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Social Capital and Subjective Well-Being trends:  
Evidence from 11 European countries

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**Abstract** - Discovering whether social capital endowments in modern societies have been subjected or not to a process of gradual erosion is one of the most debated topics in recent economic literature. This new stream of research has been inaugurated by Putnam's pioneering studies about social capital trends in the United States. Recently, a considerable work by Stevenson and Wolfers (2008) put a new emphasis on this topic contending Easterlin's assessment. Present work is aimed at analyzing the relationship between changes in social capital and subjective well-being in Europe considering 11 different countries. In particular, we would like to answer questions such as: 1) is social capital in Europe declining? Is such erosion a general trend of modern societies or is it a characteristic feature of only some of them? 2) social capital trend can help to explain subjective well-being trend? In so doing, our research considers three different set of proxies of social capital controlling for time and socio-demographic aspects in eleven different European countries using WVS data between 1980 and 2000. Our results are encouraging, showing evidence of a probable relationship between social capital and happiness. Furthermore, our results show that during last twenty years European citizens have persistently lost confidence in the judicial system, in the church, in armed forces and the police. Finally, considering single countries, we discover that United Kingdom is the only European country with a clear and negative pattern for social capital: quite every proxy of social capital in UK declined over the considered period

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# 1 Introduction

Discovering whether social capital (SC) endowments in modern societies have been subjected or not to a process of gradual erosion is one of the most debated topics in recent economic literature. This new stream of research has been inaugurated by Putnam's pioneering studies about SC trends in the United States. Considering numerous proxies of SC, Putnam (2000) argues that during last thirty years USA experienced a decline in social relationships and in its system of shared values and beliefs. From this point, much of the literature on SC tries to find evidence to support or to contend this statement. For a comprehensive review of such literature see Stall and Hooghe (2004). Putnam's finding has been carefully scrutinised by Paxton (1999), Robinson and Jackson (2001), Costa and Kahn (2003), and Bartolini, Bilancini and Pugno (2008), while Ladd (1996) criticised this evidence. "On balance, social capital has been confirmed as declining in the US, although not so dramatically as Putnam claimed."<sup>1</sup> All these studies are focused on the USA since similar research asks for a generous data-base and the US General Social Survey (GSS) offers a long lasting temporal data-series. Consequently, we don't have much informations about what happened in other countries in the same period. For that reason the first question I would like to give an answer is: how is doing Europe? is SC declining? is such erosion a general trend of western societies or is it a characteristic feature of the American one? To my knowledge only a few authors payed attention to this aspect since only a few data-sets are useful to establish a clear long-term pattern. In 2001 OECD<sup>2</sup> dedicated to this topic a publication in which, beyond others, dealt with the theme of trends in five European countries: United Kingdom, Netherlands, Sweden, France and Germany. The report assesses that in general SC declined, in particular in United Kingdom, while remaining countries show a more mixed pattern.

Another general perspective is offered by Andrew Leigh (2003)<sup>3</sup>. Contributing to an entry on "Trends in social capital" he identifies three common patterns of declining trust, political participation and organizational activity across industrialized countries in the period between 1980 and 1990. Among the five reviewed European countries (Britain, France, Germany, Spain and Sweden) only the Scandinavian one seems to have a positive trend even if civic engagement is declining. Further studies have been conducted by Norris (2002), Delhey and Newton (2005) but these studies focused on particular

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<sup>1</sup>S. Bartolini, E. Bilancini, M. Pugno, Did the decline in social capital decrease American happiness? A relational explanation of the happiness paradox, Università degli Studi di Siena - Quaderni del Dipartimento di Economia Politica, n.540, Agosto 2008, Siena.

<sup>2</sup>OECD, The Well-being of Nations. The role if human and social capital, Centre for Educational Research and Innovation, Paris, 2001

<sup>3</sup>A. Leigh, Entry on "Trends in Social Capital", prepared for Karen Christensen and David Levinson (eds) (2003) *Encyclopedia of Community: from the village to the virtual world* Thousand Oaks, CA: Sage

indexes of SC or only on generalised trust and were based on old data from the WVS. A deeper analysis was conducted by Morales (2004) on trends and levels of associational participation in Europe. Looking at trends between 1980 and 2002 from the WVS and the European social survey (ESS) she concludes that it is not possible to state whether a clear increase or decrease in general levels of membership exists. Anyway, her analysis is merely descriptive and, even if she focuses on a broad set of countries, her conclusions may be affected by sample bias. Finally, a more recent article by Frane Adams (2006) observes trends of generalized trust and membership in voluntary organizations using data from WVS in the period 1980 - 2000. The author finds evidence of a non eroding SC in Europe even if he warns about signs of decline as well as improvement. He states that decline in trust in individuals is quite visible, while associational involvement shows a more complex but on average positive trend. Adam's work is, to my knowledge, the most up-to-date and complete research on European trends of SC. Anyway, it suffers some limitations. First of all it is based on mean variations between the starting and ending period. This is quite comprehensible since the second aim of the author was to test the reliability of the WVS vis-a-vis other data-bases (i.e. ESS), but in general this approach does not allow to check for other factors and sample bias; secondly the author adopts only some of the available proxies of SC, namely generalized trust, membership in voluntary organizations and unpaid voluntary work; finally, Adams focuses on a large number of European countries including transition countries: this is an interesting point, but misses to account for different economic realities (developed and transition countries) preventing a more detailed knowledge of what has happened to SC during last twenty years.

In order to overcome these limitations, my research considers three different set of proxies of SC controlling for time and socio-demographic aspects in eleven different European countries. Data are drawn from the WVS, a data-set composed of four waves between 1980 and 2000. In so doing, I am able to investigate European trends on a twenty years period.

The second question I would like to answer is whether SC trend can help to explain subjective well-being (SWB) trend. In a pioneering work Easterlin (1974) discovered that, using cross-section data, on average richer people are also happier than poorer ones; but a life-cycle analysis on the same sample shows that during time income grew up while happiness stayed constant. Such a puzzle is actually known as the “Easterlin paradox”. Starting from this point an even more consistent part of the economic literature flourished trying to solve the problem. Many different theories coming from manifold scientific fields have been advanced so far, but until now they failed to fully explain the paradox<sup>4</sup>. Recently, Stevenson and Wolfers (2008) revive the

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<sup>4</sup>for a review of the main theories advanced so far please refer to F. Sarracino, Subjective well-being in low income countries, Studi e Note di Economia, n. 3, 2008

debate challenging the existence of the paradox. Considering Europe and Japan they argue that societies get happier as they become richer. That is to say that “money can buy happiness”. Unfortunately, at the same time they state that “the failure of happiness to rise in the United States remains a puzzling outlier.”<sup>5</sup>. In this way the Easterlin paradox remains unsolved and also its non existence is not demonstrated. There is a need to further look into the “black box” of the American case. From this point of view, some recent contributions by Helliwell (2003, 2006) propose SC as an important aspect for SWB arguing that money can not explain the whole variation in people well-being. To my knowledge, the paper tackling most successfully with the challenge settled by Helliwell is Bartolini, Bilancini and Pugno (2008)<sup>6</sup> which argues that SC, and in particular relational goods, is important for SWB. They do not deny the importance of income for happiness, but using data from the American GSS between 1975 and 2004 they find out that U.S. SWB is largely explained by four forces acting in different directions: 1) income growth; 2) decreasing relational goods; 3) decreasing confidence in institutions; 4) social comparisons. These four groups of variables allow to explain quite the whole variation in SWB. In other words, the three authors suggests that American happiness did not grow up together with economic growth because the positive effect of income growth was counterbalanced by the declining availability of SC which negatively affects SWB. In this way they provide a convincing and powerful explanation of the Easterlin paradox giving SC a new role: a higher income increases happiness as long as it does not undermine SC. Whenever this hypothesis would be corroborated by further research, policy agendas will have to consider also the effects of economic policy on the preservation and the provision of social capital. Hence, SC can become an important aspect of future development policies.

The theory proposed by Bartolini et al. (2008) can help to explain what happened in U.S.A. A few example can probably be convincing. Estimates from the three authors suggest that in presence of a stable endowment of SC, and in particular of relational goods, American SWB would have been higher than the actual one. Similarly, if income growth should compensate for the effect of the reduction of SC on happiness, keeping this variable stable to its 1975 levels, then the growth rate of GDP should have been more than 10%. Finally, they also estimate that the positive effect of income growth on SWB has been counterbalanced by the increase of other's people income (which offsets 2/3 of the effect of income growth) and by the decrease in relational goods and confidence in institutions (which accounts for 5/6 of

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<sup>5</sup>B. Stevenson and J. Wolfers, Economic growth and subjective well-being: reassessing the Easterlin paradox, IZA DP n. 3654, August 2008, p. 16

<sup>6</sup>S. Bartolini, E. Bilancini, M. Pugno, Did the decline in social capital decrease American happiness? A relational explanation of the happiness paradox, Università degli Studi di Siena - Quaderni del Dipartimento di Economia Politica, n. 540, Agosto 2008, Siena.

the total effect of social comparisons on SWB).

Concluding, the contribution from Bartolini et al. (2008) seems to suggest that differences in SC trends can help to explain differences in SWB trends. The aim of this work is to provide further evidence to support this hypothesis looking at European countries.

Main results of my research are the following:

1. SC trends in Continental Europe and Great Britain are different. British trends are very similar to the American ones;
2. SWB trends in Europe are generally positive with the only exception of Great Britain;
3. SC and SWB trends for Europe are compatible with a relational explanation of the Easterlin paradox.

Present work is structured in four sections: the first section outlined my research questions and motivations behind them; the following section points out data adopted for my research and methodological aspects; the third section reports results from different regressions considering various proxies of SC as dependent variable and adopting time dummies and socio-economic conditions as independent variables. Finally, some concluding remarks will follow.

## 2 Data and Methodology

The analysis of SC trends for different European countries asks for a generous data-set. From this point of view, probably, the most comprehensive data-base is represented by the World Values Survey (WVS). It is a wide compilation of surveys collected in more than 80 countries representing more than 80% of the world's population. It collects informations on sociocultural and political change observed on a randomly selected sample of 300 to 4,000 individuals per country. In particular the database provides informations on "individual beliefs about politics, the economy, religious, social and ethical topics, personal finances, familial and social relationships, happiness and life satisfaction"<sup>7</sup>. Data have been collected in four waves (1980 - 82; 1990 - 91; 1995 - 97 and 1999 - 2001) for a total of 267,870 observations covering quite a long period of time - about 20 years. Anyway, the sample available for present study is smaller since I focus on the trend of SC indicators in a small subset of available countries, namely: Italy, France, the Netherlands, Belgium, United Kingdom, Ireland, Germany, Denmark, Sweden, Norway and Finland.

