HU21	Kozep-Dunantul	350	0.22	70.32
HU221	Gyor-Moson-Sopron	100	0.06	70.38
HU222	Vas	105	0.07	70.45
HU223	Zala	110	0.07	70.51
HU231	Baranya	157	0.1	70.61
HU232	Somogy	84	0.05	70.67
HU233	Tolna	87	0.05	70.72
HU31	Észak-Magyarország	363	0.23	70.95
HU32	Észak-Alföld	444	0.28	71.22
HU331	Bacs-Kiskun	174	0.11	71.33
HU332	Bekes	122	0.08	71.41
HU333	Csongrad	126	0.08	71.49
IE	Ireland	1035	0.65	72.14
IL2	North	500	0.31	72.45
IL4	Center	368	0.23	72.68
IL6	South	17	0.01	72.69
ITC1	Piemonte	678	0.42	73.11
ITC3	Liguria	184	0.12	73.23
ITC4	Lombardia	1385	0.87	74.09
ITF1	Abruzzo	199	0.12	74.22
ITF3	Campania	715	0.45	74.66
ITF4	Puglia	753	0.47	75.14
ITF5	Basilicata	343	0.21	75.35
ITF6	Calabria	439	0.27	75.62
ITG1	Sicilia	879	0.55	76.17
ITG2	Sardegna	254	0.16	76.33
ITH2	Provincia Autonoma Trento	51	0.03	76.36

ITH3	Veneto	800	0.5	76.86
ITH4	Friuli-Venezia Giulia	221	0.14	77
ITH5	Emilia-Romagna	840	0.53	77.53
ITI1	Toscana	620	0.39	77.92
ITI2	Umbria	386	0.24	78.16
ITI3	Marche	484	0.3	78.46
ITI4	Lazio	794	0.5	78.96
LU000	Luxembourg	3174	1.99	80.94
NL1	Noord-Nederland	588	0.37	81.31
NL2	Oost-Nederland	292	0.18	81.49
NL21	Overijssel	512	0.32	81.81
NL22	Gelderland	209	0.13	81.94
NL23	Flevoland	202	0.13	82.07
NL3	West-Nederland	660	0.41	82.48
NL32	Noord-Holland	507	0.32	82.8
NL33	Zuid-Holland	572	0.36	83.15
NL34	Zeeland	291	0.18	83.34
NL4	Zuid-Nederland	207	0.13	83.47
NL41	Noord-Brabant	612	0.38	83.85
NL42	Limburg (NL)	109	0.07	83.92
PL11	Lodzkie	510	0.32	84.24
PL12	Mazowieckie	765	0.48	84.71
PL21	Malopolskie	189	0.12	84.83
PL22	Slaskie	661	0.41	85.24
PL31	Lubelskie	226	0.14	85.39
PL32	Podkarpackie	330	0.21	85.59
PL33	Swietokrzyskie	323	0.2	85.79
PL34	Podlaskie	261	0.16	85.96
PL41	Wielkopolskie	578	0.36	86.32
PL42	Zachodniopomorskie	449	0.28	86.6
PL43	Lubuskie	233	0.15	86.75
PL51	Dolnoslaskie	436	0.27	87.02
PL52	Opolskie	240	0.15	87.17
PL61	Kujawsko-Pomorskie	314	0.2	87.36
PL62	Warminsko-Mazurskie	330	0.21	87.57
PL63	Pomorskie	160	0.1	87.67
PT11	Norte	1079	0.67	88.35
PT16	Centro (P)	836	0.52	88.87
PT171	Grande Lisboa	1055	0.66	89.53
PT172	Peninsula de Setubal	133	0.08	89.61
PT182	Alto Alentejo	230	0.14	89.75
PT183	Alentejo Central	174	0.11	89.86
PT200	Região Autónoma dos Açores	189	0.12	89.98
SE0	Sverige	7	0	89.99
SE110	Stockholms lan	843	0.53	90.51
SE121	Uppsala lan	354	0.22	90.73
SE123	Ostergotlands lan	296	0.19	90.92

SE124	Orebro lan	227	0.14	91.06
SE125	Vastmanlands lan	178	0.11	91.17
SE21	Smaland and the islands	670	0.42	91.59
SE22	South Sweden	905	0.57	92.16
SE231	Hallands län	178	0.11	92.27
SE232	Vastra Gotalands lan	979	0.61	92.88
SE311	Varmlands lan	184	0.12	93
SE312	Dalarnas lan	204	0.13	93.12
SE313	Gavleborgs lan	259	0.16	93.28
SE321	Vasternorrlands lan	271	0.17	93.45
SE322	Jamtlands lan	113	0.07	93.52
SE331	Vasterbottens lan	278	0.17	93.7
SE332	Norrbottens lan	185	0.12	93.81
SI03	Vzhodna Slovenija	796	0.5	94.31
SI031	Pomurska	481	0.3	94.61
SI032	Podravska	1232	0.77	95.38
SI033	Koroška	418	0.26	95.64
SI034	Savinjska	1093	0.68	96.33
SI035	Zasavska	329	0.21	96.53
SI036	Spodnjeposavska	361	0.23	96.76
SI037	Jugovzhodna Slovenija	706	0.44	97.2
SI038	Notranjsko-kraška	151	0.09	97.29
SI04	Zahodna Slovenija	527	0.33	97.62
SI041	Osrednjeslovenska	1904	1.19	98.81
SI042	Gorenjska	848	0.53	99.34
SI043	Goriška	576	0.36	99.7
SI044	Obalno-kraška	473	0.3	100
Total		159959	100,00	

Table B Bootstrap estimation on life meaning

	(1)	(2)	(3)	(4)
Important to be successful	-0.237***	-0.179***	-0.311***	-0.525***
	(0.053)	(0.056)	(0.092)	(0.113)
ISCORP	0.097***	0.067**	0.112**	0.146**
	(0.034)	(0.033)	(0.052)	(0.059)
Dummy waves	Yes	Yes	Yes	Yes
Dummy countries	Yes	Yes	Yes	Yes
Repetitions	500	500	500	500
Adj. R-squared	0.065	0.082	0.102	0.103
No. of Observation	38813	38800	17064	17064

Table B1 Bootstrap estimation on life satisfaction

	(1)	(2)	(3)	(4)
Important to be successful	-0.214***	-0.157***	-0.258***	-0.425***
	(0.047)	(0.047)	(0.073)	(0.092)
ISCORP	0.108***	0.070**	0.104**	0.130***
	(0.030)	(0.030)	(0.044)	(0.050)
Dummy waves	Yes	Yes	Yes	Yes
Dummy countries	Yes	Yes	Yes	Yes
Repetitions	500	500	500	500
Adj. R-squared	0.049	0.069	0.085	0.085
No. of Observation	38998	38984	17141	17141