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<sup>7</sup>Bruni L. and Stanca L., Watching alone: relational goods, television and happiness, Journal of Economic Behaviour and Organization, 2006, p. 6

Although SC has been longly a much debated topic, actually it still lacks a commonly agreed definition. This topic has been developed and applied in many different social disciplines then different definitions have been advanced so far. Some of the fathers of this concept propose different definitions for it, but given the empirical nature of present work, I opted for the definition proposed by Bartolini et al. (2008) who define SC as “the stock of both *non-market relations* and *beliefs concerning institutions* that affect either utility or production functions.”<sup>8</sup>. In this way the authors do not focus solely on particular aspects of SC - networks, norms and trust - but comprise all those aspects - material and immaterial - that can contribute to develop mutual trust and co-operation. In particular, they point to two main aspects of SC: 1) every non-market relationships among individuals which allow people to communicate each other and to develop mutual trust. They define this aspect *relational SC*; 2) the system of values or believes that makes people act coherently. Moreover, the authors propose a further distinction in intrinsically and extrinsically motivated *relational SC* depending on whether the incentives to act come from within or outside the individual. They define *intrinsic SC* (alternatively defined as *relational goods*) those components “that enter into people’s utility function”<sup>9</sup>; by *extrinsic SC* they mean those components that do not “directly enter into people’s utility functions but are instrumental to something else that may be considered valuable”<sup>10</sup>. This distinction allows to go deeper in the analysis of the category of relational SC. In fact, quoting Deci’s work (1971), they focus on the non-instrumental nature of intrinsic motivated activities. This peculiarity allows to focus on a broader point: non-market relations are not always intrinsic; there can be extrinsic relational SC (or purely extrinsic) as well as intrinsic one.<sup>11</sup>

A further critical aspect about SC is how to measure it. Different proposals have been advanced, but generally there are some agreed proxies of SC. For example, following Putnam (2000) main measures of SC centre around proxies of trust and levels of engagement or interaction in social or group activities. When trying to measure SC we should keep in mind particular aspects (OECD, 2001):

- we should pay attention to causal connections since sources, functions and outcomes may be confused;

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<sup>8</sup>S. Bartolini, E. Bilancini, M. Pugno, Did the decline in social capital decrease American happiness? A relational explanation of the happiness paradox, Università degli Studi di Siena - Quaderni del Dipartimento di Economia Politica, n. 540, Agosto 2008, Siena, p. 5

<sup>9</sup>S. Bartolini, E. Bilancini, M. Pugno, Did the decline in social capital decrease American happiness? A relational explanation of the happiness paradox, Università degli Studi di Siena - Quaderni del Dipartimento di Economia Politica, n. 540, Agosto 2008, Siena, pp. 5 - 6.

<sup>10</sup>S. Bartolini, E. Bilancini, M. Pugno, *ibidem*, pp. 5 - 6.

<sup>11</sup>please refer to tab.1 in the appendix for a summarizing scheme.

- SC is mainly characterized by tacit and relational aspects which are naturally difficult to observe, to measure and to codify;
- usual variables of SC (trust, membership, voting, etc.) provide proxy measures and should not be confused with the underlying concept.

According to the vast majority of the literature on SC (Paxton, 2004; Costa and Kahn (2003)), I observe the *beliefs* component through several reports of confidence in institutions, namely armed forces, police, parliament, civil services, press, ecclesiastic, judicial system, education system, labour unions and major companies. Answers to these questions range on a 1 to 4 point scale going from *none at all* to *a great deal*. To measure *non-market relations*, I use trust in individuals (represented by a dummy variable) and membership in various voluntary groups and organizations. Given the multiple nature of this third aspect, I adopt the mentioned distinction between intrinsically and extrinsically motivated group membership (Bartolini et al., 2008). Voluntary organizations which enter the first set are labelled Putnam's groups while those entering the second set are named Olson's group (Knack, 2003). This distinction is based on the works of the two authors: Olson<sup>12</sup> emphasizes the tendency of associations to act as lobbies to get policies that protect the interest of special groups at the expenses of the society as a whole. Consequently, I include in Olson's groups all those organizations which are extrinsically motivated since it is supposed they are experienced only for instrumental reasons. On the contrary, Putnam<sup>13</sup> identifies in associations a source of general trust and of social ties leading to governmental and economic efficiency (Bartolini et al., 2008). In this paper membership in a Putnam's group is interpreted as intrinsic SC supposing it is experienced only for the pleasure of being a member. Among Putnam's group I include social welfare service for elderly, church organizations, sport clubs, art and literature clubs, fraternal groups and youth associations, human and animal rights. Among Olson's groups I include fraternity associations, unions, professional organizations and farm organizations, organization concerned with health and consumer groups. Finally, there are some groups that were left unclassified and labeled as *other groups* because it is not clear whether they constitute intrinsic or extrinsic RSC, although they are part of RSC. In this latter group I included veterans associations, political parties and "other groups". Each option between these three groups of variables is expressed as a dummy variable.

Finally, SWB is proxied by the variable *happiness* that is measured on a scale ranging from 1 to 4 and is based on answers to the following question:

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<sup>12</sup>Olson M., *The rise and decline of nations: economic growth, stagflation and social rigidities*, Yale UP: New Haven, 1982

<sup>13</sup>Putnam R.D., *Making democracy work: civic traditions in modern Italy*, Princeton NJ, Princeton University Press, 1993.

*“All considered you would say that you are: 1. very happy; 2. pretty happy; 3. not too happy; 4. not at all happy?”.*

In order to study SC and SWB trends during the last 20 years for each of the considered European countries, I follow two approaches<sup>14</sup>: I first regress the proxies of SC and SWB on time dummy variables. In this way trends are based on mean values; than I regress the same proxies on different groups of control variables (age, gender, familiar status and education) to consider specific individual and social aspects. In particular, age is considered linearly and with its square; a dummy on male is introduced; familiar status is controlled through three proxies: the number of children, a variable ranging between zero and twenty, and two dummy variables for single and married; finally, education includes a dummy for illiterate.

This model is repeated for each considered country. Formally, I estimate the following:

$$\begin{aligned} Proxy_{it}^j = & \alpha + \beta_1 \cdot D_{i,w_2} + \beta_2 \cdot D_{i,w_3} + \beta_3 \cdot D_{i,w_4} + \gamma_1 \cdot Age_{it} + \gamma_2 \cdot Age_{it}^2 + \\ & \gamma_3 \cdot Male_i + v_1 \cdot NChild_{it} + v_2 \cdot Single_{it} + v_3 \cdot Married_{it} + \delta_1 \cdot Illiterate_{it} \end{aligned} \quad (1)$$

where index  $j$  stands for the different proxies of SC and SWB, index  $t$  represents the various waves and index  $i$  stands for each individual. In each equation three dummy variables have been introduced to account for the four waves. Where possible I kept the first wave as the reference period. When informations about the first waves where not available, I adopted the second wave as reference period.

Since I have different indicators of SC and one proxy of SWB, my regression methodology varies following the specificities of each depending variable: in the case of generalized trust and participation in voluntary organizations, that are expressed in the form of dummies, I adopted a logit model; when studying confidence in institutions or happiness, defined on a 1 to 4 scale, I used an ordered logit model. Tables from 2 to 12 in the appendix report summary statistics for each considered country.

When dealing with these data we have to be careful because, although the WVS is the most complete database on our topic, it has some deficiencies. In particular, we have to keep in mind that observations about Italy, Ireland, Denmark, France, The Netherlands and Belgium are missing in the third wave; similarly, data about Finland are not collected in the first wave, while Norway is not observed in the fourth wave. Finally, the third wave does not contain informations about trust in the United Kingdom and about confidence in the educational system in Sweden, Norway, Finland and Germany. Overall, the pooled dataset contains 48340 observations.

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<sup>14</sup>M. Aguiar and E. Hurst, Measuring trends in leisure: the allocation of time over five decades, Federal Reserve Bank of Boston, Working Papers n. 2, 2006

### 3 Results

#### 3.1 Social capital trends in Europe

I report and discuss results from several regressions relative to equation 1. Results about each regression are reported in the appendix from tab.13 to tab.23. Here I discuss directly my conclusive results which are summarized in charts in the appendix.

A first interesting aspect emerging from my regressions is that SC trend in Europe is mainly positive. Hence, the picture about Europe appears fundamentally different from the American one. There is only one European country representing a shocking exception: the Great Britain. In this case every considered proxy of SC is declining meaning that during last twenty years Great Britain experienced a substantial erosion of SC. Charts from fig.1 to fig.7 show clearly this result. On the x-axis I reported the time from 1980 to 2000. Each point on the x-axis corresponds to a wave in the WVS. On the y-axis I report coefficients of the time dummies originating from regressions. The point on the x-axis corresponding to zero represents the reference year, while other points in the charts defining trends corresponds to the coefficients of the time dummies. Finally, each chart reports more than one line. Each line represents results from regressions with different sets of control variables, coherently with the adopted model. Looking at the charts it emerges clearly that Great Britain experienced a general social crisis. *Relational SC*, represented by *trust in others* and *membership in Putnam's groups*, decreases strongly during all the period. Similarly, also every proxy of beliefs in institutions declines steadily all along the last twenty years. The only proxy reporting a positive trend is *membership in other groups*, but data are insufficient to draw a trend for all the considered period.

The picture is completely different if we consider remaining European countries. In particular, trends about relational goods are generally positive. Here I will discuss only results for some of the major European countries. Considering *membership in Putnam's groups*, charts from fig.8(a) to fig.10(a) suggest that Italy, the Netherlands and Sweden from 1980 to 2000 experienced a growing trend. Figure 11(a) and fig.12(a) show that the same trend is positive also in France and in Denmark, even if in these two cases relative growth rate reduces since 1995. Considering Norway, fig.13(a) suggests a positive trend, but in this case available data do not allow to set a clear pattern. I can only conclude that in this case the trend between 1980 and 1990 is positive. Finally, the chart about Germany<sup>15</sup> (fig.14(a)) points out that overall from 1980 to 2000 membership in Putnam's groups is positive,

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<sup>15</sup>Observations about Germany before 1989 refer to West Germany.

but I have to remark that the trend reverted since 1990.

Considering the other component of relational goods, that is to say *trust in others*, the picture emerging from regressions is more homogeneous, since it grows up in every of the mentioned countries. I have only to highlight two cases: 1) Italy, in which the overall trend is positive although the growth rate of *trust in others* slightly reduces starting from 1990; 2) France, which emerges as the only Continental European country with a decreasing trend of *trust in others* during last twenty years (please, consider (b) charts from fig.8 to fig.14).

Let's turn now to the second component of SC: *beliefs in institutions*. In this case trends are more mixed among both variables and countries. In any case, some general trends arise quite clearly indicating a worrying trend for confidence in particular institutions: in particular, it seems that during last twenty years European citizens have persistently lost confidence in the judicial system, in religious institutions, in armed forces and in police.

Summing up, although some specificities and a mixed pattern regarding confidence in institutions, results suggest that SC, and in particular relational goods, generally increased during the last twenty years for the considered European countries, while Great Britain comes out as the big European exception showing a very similar pattern to the American one.

### 3.2 Social capital and subjective well-being in Europe

Previous results conveyed a framework in which Europe appears as very different from the USA. For quite every considered country, with the exception of Great Britain, relational SC increased from 1980 to 2000. Regressions about the trend of SWB in the same countries confirm a similar pattern. In fact, SWB increases in every considered country, while Great Britain is once again the only exception with a strongly decreasing trend from 1980 to 1995. Unfortunately, data about the fourth wave are not available in this case (see fig.15 to fig.19 in the appendix). Charts about remaining European countries show an overall positive pattern, even if single trends may differ. For example, France, Norway, Denmark and Netherlands have a steady growing trend (see fig.17(b), fig.18(a) and (b), and fig.16(b)); trends for Germany and Italy are positive too, but the growth rate reduces significantly between 1990 and 2000 (see fig.16(a) and fig.19 in the appendix); finally, Sweden's trend has a U-shaped outline (see fig.17(a)), even if the net result is positive.

## 4 Conclusions

The aim of present study was to point out trends of social capital in Europe and finding evidence to support the thesis that SC trends can help to explain SWB trends. In this way SC gains a new dimension: it can give further meaning to the widely used term *well-being*. Whenever present thesis would

be corroborated by further research, SC would acquire a central role in the definition of our policy agenda. For example, future economic policies should not only focus on ways to promote economic growth, but should pay attention also to their effects on SC.

Using different regression techniques, following the nature of dependent variables, I tried to assess the trends of three proxies of SC for each country in the period between 1980 and 2000. Following a broadly accepted approach in the literature, I adopted the following variables: trust in individuals, membership in eighteen different voluntary organizations and confidence in ten institutions. Results are quite innovative for at least two reasons: 1) contemporary literature largely focused on trends in USA rather than in Europe. This is mainly due to the fact that USA have large data-bases allowing such studies for longer periods of time (for example the U.S. GSS); 2) following the debate on the Easterlin paradox, my results suggest that we can not discard the hypothesis that the trend of SC is important for the trend of SWB. From this point of view, it is important to stress that I am not performing a causal analysis, but I am simply assessing SC and SWB trends and notice that in 10 out of 11 countries signs of SC trends are concordant with signs of SWB trends. Whether such evidence would be substantiated by future research, we could say that U.S.A. do not represent a “puzzling outlier” since “income growth is desirable as far as it is not associated with a deterioration of SC.”<sup>16</sup> Nonetheless, the question about whether SC trend can help to explain SWB trend is still an open question asking for further and deeper research.

Summarizing, my findings are the following:

1. Trends for SC in Europe are mainly positive (in particular for relational goods);
2. Great Britain appears as the only exception with declining trends of SC;
3. Europe seems affected by a general crisis of some particular institutions;
4. Given the concordance between SC and SWB trends in 10 out of 11 cases, we can not reject the hypothesis that SC can help to explain SWB.

Concluding, present research allows to remark a few aspects: the first one is that Europe and USA are not exactly following the same pattern. While both regions have experienced an institutional crisis during last twenty years,

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<sup>16</sup>S. Bartolini, E. Bilancini, M. Pugno, Did the decline in social capital decrease American happiness? A relational explanation of the happiness paradox, Università degli Studi di Siena - Quaderni del Dipartimento di Economia Politica, n. 540, Siena, Agosto 2008, p. 26.

relational social capital in Europe increased. The only European country with negative trends is the Great Britain. Nonetheless, we should take in mind that these figures need further investigation to extend both the number of interested countries and the lenght of the period considered. By now, present results suggesting a quite different pattern between USA and Europe push future research in two main directions: 1) to enlarge present research to discover trends relative to other countries; 2) to investigate why USA and Europe have a different performance. Which forces have pushed toward an increasing erosion of social capital in USA? Is European social capital subjected to the same erosive forces? 3) Do SC trends explain SWB trends in Europe?

## 5 Appendix: tables

		Relational goods	trust in others
			Putnam' groups
	Extrinsic RSC		Olson' groups
Other RSC			Others groups
Non - RSC		Confidence in	Church Armed forces Educational System Press Labor Unions Police Parliament Civil services Major Companies Judicial System

Table 1: Summarizing scheme of the different constituents of social capital.  
 Source: author's own elaboration

Table 2: Descriptive statistics about Italy.  
Source: author's own elaboration of World Values Survey data

Italy		Wave 1					Wave 2					Wave 3		Wave 4				
Variable		Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Obs	Mean	Std. Dev.	Min	Max	
happiness		1324	2.879154	0.632136	1	4	1971	2.99036	0.602371	1	4	0	1975	2.951899	0.693153	1	4	
trust in others		1302	0.268049	0.443114	0	1	1932	0.353002	0.478027	0	1	0	1946	0.32631	0.468983	0	1	
Putnam's group		1348	0.126855	0.332934	0	1	2018	0.245788	0.43066	0	1	0	2000	0.3135	0.464032	0	1	
Olson's group		1348	0.103116	0.304223	0	1	2018	0.122894	0.328397	0	1	0	2000	0.171	0.376603	0	1	
Other groups		1348	0.083828	0.277232	0	1	2018	0.107532	0.309866	0	1	0	2000	0.108	0.310458	0	1	
Confidence in	Church	1348	2.627596	1.065436	1	4	2016	2.72371	0.990553	1	4	0	1975	2.869873	0.891124	1	4	
	Armed forces	1348	2.541543	0.954291	1	4	2012	2.352386	0.858792	1	4	0	1948	2.524127	0.824592	1	4	
	Educational system	1348	2.568249	0.872206	1	4	2017	2.452652	0.81276	1	4	0	1966	2.595626	0.815724	1	4	
	Press	1348	2.131306	0.813654	1	4	2013	2.281172	0.778327	1	4	0	1954	2.270727	0.753821	1	4	
	Labour Unions	1348	2.02003	0.858366	1	4	2009	2.155799	0.809011	1	4	0	1927	2.089777	0.804152	1	4	
	Police	1348	2.708457	0.878863	1	4	2012	2.701292	0.746108	1	4	0	1968	2.766768	0.748476	1	4	
	Parliament	1348	2.082344	0.846785	1	4	2011	2.122327	0.802951	1	4	0	1944	2.222222	0.77996	1	4	
	Civil Services	1348	2.021513	0.826607	1	4	2013	2.001987	0.800718	1	4	0	1944	2.216049	0.738354	1	4	
	Major Companies	1348	2.073442	0.880258	1	4	2005	2.631421	0.807469	1	4	0	1879	2.443853	0.779061	1	4	
	Judicial system	1348	2.372404	0.879973	1	4	2012	2.152584	0.8212	1	4	0	1946	2.183967	0.808102	1	4	
wave 1		1348	1	0	1	1	2018	0	0	0	0	0	2000	0	0	0	0	
wave 2		1348	0	0	0	0	2018	1	0	1	1	0	2000	0	0	0	0	
wave 3		1348	0	0	0	0	2018	0	0	0	0	0	2000	0	0	0	0	
wave 4		1348	0	0	0	0	2018	0	0	0	0	0	2000	1	0	1	1	
age		1348	39.55341	16.87249	17	86	2018	41.35282	16.09372	18	88	0	2000	45.2835	16.8875	18	92	
age2		1348	1848.942	1478.435	289	7396	2018	1968.936	1455.248	324	7744	0	2000	2335.641	1617.433	324	8464	
male		1348	0.493323	0.500141	0	1	2018	0.478196	0.499648	0	1	0	2000	0.4795	0.499705	0	1	
number of children		766	2.275457	1.311028	1	8	1983	1.317196	1.337098	0	6	0	1850	1.401622	1.329979	0	9	
single		1348	0.355341	0.478794	0	1	2018	0.314668	0.464499	0	1	0	2000	0.309	0.462197	0	1	
married		1348	0.563798	0.496097	0	1	2018	0.581269	0.493474	0	1	0	2000	0.584	0.493017	0	1	
illiterate		1348	0	0	0	0	2018	0	0	0	0	0	2000	0.065	0.246588	0	1	

Table 3: Descriptive statistics about Great Britain.  
Source: author's own elaboration of World Values Survey data

Great Britain		Wave 1					Wave 2					Wave 3					Wave 4					
Variable		Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	
happiness		1163	3.331	0.567	1	4	1474	3.246	0.656	1	4	1091	3.212	0.675	1	4	0					
trust in others		1127	0.431	0.495	0	1	1440	0.437	0.496	0	1	1073	0.296	0.457	0	1	960	0.289	0.453	0	1	
Putnam's group		1167	0.324	0.468	0	1	1484	0.375	0.484	0	1	1093	0.000	0.000	0	0	1000	0.197	0.398	0	1	
Olson's group		1167	0.272	0.445	0	1	1484	0.255	0.436	0	1	1093	0.000	0.000	0	0	1000	0.133	0.340	0	1	
Other groups		1167	0.117	0.321	0	1	1484	0.179	0.384	0	1	1093	0.000	0.000	0	0	1000	0.123	0.329	0	1	
Confidence in	Church	1155	2.519	0.912	1	4	1467	2.517	0.930	1	4	0					942	2.246	0.870	1	4	
	Armed forces	1152	3.143	0.774	1	4	1472	3.102	0.787	1	4	0					975	3.068	0.709	1	4	
	Educational system	1148	2.691	0.752	1	4	1472	2.576	0.790	1	4	0					980	2.729	0.724	1	4	
	Press	1150	2.192	0.716	1	4	1476	1.898	0.719	1	4	0					986	1.783	0.712	1	4	
	Labour Unions	1139	2.076	0.786	1	4	1456	2.113	0.825	1	4	0					899	2.069	0.769	1	4	
	Police	1155	3.212	0.749	1	4	1478	2.976	0.771	1	4	0					984	2.802	0.776	1	4	
	Parliament	1146	2.373	0.804	1	4	1467	2.427	0.824	1	4	0					956	2.247	0.756	1	4	
	Civil Services	1133	2.472	0.754	1	4	1452	2.457	0.763	1	4	0					903	2.406	0.708	1	4	
	Major Companies	1112	2.522	0.782	1	4	1433	2.456	0.784	1	4	0					871	2.312	0.726	1	4	
	Judicial system	1147	2.787	0.801	1	4	1465	2.595	0.813	1	4	0					971	2.421	0.838	1	4	
wave 1		1167	1.000	0.000	1	1	1484	0.000	0.000	0	0	1093	0.000	0.000	0	0	1000	0.000	0.000	0	0	
wave 2		1167	0.000	0.000	0	0	1484	1.000	0.000	1	1	1093	0.000	0.000	0	0	1000	0.000	0.000	0	0	
wave 3		1167	0.000	0.000	0	0	1484	0.000	0.000	0	0	1093	1.000	0.000	1	1	1000	0.000	0.000	0	0	
wave 4		1167	0.000	0.000	0	0	1484	0.000	0.000	0	0	1093	0.000	0.000	0	0	1000	1.000	0.000	1	1	
age		1167	40.843	19.527	18	90	1475	46.850	18.427	18	90	1093	45.790	18.960	15	95	971	44.124	17.790	17	92	
age2		1167	2049.138	1860.429	324	8100	1475	2534.255	1845.163	324	8100	1093	2455.915	1895.149	225	9025	971	2263.048	1759.522	289	8464	
male		1167	0.476	0.500	0	1	1484	0.466	0.499	0	1	1093	0.463	0.499	0	1	1000	0.437	0.496	0	1	
number of children		680	2.324	1.272	1	8	1476	1.732	1.483	0	6	1093	0.637	1.022	0	8	986	1.879	1.562	0	14	
single		1167	0.297	0.457	0	1	1484	0.177	0.382	0	1	1093	0.207	0.405	0	1	1000	0.265	0.442	0	1	
married		1167	0.577	0.494	0	1	1484	0.613	0.487	0	1	1093	0.556	0.497	0	1	1000	0.506	0.500	0	1	
illiterate		1167	0.000	0.000	0	0	1484	0.000	0.000	0	0	1093	0.312	0.464	0	1	1000	0.000	0.000	0	0	

Table 4: Descriptive statistics about Ireland.  
Source: author's own elaboration of World Values Survey data

Ireland	Wave 1					Wave 2					Wave 3		Wave 4				
Variable	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max		
happiness	1175	3.360851	0.578578	1	4	980	3.359184	0.640454	1	4	0	1008	3.380952	0.577391	1	4	
trust in others	1170	0.411111	0.492246	0	1	988	0.473684	0.49956	0	1	0	992	0.359879	0.480207	0	1	
Putnam's group	1217	0.389482	0.487833	0	1	1000	0.399	0.489938	0	1	0	1012	0.447629	0.497496	0	1	
Olson's group	1217	0.163517	0.369989	0	1	1000	0.17	0.375821	0	1	0	1012	0.213439	0.409937	0	1	
Other groups	1217	0.126541	0.332594	0	1	1000	0.159	0.365859	0	1	0	1012	0.201581	0.401379	0	1	
Confidence in	Church	1210	3.246281	0.886722	1	4	999	3.083083	0.88412	1	4	0	1003	2.753739	0.906934	1	4
	Armed forces	1213	3.029678	0.826007	1	4	996	2.747992	0.864571	1	4	0	969	2.739938	0.829757	1	4
	Educational system	1206	2.833333	0.786557	1	4	994	2.947686	0.763782	1	4	0	1002	3.219561	0.668767	1	4
	Press	1205	2.433195	0.775386	1	4	998	2.265531	0.782606	1	4	0	989	2.308392	0.782488	1	4
	Labour Unions	1202	2.312812	0.817371	1	4	994	2.385312	0.814907	1	4	0	952	2.469538	0.824899	1	4
	Police	1211	3.201486	0.749014	1	4	997	3.18656	0.750702	1	4	0	1004	3.192231	0.753787	1	4
	Parliament	1205	2.578423	0.856788	1	4	992	2.528226	0.845961	1	4	0	986	2.224138	0.835425	1	4
	Civil Services	1205	2.605809	0.81093	1	4	994	2.639839	0.795925	1	4	0	974	2.697125	0.791561	1	4
	Major Companies	1190	2.521008	0.842008	1	4	989	2.539939	0.798323	1	4	0					
	Judicial system	1201	2.675271	0.829335	1	4	994	2.490946	0.833838	1	4	0	992	2.61996	0.840285	1	4
wave 1	1217	1	0	1	1	1000	0	0	0	0	0	1012	0	0	0	0	
wave 2	1217	0	0	0	0	1000	1	0	1	1	0	1012	0	0	0	0	
wave 3	1217	0	0	0	0	1000	0	0	0	0	0	1012	0	0	0	0	
wave 4	1217	0	0	0	0	1000	0	0	0	0	0	1012	1	0	1	1	
age	1214	40.58072	18.93242	18	93	1000	44.619	17.44018	18	89	0	986	47.05781	17.12225	18	90	
age2	1214	2004.937	1797.291	324	8649	1000	2294.711	1683.646	324	7921	0	986	2507.311	1734.106	324	8100	
male	1217	0.438784	0.496442	0	1	1000	0.48	0.49985	0	1	0	1012	0.459486	0.498602	0	1	
number of children	597	3.465662	1.861183	1	8	999	2.313313	2.138242	0	6	0	1001	2.509491	2.426141	0	20	
single	1217	0.41249	0.492485	0	1	1000	0.298	0.457608	0	1	0	1012	0.253953	0.435486	0	1	
married	1217	0.493016	0.500157	0	1	1000	0.615	0.486839	0	1	0	1012	0.588933	0.492271	0	1	
illiterate	1217	0	0	0	0	1000	0	0	0	0	0	1012	0.227273	0.419277	0	1	

Table 5: Descriptive statistics about France.  
Source: author's own elaboration of World Values Survey data

France	Wave 1					Wave 2					Wave 3		Wave 4				
Variable	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max		
happiness	1179	3.11	0.55	1	4	995	3.16	0.57	1	4	0	1607	3.24	0.62	1	4	
trust in others	1117	0.25	0.43	0	1	939	0.23	0.42	0	1	0	1560	0.21	0.41	0	1	
Putnam's group	1200	0.13	0.34	0	1	1002	0.30	0.46	0	1	0	1615	0.29	0.46	0	1	
Olson's group	1200	0.12	0.33	0	1	1002	0.12	0.33	0	1	0	1615	0.11	0.31	0	1	
Other groups	1200	0.08	0.27	0	1	1002	0.11	0.31	0	1	0	1615	0.11	0.31	0	1	
Confidence in institutions	Church	1145	2.43	1.03	1	4	965	2.37	0.98	1	4	0	1564	2.27	1.01	1	4
	Armed forces	1141	2.45	0.98	1	4	967	2.48	0.94	1	4	0	1564	2.64	0.93	1	4
	Educational system	1147	2.56	0.76	1	4	968	2.69	0.79	1	4	0	1597	2.75	0.77	1	4
	Press	1157	2.16	0.75	1	4	973	2.19	0.82	1	4	0	1601	2.14	0.80	1	4
	Labour Unions	1113	2.24	0.82	1	4	945	2.06	0.84	1	4	0	1551	2.13	0.84	1	4
	Police	1176	2.62	0.84	1	4	980	2.66	0.78	1	4	0	1598	2.70	0.83	1	4
	Parliament	1031	2.48	0.80	1	4	902	2.36	0.82	1	4	0	1544	2.20	0.83	1	4
	Civil Services	1131	2.45	0.75	1	4	947	2.38	0.80	1	4	0	1575	2.33	0.81	1	4
	Major Companies	1041	2.36	0.79	1	4	902	2.67	0.75	1	4	0	1530	2.37	0.80	1	4
	Judicial system	1171	2.55	0.78	1	4	968	2.54	0.78	1	4	0	1588	2.32	0.85	1	4
wave 1	1200	1.00	0.00	1	1	1002	0.00	0.00	0	0	0	1615	0.00	0.00	0	0	
wave 2	1200	0.00	0.00	0	0	1002	1.00	0.00	1	1	0	1615	0.00	0.00	0	0	
wave 3	1200	0.00	0.00	0	0	1002	0.00	0.00	0	0	0	1615	0.00	0.00	0	0	
wave 4	1200	0.00	0.00	0	0	1002	0.00	0.00	0	0	0	1615	1.00	0.00	1	1	
age	1200	40.36	17.91	17	89	1002	42.85	17.22	18	92	0	1615	45.12	16.94	18	93	
age2	1200	1949.76	1692.78	289	7921	1002	2132.65	1639.38	324	8464	0	1615	2323.09	1661.32	324	8649	
male	1200	0.48	0.50	0	1	1002	0.47	0.50	0	1	0	1615	0.50	0.50	0	1	
number of children	770	2.49	1.52	1	8	998	1.70	1.55	0	6	0	1615	1.75	1.54	0	7	
single	1200	0.24	0.43	0	1	1002	0.21	0.41	0	1	0	1615	0.26	0.44	0	1	
married	1200	0.62	0.49	0	1	1002	0.56	0.50	0	1	0	1615	0.52	0.50	0	1	
illiterate	1200	0.00	0.00	0	0	1002	0.00	0.00	0	0	0	1615	0.18	0.39	0	1	

Table 6: Descriptive statistics about Germany.  
Source: author's own elaboration of World Values Survey data

Germany		wave 1					Wave 2					Wave 3					Wave 4				
Variable		Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.		Max
happiness		1211	2.97	0.52	1	4	3201	3.01	0.56	1	4	2002	2.97	0.68	1	4	1995	2.97	0.67	1	4
trust in others		1084	0.32	0.47	0	1	2893	0.33	0.47	0	1	1956	0.33	0.47	0	1	1937	0.38	0.48	0	1
Putnam's group		1305	0.26	0.44	0	1	3437	0.52	0.50	0	1	2026	0.00	0.00	0	0	2036	0.38	0.48	0	1
Olson's group		1305	0.22	0.42	0	1	3437	0.40	0.49	0	1	2026	0.00	0.00	0	0	2036	0.13	0.33	0	1
Other groups		1305	0.13	0.33	0	1	3437	0.24	0.43	0	1	2026	0.00	0.00	0	0	2036	0.11	0.32	0	1
Confidence in	Church	1300	2.43	0.94	1	4	3434	2.36	0.94	1	4	1979	2.04	0.83	1	4	1911	2.14	0.93	1	4
	Armed forces	1297	2.50	0.80	1	4	3433	2.06	0.82	1	4	1950	2.36	0.78	1	4	1910	2.48	0.73	1	4
	Educational system	1300	2.41	0.70	1	4	3430	2.49	0.72	1	4	0					1975	2.80	0.62	1	4
	Press	1299	2.19	0.68	1	4	3436	2.16	0.70	1	4	2005	1.94	0.67	1	4	1978	2.27	0.76	1	4
	Labour Unions	1294	2.30	0.77	1	4	3428	2.19	0.78	1	4	1886	2.26	0.71	1	4	1866	2.28	0.75	1	4
	Police	1297	2.80	0.74	1	4	3437	2.60	0.76	1	4	2012	2.63	0.70	1	4	2006	2.77	0.66	1	4
	Parliament	1293	2.55	0.72	1	4	3432	2.42	0.76	1	4	1950	2.05	0.67	1	4	1933	2.24	0.75	1	4
	Civil Services	1297	2.24	0.70	1	4	3429	2.18	0.71	1	4	1971	2.39	0.68	1	4	1947	2.28	0.69	1	4
	Major Companies	1292	2.18	0.80	1	4	3424	2.33	0.79	1	4	1931	2.08	0.69	1	4	1851	2.29	0.79	1	4
	Judicial system	1295	2.77	0.75	1	4	3434	2.60	0.79	1	4	1991	2.38	0.73	1	4	1966	2.58	0.74	1	4
wave 1		1305	1.00	0.00	1	1	3437	0.00	0.00	0	0	2026	0.00	0.00	0	0	2036	0.00	0.00	0	0
wave 2		1305	0.00	0.00	0	0	3437	1.00	0.00	1	1	2026	0.00	0.00	0	0	2036	0.00	0.00	0	0
wave 3		1305	0.00	0.00	0	0	3437	0.00	0.00	0	0	2026	1.00	0.00	1	1	2036	0.00	0.00	0	0
wave 4		1305	0.00	0.00	0	0	3437	0.00	0.00	0	0	2026	0.00	0.00	0	0	2036	1.00	0.00	1	1
age		1304	41.34	17.42	16	100	3437	45.03	17.57	18	90	2019	43.61	16.17	18	90	2034	48.86	17.77	18	92
age2		1304	2011.97	1579.35	256	10000	3437	2336.46	1703.79	324	8100	2019	2162.87	1566.22	324	8100	2034	2702.57	1795.87	324	8464
male		1305	0.47	0.50	0	1	3437	0.47	0.50	0	1	2026	0.46	0.50	0	1	2036	0.43	0.50	0	1
number of children		768	2.21	1.16	1	8	3431	1.47	1.29	0	6	2020	1.39	1.23	0	8	2033	1.56	1.29	0	11
single		1305	0.27	0.44	0	1	3437	0.19	0.39	0	1	2026	0.20	0.40	0	1	2036	0.21	0.41	0	1
married		1305	0.56	0.50	0	1	3437	0.58	0.49	0	1	2026	0.54	0.50	0	1	2036	0.56	0.50	0	1
illiterate		1305	0.00	0.00	0	0	3437	0.00	0.00	0	0	2026	0.03	0.17	0	1	2036	0.02	0.14	0	1

Table 7: Descriptive statistics about Netherlands.  
Source: author's own elaboration of World Values Survey data

Netherlands	Wave 1					Wave 2					Wave 3	Wave 4					
Variable	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Obs	Mean	Std. Dev.	Min	Max	
happiness	1195	3.31	0.53	1	4	1015	3.39	0.65	1	4	0	1002	3.40	0.60	1	4	
trust in others	1072	0.45	0.50	0	1	965	0.53	0.50	0	1	0	997	0.60	0.49	0	1	
Putnam's group	1221	0.49	0.50	0	1	1017	0.78	0.41	0	1	0	1003	0.89	0.32	0	1	
Olson's group	1221	0.25	0.44	0	1	1017	0.40	0.49	0	1	0	1003	0.43	0.49	0	1	
Other groups	1221	0.14	0.35	0	1	1017	0.28	0.45	0	1	0	1003	0.26	0.44	0	1	
Confidence in	Church	1205	2.27	0.95	1	4	1014	2.14	0.89	1	4	0	993	2.14	0.82	1	4
	Armed forces	1189	2.33	0.79	1	4	1012	2.13	0.78	1	4	0	993	2.31	0.70	1	4
	Educational system	1190	2.83	0.67	1	4	1006	2.71	0.66	1	4	0	996	2.80	0.65	1	4
	Press	1192	2.18	0.65	1	4	1012	2.22	0.75	1	4	0	997	2.58	0.66	1	4
	Labour Unions	1173	2.32	0.74	1	4	994	2.45	0.76	1	4	0	966	2.56	0.68	1	4
	Police	1196	2.82	0.69	1	4	1015	2.80	0.64	1	4	0	999	2.70	0.66	1	4
	Parliament	1183	2.41	0.72	1	4	1008	2.49	0.68	1	4	0	993	2.54	0.67	1	4
	Civil Services	1173	2.42	0.70	1	4	1004	2.42	0.65	1	4	0	989	2.32	0.62	1	4
	Major Companies	1173	2.24	0.75	1	4	1000	2.41	0.70	1	4	0	0				
	Judicial system	1185	2.72	0.71	1	4	1011	2.67	0.73	1	4	0	986	2.45	0.72	1	4
wave 1	1221	1.00	0.00	1	1	1017	0.00	0.00	0	0	0	1003	0.00	0.00	0	0	
wave 2	1221	0.00	0.00	0	0	1017	1.00	0.00	1	1	0	1003	0.00	0.00	0	0	
wave 3	1221	0.00	0.00	0	0	1017	0.00	0.00	0	0	0	1003	0.00	0.00	0	0	
wave 4	1221	0.00	0.00	0	0	1017	0.00	0.00	0	0	0	1003	1.00	0.00	1	1	
age	1198	39.26	17.03	18	89	1017	43.16	16.49	18	89	0	1002	46.38	16.24	18	93	
age2	1198	1830.82	1558.72	324	7921	1017	2134.52	1585.83	324	7921	0	1002	2414.49	1691.06	324	8649	
male	1221	0.42	0.49	0	1	1017	0.43	0.50	0	1	0	1003	0.49	0.50	0	1	
number of children	759	2.60	1.46	1	8	998	1.54	1.42	0	6	0	1001	1.60	1.48	0	9	
single	1221	0.21	0.41	0	1	1017	0.22	0.42	0	1	0	1003	0.27	0.44	0	1	
married	1221	0.63	0.48	0	1	1017	0.57	0.50	0	1	0	1003	0.55	0.50	0	1	
illiterate	1221	0.00	0.00	0	0	1017	0.00	0.00	0	0	0	1003	0.01	0.10	0	1	

Table 8: Descriptive statistics about Belgium.  
Source: author's own elaboration of World Values Survey data

Belgium		Wave 1					Wave 2					Wave 3		Wave 4				
Variable		Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max		
happiness		1089	3.264	0.594	1	4	2701	3.315	0.641	1	4	0	1894	3.310	0.679	1	4	
trust in others		1001	0.292	0.455	0	1	2576	0.335	0.472	0	1	0	1824	0.292	0.455	0	1	
Putnam's group		1145	0.225	0.418	0	1	2792	0.444	0.497	0	1	0	1912	0.483	0.500	0	1	
Olson's group		1145	0.195	0.396	0	1	2792	0.241	0.428	0	1	0	1912	0.272	0.445	0	1	
Other groups		1145	0.079	0.269	0	1	2792	0.244	0.430	0	1	0	1912	0.285	0.452	0	1	
Confidence in Institutions	Church	1046	2.719	0.992	1	4	2776	2.475	0.980	1	4	0	1871	2.310	0.978	1	4	
	Armed forces	1047	2.312	0.875	1	4	2768	2.144	0.859	1	4	0	1845	2.237	0.854	1	4	
	Educational system	1075	2.950	0.720	1	4	2776	2.844	0.723	1	4	0	1885	2.919	0.713	1	4	
	Press	1074	2.223	0.753	1	4	2767	2.348	0.762	1	4	0	1892	2.237	0.791	1	4	
	Labour Unions	1022	2.117	0.829	1	4	2762	2.241	0.794	1	4	0	1825	2.217	0.830	1	4	
	Police	1079	2.646	0.784	1	4	2771	2.479	0.795	1	4	0	1891	2.513	0.781	1	4	
	Parliament	1010	2.245	0.792	1	4	2762	2.318	0.765	1	4	0	1824	2.226	0.815	1	4	
	Civil Services	1021	2.358	0.798	1	4	2755	2.333	0.774	1	4	0	1858	2.351	0.769	1	4	
	Major Companies	972	2.318	0.793	1	4	2736	2.457	0.783	1	4	0	0					
	Judicial system	1060	2.592	0.846	1	4	2761	2.394	0.805	1	4	0	1883	2.189	0.861	1	4	
wave 1		1145	1.000	0.000	1	1	2792	0.000	0.000	0	0	0	1912	0.000	0.000	0	0	
wave 2		1145	0.000	0.000	0	0	2792	1.000	0.000	1	1	0	1912	0.000	0.000	0	0	
wave 3		1145	0.000	0.000	0	0	2792	0.000	0.000	0	0	0	1912	0.000	0.000	0	0	
wave 4		1145	0.000	0.000	0	0	2792	0.000	0.000	0	0	0	1912	1.000	0.000	1	1	
age		1145	43.121	19.220	15	87	2792	44.677	17.267	17	93	0	1905	46.392	17.553	15	98	
age2		1145	2228.550	1838.867	225	7569	2792	2294.082	1643.219	289	8649	0	1905	2460.112	1775.723	225	9604	
male		1145	0.469	0.499	0	1	2792	0.488	0.500	0	1	0	1912	0.463	0.499	0	1	
number of children		695	2.376	1.479	1	8	2777	1.606	1.489	0	6	0	1873	1.713	1.559	0	12	
single		1145	0.218	0.413	0	1	2792	0.196	0.397	0	1	0	1912	0.233	0.423	0	1	
married		1145	0.634	0.482	0	1	2792	0.593	0.491	0	1	0	1912	0.582	0.493	0	1	
illiterate		1145	0.000	0.000	0	0	2792	0.000	0.000	0	0	0	1912	0.021	0.145	0	1	

Table 9: Descriptive statistics about Denmark.  
Source: author's own elaboration of World Values Survey data

Denmark	Wave 1					Wave 2					Wave 3		Wave 4				
Variable	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max		
happiness	1150	3.261	0.536	1	4	1022	3.36	0.62	1	4	0	1017	3.39	0.60	1	4	
trust in others	1059	0.527	0.500	0	1	992	0.58	0.49	0	1	0	986	0.67	0.47	0	1	
Putnam's group	1182	0.185	0.389	0	1	1030	0.52	0.50	0	1	0	1023	0.56	0.50	0	1	
Olson's group	1182	0.499	0.500	0	1	1030	0.60	0.49	0	1	0	1023	0.61	0.49	0	1	
Other groups	1182	0.157	0.363	0	1	1030	0.23	0.42	0	1	0	1023	0.26	0.44	0	1	
Confidence in	Church	1166	2.408	0.891	1	4	1015	2.45	0.84	1	4	0	949	2.62	0.74	1	4
	Armed forces	1170	2.314	0.851	1	4	1009	2.43	0.80	1	4	0	965	2.64	0.69	1	4
	Educational system	1168	2.747	0.721	1	4	1014	2.99	0.64	1	4	0	994	2.83	0.60	1	4
	Press	1171	2.189	0.707	1	4	1020	2.18	0.72	1	4	0	995	2.24	0.67	1	4
	Labour Unions	1144	2.539	0.812	1	4	1004	2.40	0.82	1	4	0	953	2.45	0.73	1	4
	Police	1173	3.124	0.724	1	4	1019	3.18	0.62	1	4	0	1011	3.16	0.60	1	4
	Parliament	1167	2.267	0.787	1	4	1015	2.38	0.74	1	4	0	986	2.47	0.70	1	4
	Civil Services	1161	2.446	0.743	1	4	1010	2.52	0.69	1	4	0	978	2.54	0.64	1	4
	Major Companies	1115	2.239	0.738	1	4	978	2.32	0.72	1	4	0					
	Judicial system	1170	3.009	0.748	1	4	1011	3.00	0.69	1	4	0	980	2.92	0.67	1	4
wave 1	1182	1.000	0.000	1	1	1030	0.00	0.00	0	0	0	1023	0.00	0.00	0	0	
wave 2	1182	0.000	0.000	0	0	1030	1.00	0.00	1	1	0	1023	0.00	0.00	0	0	
wave 3	1182	0.000	0.000	0	0	1030	0.00	0.00	0	0	0	1023	0.00	0.00	0	0	
wave 4	1182	0.000	0.000	0	0	1030	0.00	0.00	0	0	0	1023	1.00	0.00	1	1	
age	1182	40.882	18.319	18	91	1030	43.99	17.80	18	90	0	1023	45.76	17.43	18	92	
age2	1182	2006.602	1714.562	324	8281	1030	2251.69	1765.44	324	8100	0	1023	2397.96	1768.26	324	8464	
male	1182	0.492	0.500	0	1	1030	0.50	0.50	0	1	0	1023	0.49	0.50	0	1	
number of children	762	2.320	1.227	1	8	1027	1.62	1.43	0	6	0	1023	1.66	1.38	0	10	
single	1182	0.220	0.414	0	1	1030	0.20	0.40	0	1	0	1023	0.30	0.46	0	1	
married	1182	0.530	0.499	0	1	1030	0.51	0.50	0	1	0	1023	0.53	0.50	0	1	
illiterate	1182	0.000	0.000	0	0	1030	0.00	0.00	0	0	0	1023	0.00	0.05	0	1	

Table 10: Descriptive statistics about Norway.  
Source: author's own elaboration of World Values Survey data

Norway		Wave 1					Wave 2					Wave 3					Wave 4
Variable		Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs
happiness		1044	3.203	0.573	1	4	1233	3.225	0.576	1	4	1125	3.237	0.566	1	4	0
trust in others		958	0.609	0.488	0	1	1156	0.651	0.477	0	1	1118	0.653	0.476	0	1	0
Putnam's group		1051	0.278	0.448	0	1	1239	0.553	0.497	0	1	1127	0.000	0.000	0	0	0
Olson's group		1051	0.433	0.496	0	1	1239	0.540	0.499	0	1	1127	0.000	0.000	0	0	0
Other groups		1051	0.206	0.405	0	1	1239	0.354	0.478	0	1	1127	0.000	0.000	0	0	0
Confidence in	Church	1047	2.571	0.865	1	4	1234	2.437	0.830	1	4	1119	2.557	0.773	1	4	0
	Armed forces	1045	2.805	0.756	1	4	1234	2.714	0.725	1	4	1122	2.796	0.663	1	4	0
	Educational system	1044	2.959	0.636	1	4	1233	2.920	0.621	1	4	0					0
	Press	1045	2.403	0.658	1	4	1229	2.422	0.653	1	4	1120	2.264	0.615	1	4	0
	Labour Unions	1040	2.577	0.730	1	4	1221	2.596	0.717	1	4	1090	2.670	0.654	1	4	0
	Police	1044	3.187	0.626	1	4	1235	3.062	0.599	1	4	1124	2.997	0.589	1	4	0
	Parliament	1047	2.947	0.685	1	4	1235	2.617	0.705	1	4	1117	2.738	0.605	1	4	0
	Civil Services	1042	2.622	0.673	1	4	1232	2.406	0.668	1	4	1116	2.480	0.629	1	4	0
	Major Companies	1035	2.426	0.659	1	4	1224	2.533	0.639	1	4	1096	2.602	0.596	1	4	0
	Judicial system	1045	3.115	0.685	1	4	1228	2.883	0.683	1	4	1121	2.762	0.660	1	4	0
wave 1		1051	1.000	0.000	1	1	1239	0.000	0.000	0	0	1127	0.000	0.000	0	0	0
wave 2		1051	0.000	0.000	0	0	1239	1.000	0.000	1	1	1127	0.000	0.000	0	0	0
wave 3		1051	0.000	0.000	0	0	1239	0.000	0.000	0	0	1127	1.000	0.000	1	1	0
wave 4		1051	0.000	0.000	0	0	1239	0.000	0.000	0	0	1127	0.000	0.000	0	0	0
age		1051	44.089	16.920	17	79	1239	44.311	16.347	19	80	1127	43.264	16.182	18	79	0
age2		1051	2229.895	1582.855	289	6241	1239	2230.446	1568.387	361	6400	1127	2133.361	1529.118	324	6241	0
male		1051	0.525	0.500	0	1	1239	0.513	0.500	0	1	1127	0.487	0.500	0	1	0
number of children		767	2.435	1.283	1	8	1230	1.653	1.384	0	6	1126	1.683	1.397	0	8	0
single		1051	0.162	0.368	0	1	1239	0.186	0.390	0	1	1127	0.183	0.387	0	1	0
married		1051	0.684	0.465	0	1	1239	0.624	0.485	0	1	1127	0.538	0.499	0	1	0
illiterate		1051	0.000	0.000	0	0	1239	0.000	0.000	0	0	1127	0.018	0.132	0	1	0

Table 11: Descriptive statistics about Sweden.  
Source: author's own elaboration of World Values Survey data

Sweden		Wave 1					Wave 2					Wave 3					Wave 4				
Variable		Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max
happiness		935	3.241	0.542	1	4	1038	3.364	0.578	1	4	997	3.340	0.596	1	4	1012	3.287	0.628	1	4
trust in others		876	0.567	0.496	0	1	944	0.661	0.474	0	1	957	0.597	0.491	0	1	974	0.663	0.473	0	1
Putnam's group		954	0.273	0.445	0	1	1047	0.559	0.497	0	1	1009	0.000	0.000	0	0	1015	0.887	0.317	0	1
Olson's group		954	0.491	0.500	0	1	1047	0.627	0.484	0	1	1009	0.000	0.000	0	0	1015	0.700	0.458	0	1
Other groups		954	0.180	0.385	0	1	1047	0.351	0.477	0	1	1009	0.000	0.000	0	0	1015	0.379	0.485	0	1
Cetitadene in	Church	930	2.287	0.848	1	4	990	2.226	0.855	1	4	985	2.470	0.739	1	4	991	2.409	0.781	1	4
	Armed forces	915	2.634	0.716	1	4	1012	2.464	0.756	1	4	988	2.550	0.708	1	4	992	2.410	0.707	1	4
	Educational system	914	2.663	0.665	1	4	1014	2.777	0.669	1	4	0					1004	2.752	0.665	1	4
	Press	929	2.177	0.656	1	4	1024	2.207	0.696	1	4	1001	2.184	0.666	1	4	1004	2.453	0.672	1	4
	Labour Unions	886	2.474	0.795	1	4	981	2.307	0.783	1	4	952	2.389	0.731	1	4	986	2.353	0.703	1	4
	Police	940	2.938	0.660	1	4	1027	2.847	0.678	1	4	998	2.943	0.622	1	4	1011	2.863	0.658	1	4
	Parliament	901	2.435	0.734	1	4	1010	2.439	0.791	1	4	984	2.405	0.691	1	4	994	2.502	0.699	1	4
	Civil Services	854	2.422	0.699	1	4	949	2.392	0.697	1	4	925	2.405	0.635	1	4	946	2.457	0.643	1	4
	Major Companies	853	2.352	0.712	1	4	951	2.533	0.707	1	4	945	2.669	0.614	1	4	0				
	Judicial system	908	2.838	0.699	1	4	1019	2.582	0.771	1	4	990	2.652	0.677	1	4	995	2.642	0.698	1	4
wave 1		954	1.000	0.000	1	1	1047	0.000	0.000	0	0	1009	0.000	0.000	0	0	1015	0.000	0.000	0	0
wave 2		954	0.000	0.000	0	0	1047	1.000	0.000	1	1	1009	0.000	0.000	0	0	1015	0.000	0.000	0	0
wave 3		954	0.000	0.000	0	0	1047	0.000	0.000	0	0	1009	1.000	0.000	1	1	1015	0.000	0.000	0	0
wave 4		954	0.000	0.000	0	0	1047	0.000	0.000	0	0	1009	0.000	0.000	0	0	1015	1.000	0.000	1	1
age		954	45.136	16.561	18	90	993	42.640	15.667	18	82	1009	44.907	16.198	19	76	1015	44.193	15.887	18	75
age2		954	2311.256	1593.478	324	8100	993	2063.432	1420.085	324	6724	1009	2278.726	1531.306	361	5776	1015	2205.192	1463.941	324	5625
male		954	0.523	0.500	0	1	1047	0.515	0.500	0	1	1009	0.510	0.500	0	1	1015	0.498	0.500	0	1
number of children		698	2.138	0.975	1	8	1044	1.451	1.307	0	6	999	1.563	1.256	0	7	1012	1.448	1.257	0	5
single		954	0.138	0.345	0	1	1047	0.223	0.416	0	1	1009	0.204	0.403	0	1	1015	0.192	0.394	0	1
married		954	0.619	0.486	0	1	1047	0.523	0.500	0	1	1009	0.527	0.500	0	1	1015	0.469	0.499	0	1
illiterate		954	0.000	0.000	0	0	1047	0.000	0.000	0	0	1009	0.003	0.054	0	1	1015	0.004	0.063	0	1

Table 12: Descriptive statistics about Finland.  
Source: author's own elaboration of World Values Survey data

Finland	Wave 1	Wave 2					Wave 3					Wave 4					
Variable	Obs	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	
happiness	0	568	3.09	0.59	1	4	975	3.15	0.57	1	4	1032	3.14	0.60	1	4	
trust in others	0	558	0.63	0.48	0	1	969	0.49	0.50	0	1	1015	0.57	0.49	0	1	
Putnam's group	0	588	0.55	0.50	0	1	987	0.00	0.00	0	0	1038	0.68	0.47	0	1	
Olson's group	0	588	0.48	0.50	0	1	987	0.00	0.00	0	0	1038	0.42	0.49	0	1	
Other groups	0	588	0.26	0.44	0	1	987	0.00	0.00	0	0	1038	0.25	0.43	0	1	
Confidence in	Church	0	560	2.21	0.83	1	4	970	2.59	0.80	1	4	1019	2.59	0.81	1	4
	Armed forces	0	565	2.62	0.80	1	4	978	3.04	0.72	1	4	1021	3.07	0.69	1	4
	Educational system	0	571	2.91	0.63	1	4	0					1029	3.14	0.60	1	4
	Press	0	569	2.32	0.67	1	4	976	2.19	0.70	1	4	1028	2.30	0.67	1	4
	Labour Unions	0	543	2.24	0.72	1	4	942	2.49	0.75	1	4	1001	2.53	0.71	1	4
	Police	0	574	2.83	0.64	1	4	978	3.08	0.66	1	4	1032	3.19	0.63	1	4
	Parliament	0	570	2.23	0.75	1	4	968	2.20	0.69	1	4	1020	2.38	0.72	1	4
	Civil Services	0	556	2.24	0.70	1	4	963	2.25	0.66	1	4	1007	2.35	0.68	1	4
	Major Companies	0	535	2.34	0.68	1	4	957	2.46	0.68	1	4	1002	2.37	0.69	1	4
	Judicial system	0	576	2.75	0.70	1	4	974	2.77	0.75	1	4	1023	2.74	0.69	1	4
wave 1	0	588	0.00	0.00	0	0	987	0.00	0.00	0	0	1038	0.00	0.00	0	0	
wave 2	0	588	1.00	0.00	1	1	987	0.00	0.00	0	0	1038	0.00	0.00	0	0	
wave 3	0	588	0.00	0.00	0	0	987	1.00	0.00	1	1	1038	0.00	0.00	0	0	
wave 4	0	588	0.00	0.00	0	0	987	0.00	0.00	0	0	1038	1.00	0.00	1	1	
age	0	588	41.19	13.93	18	89	986	42.14	16.67	16	85	1017	42.58	16.08	17	79	
age2	0	588	1890.16	1321.51	324	7921	986	2053.46	1556.91	256	7225	1017	2071.08	1468.33	289	6241	
male	0	588	0.52	0.50	0	1	987	0.49	0.50	0	1	1038	0.48	0.50	0	1	
number of children	0	580	1.85	1.41	0	6	982	1.56	1.58	0	8	971	1.74	1.88	0	20	
single	0	588	0.12	0.32	0	1	987	0.21	0.40	0	1	1038	0.20	0.40	0	1	
married	0	588	0.69	0.46	0	1	987	0.43	0.49	0	1	1038	0.43	0.50	0	1	
illiterate	0	588	0.00	0.00	0	0	987	0.00	0.00	0	0	1038	0.00	0.00	0	0	

Table 13: Logit regression about the trends of relational goods in Italy.  
 Source: author's own elaboration of World Values Survey data

Italy	Putnam's group				Olson's group				Other's group				Trust			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
wave 2	0.808	0.841	0.619	0.623	0.198	0.149	-0.015	-0.011	0.275	0.292	0.153	0.161	0.399	0.397	0.411	0.414
	[8.34]***	[8.49]***	[4.86]***	[4.90]***	[1.76]*	[1.32]	[0.11]	[0.08]	[2.26]**	[2.38]**	[0.97]	[1.02]	[5.07]***	[5.02]***	[4.08]***	[4.10]***
wave 4	1.145	1.233	1.015	1.035	0.585	0.553	0.393	0.414	0.28	0.329	0.168	0.206	0.28	0.306	0.299	0.317
	[12.06]***	[12.48]***	[7.97]***	[8.09]***	[5.44]***	[5.11]***	[3.04]***	[3.17]***	[2.30]**	[2.67]***	[1.07]	[1.30]	[3.54]***	[3.83]***	[2.91]***	[3.06]***
age		-0.009	0.034	0.032		0.15	0.135	0.132		0.016	0.046	0.041		0.027	0.066	0.064
		[0.78]	[2.29]**	[2.11]**		[8.48]***	[6.20]***	[6.06]***		[0.97]	[2.05]**	[1.84]*		[2.46]**	[4.42]***	[4.29]***
age2		0	0	0		-0.002	-0.001	-0.001		0	-0.001	0		0	-0.001	-0.001
		[0.40]	[2.64]***	[2.40]**		[8.11]***	[6.25]***	[6.08]***		[1.51]	[2.20]**	[1.92]*		[3.08]***	[4.54]***	[4.37]***
male		0.203	0.245	0.241		0.747	0.778	0.772		0.666	0.597	0.59		0.057	0.039	0.036
		[3.12]***	[3.46]***	[3.40]***		[8.93]***	[8.73]***	[8.66]***		[7.14]***	[5.88]***	[5.80]***		[0.95]	[0.60]	[0.55]
how many children do you have			-0.075	-0.071			-0.143	-0.139			-0.104	-0.099			-0.059	-0.057
21				[1.93]*	[1.85]*			[3.38]***	[3.29]***			[2.08]**	[1.95]*		[1.77]*	[1.70]*
single				0.482	0.474			-0.199	-0.207			0.275	0.26		0.3	0.293
				[3.01]***	[2.95]***			[0.98]	[1.02]			[1.15]	[1.09]		[2.07]**	[2.01]**
married				-0.122	-0.131			-0.116	-0.124			0.038	0.025		-0.006	-0.013
				[0.94]	[1.01]			[0.76]	[0.81]			[0.21]	[0.13]		[0.05]	[0.11]
illiterate					-0.343				-0.464				-0.977			-0.298
					[1.38]				[1.34]				[1.89]*			[1.27]
Constant	-1.929	-1.605	-2.501	-2.462	-2.163	-5.556	-4.824	-4.772	-2.391	-2.896	-3.485	-3.407	-1.005	-1.418	-2.401	-2.368
	[23.57]***	[6.84]***	[6.87]***	[6.73]***	[24.15]***	[15.42]***	[9.49]***	[9.40]***	[24.33]***	[8.45]***	[6.50]***	[6.36]***	[16.05]***	[6.20]***	[6.89]***	[6.80]***
Wald chi2	145.78	183.56	215.08	218.25	35.73	199.6	172.4	174.04	6.3	86.36	80.05	81.06	25.9	49.19	62.12	62.28
Prob > chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.043	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Log pseudolikelihood	-2881.83	-2853.54	-2456.94	-2455.92	-2114.32	-2027.81	-1817.15	-1816.17	-1761.67	-1728.73	-1486.32	-1484.02	-3240.25	-3228.00	-2761.02	-2760.17
Pseudo R2	0.0278	0.0373	0.0456	0.046	0.0084	0.049	0.0456	0.0461	0.0019	0.0205	0.0217	0.0232	0.0041	0.0078	0.0122	0.0125
Observations	5366	5366	4599	4599	5366	5366	4599	4599	5366	5366	4599	4599	5180	5180	4441	4441

Robust z-statistics in brackets. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

1) Mean values

2) Demographic controls

3) Familiar status

4) Education

Table 14: Logit regression about the trends of relational goods in Great Britain.  
 Source: author's own elaboration of World Values Survey data

Great Britain	Putnam's group				Olson's group				Other's group				Trust			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
wave 2	0.224	0.185	0.159	0.159	-0.087	-0.163	-0.059	-0.059	0.504	0.46	0.589	0.589	0.023	-0.037	-0.04	-0.043
	[2.71]***	[2.19]**	[1.57]	[1.57]	[0.98]	[1.78]*	[0.54]	[0.54]	[4.44]***	[4.05]***	[4.16]***	[4.16]***	[0.28]	[0.45]	[0.42]	[0.44]
wave 3													-0.588	-0.642	-0.743	-0.596
													[6.54]***	[7.06]***	[6.65]***	[5.04]***
wave 4	-0.669	-0.776	-0.786	-0.786	-0.888	-1.003	-0.864	-0.864	0.061	-0.031	0.145	0.145	-0.626	-0.66	-0.646	-0.644
	[6.61]***	[7.35]***	[6.53]***	[6.53]***	[7.79]***	[8.42]***	[6.34]***	[6.34]***	[0.46]	[0.23]	[0.89]	[0.89]	[6.71]***	[6.92]***	[5.86]***	[5.85]***
age		0.024	0.051	0.051		0.121	0.159	0.159		0.059	0.081	0.081		0.044	0.061	0.062
		[2.11]**	[3.46]***	[3.46]***		[8.30]***	[7.85]***	[7.85]***		[3.87]***	[4.16]***	[4.16]***		[4.71]***	[5.17]***	[5.21]***
age2		0	0	0		-0.001	-0.002	-0.002		-0.001	-0.001	-0.001		0	-0.001	-0.001
		[1.74]*	[3.07]***	[3.07]***		[8.53]***	[7.98]***	[7.98]***		[4.00]***	[4.21]***	[4.21]***		[4.30]***	[4.82]***	[4.75]***
male		-0.203	-0.135	-0.135		0.749	0.839	0.839		-0.008	-0.111	-0.111		0.265	0.275	0.267
		[2.76]***	[1.66]*	[1.66]*		[9.02]***	[8.93]***	[8.93]***		[0.09]	[1.06]	[1.06]		[4.25]***	[4.08]***	[3.96]***
2) How many children do you have			-0.141	-0.141			-0.132	-0.132			-0.071	-0.071			-0.082	-0.09
						[3.56]***	[3.56]***			[1.88]*	[1.88]*			[3.09]***	[3.34]***	
single			0.239	0.239			0.224	0.224			-0.074	-0.074			0.165	0.155
			[1.56]	[1.56]			[1.15]	[1.15]			[0.36]	[0.36]			[1.31]	[1.23]
married			0.101	0.101			0.164	0.164			0.227	0.227			0.095	0.092
			[0.96]	[0.96]			[1.28]	[1.28]			[1.63]	[1.63]			[1.08]	[1.05]
illiterate																-0.538
																[3.42]***
Constant	-0.736	-1.207	-1.716	-1.716	-0.986	-3.593	-4.663	-4.663	-2.026	-3.163	-3.821	-3.821	-0.277	-1.376	-1.729	-1.755
	[11.76]***	[4.94]***	[5.09]***	[5.09]***	[14.99]***	[11.70]***	[10.17]***	[10.17]***	[22.20]***	[9.37]***	[8.38]***	[8.38]***	[4.60]***	[6.63]***	[6.06]***	[6.14]***
Wald chi2	87.18	108.14	129.23	129.23	67.43	186.06	196.15	196.15	25.39	41.24	53.22	53.22	96.7	136.78	147.26	156.34
Prob > chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Log pseudolikelihood	-2212.67	-2172.14	-1847.52	-1847.52	-1916.71	-1811.17	-1495.35	-1495.35	-1490.79	-1461.16	-1266.96	-1266.96	-2986.01	-2943.82	-2608.80	-2602.64
Pseudo R2	0.0208	0.0272	0.0354	0.0354	0.0194	0.0658	0.0802	0.0802	0.0084	0.0149	0.022	0.022	0.0163	0.0233	0.0281	0.0304
Observations	3651	3613	3105	3105	3651	3613	3105	3105	3651	3613	3105	3105	4600	4563	4076	4076

Robust z-statistics in brackets. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

1) Mean values

3) Familiar status

2) Demographic controls

4) Education

Table 15: Logit regression about the<sup>26</sup> trends of relational goods in Ireland  
 Source: author's own elaboration of World Values Survey data

Ireland	Putnam's group				Olson's group				Other's group				Trust			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
wave 2	0.04	0.017	-0.085	-0.079	0.047	0.01	0.207	0.211	0.266	0.313	0.463	0.466	0.254	0.218	0.131	0.133
	[0.46]	[0.20]	[0.75]	[0.70]	[0.41]	[0.09]	[1.36]	[1.38]	[2.18]**	[2.56]**	[2.82]***	[2.84]***	[2.92]***	[2.45]**	[1.18]	[1.20]
wave 4	0.239	0.218	0.162	0.256	0.328	0.322	0.501	0.593	0.555	0.609	0.733	0.777	-0.217	-0.235	-0.289	-0.244
	[2.77]***	[2.43]**	[1.45]	[2.18]**	[3.01]***	[2.86]***	[3.35]***	[3.84]***	[4.77]***	[5.10]***	[4.54]***	[4.63]***	[2.43]**	[2.58]***	[2.56]**	[2.04]**
age		0.017	0.022	0.021		0.061	0.108	0.107		-0.013	0.03	0.029		0.021	0.038	0.037
		[1.47]	[1.39]	[1.31]		[3.61]***	[4.34]***	[4.28]***		[0.78]	[1.35]	[1.31]		[1.88]*	[2.33]**	[2.28]**
age2		0	0	0		-0.001	-0.001	-0.001		0	0	0		0	0	0
		[1.72]*	[1.47]	[1.28]		[4.47]***	[4.79]***	[4.64]***		[0.13]	[1.75]*	[1.66]*		[1.73]*	[1.74]*	[1.64]
male		0.22	0.233	0.246		0.712	0.694	0.712		0.139	0.072	0.079		0.233	0.14	0.145
		[3.05]***	[2.81]***	[2.96]***		[7.50]***	[6.25]***	[6.39]***		[1.42]	[0.64]	[0.71]		[3.18]***	[1.66]*	[1.73]*
n. of children			0.006	0.011			-0.022	-0.015			0.031	0.034			-0.007	-0.005
			[0.25]	[0.47]			[0.70]	[0.48]			[0.99]	[1.08]			[0.28]	[0.18]
single			0.835	0.837			0.281	0.289			0.174	0.175			0.791	0.794
			[4.62]***	[4.63]***			[1.13]	[1.16]			[0.75]	[0.75]			[4.32]***	[4.32]***
married			0.398	0.395			0.18	0.173			0.044	0.041			0.598	0.598
			[2.81]***	[2.78]***			[0.87]	[0.83]			[0.23]	[0.22]			[4.20]***	[4.20]***
illiterate				-0.413				-0.499				-0.209				-0.192
				[2.46]**				[2.18]**				[0.99]				[1.13]
Constant	-0.449	-0.82	-1.409	-1.438	-1.632	-2.853	-4.317	-4.367	-1.932	-1.547	-2.774	-2.79	-0.359	-0.922	-1.938	-1.952
	[7.65]***	[3.37]***	[3.69]***	[3.78]***	[21.06]***	[8.08]***	[7.66]***	[7.70]***	[22.40]***	[4.46]***	[5.28]***	[5.28]***	[6.05]***	[3.77]***	[5.03]***	[5.06]***
Wald chi2	8.52	21.04	49.66	56.53	10.45	115.67	115.57	122.05	22.86	42.57	37.74	38.9	26.37	37.92	58.75	59.35
Prob > chi2	0.014	0.001	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Log pseudolikelihood	-2182.09	-2155.55	-1718.00	-1714.89	-1522.71	-1451.52	-1142.46	-1139.93	-1408.79	-1380.02	-1117.86	-1117.37	-2123.98	-2101.07	-1686.54	-1685.89
Pseudo R2	0.0019	0.005	0.0151	0.0168	0.0034	0.0397	0.0482	0.0503	0.0081	0.0133	0.015	0.0155	0.0062	0.0089	0.0176	0.018
Observations	3229	3200	2572	2572	3229	3200	2572	2572	3229	3200	2572	2572	3150	3121	2520	2520

Robust z-statistics in brackets. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

1) Mean values

3) Familiar status

2) Demographic controls

4) Education

Table 16: Logit regression about the friends of relational goods in France.  
 Source: author's own elaboration of World Values Survey data

France	Putnam's group				Olson's group				Other's group				Trust			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
wave 2	0.411*** [0.0822]	0.411*** [0.0827]	0.296*** [0.0848]	0.252*** [0.0860]	0.123 [0.113]	0.125 [0.115]	0.137 [0.118]	0.0817 [0.120]	0.114 [0.120]	0.115 [0.120]	0.157 [0.126]	0.103 [0.127]	0.000199 [0.0904]	-0.00323 [0.0905]	0.0589 [0.0940]	-0.0351 [0.0950]
age	0.0592*** [0.0126]	0.0512*** [0.0147]	0.0516*** [0.0147]	0.191*** [0.0193]	0.186*** [0.0237]	0.186*** [0.0236]	0.186*** [0.0186]	0.0645*** [0.0227]	0.0789*** [0.0226]	0.0786*** [0.0226]	0.0175 [0.0135]	0.0534*** [0.0174]	0.0528*** [0.0173]			
age2	0.0006*** [0.000131]	-0.0005*** [0.000148]	-0.0005*** [0.000147]	-0.002*** [0.000205]	-0.002*** [0.000239]	-0.002*** [0.000237]	-0.002*** [0.000193]	-0.0007*** [0.000226]	-0.0008*** [0.000224]	-0.0008*** [0.000224]	-0.0002* [0.000144]	-0.0005*** [0.000178]	-0.0005*** [0.000176]			
male	0.142* [0.0760]	0.170** [0.0804]	0.171** [0.0805]	0.778*** [0.107]	0.736*** [0.116]	0.741*** [0.116]	0.349*** [0.110]	0.277** [0.121]	0.279** [0.121]	0.0642 [0.0796]	-0.0359 [0.0878]	-0.0362 [0.0881]				
n. of children			-0.0391 [0.0303]	-0.0349 [0.0305]		-0.0832** [0.0414]	0.0798* [0.0416]		0.0176 [0.0432]	0.0222 [0.0434]		-0.0673* [0.0353]	-0.058 [0.0356]			
single		0.257* [0.140]	0.262* [0.141]			-0.0829 [0.227]	-0.081 [0.227]		0.491** [0.222]	0.495** [0.222]		0.409*** [0.152]	0.420*** [0.153]			
married		-0.0373 [0.106]	-0.0453 [0.106]		0.409*** [0.158]	0.405** [0.158]		0.341** [0.169]	0.332** [0.169]		0.0399 [0.118]	0.0203 [0.119]				
illiterate				0.449*** [0.170]		-0.528** [0.236]			-0.548** [0.257]				-1.106*** [0.213]			
Constant	-1.238*** [0.0452]	-2.503*** [0.276]	-2.199*** [0.340]	-2.196*** [0.339]	-2.071*** [0.0598]	-6.609*** [0.443]	-6.626*** [0.560]	-6.629*** [0.559]	-2.227*** [0.0636]	-3.724*** [0.421]	-4.477*** [0.551]	-4.472*** [0.549]	-1.220*** [0.0461]	-1.470*** [0.288]	-2.399*** [0.387]	-2.394*** [0.386]
Observations	3817	3817	3383	3383	3817	3817	3383	3383	3817	3817	3383	3383	3616	3616	3218	3218
Wald chi2	25.02	51.72	43.2	48.15	1.195	137.8	137.5	137.8	0.895	21.79	25.19	29.15	4.84E-06	8.978	23.9	48.38
Prob > chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Log pseudolikelihood	-2116	-2103	-1927	-1924	-1364	-1289	-1171	-1168	-1241	-1230	-1087	-1085	-1941	-1936	-1685	-1669
Pseudo R2	0.00575	0.0118	0.0108	0.0127	0.000432	0.0552	0.0581	0.0604	0.000356	0.00931	0.0128	0.0151	1.25E-09	0.00255	0.00766	0.0174

Robust z-statistics in brackets. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

- 1) Mean values
- 2) Demographic controls
- 3) Familiar status
- 4) Education

Table 17: Logit regression about the trends of relational goods in Germany.  
 Source: author's own elaboration of World Values Survey data

Germany	Putnam's group				Olson's group				Other's group				Trust				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
wave 2	0.769*** [0.0502]	0.764*** [0.0503]	0.677*** [0.0530]	0.676*** [0.0532]	1.205*** [0.0581]	1.222*** [0.0592]	1.295*** [0.0639]	1.282*** [0.0640]	0.860*** [0.0667]	0.853*** [0.0668]	1.030*** [0.0738]	1.037*** [0.0743]	-0.122** [0.0549]	-0.130** [0.0550]	-0.127** [0.0579]	-0.133** [0.0580]	
wave 3													-0.105* [0.0612]	-0.126** [0.0616]	-0.131** [0.0642]	-0.123* [0.0644]	
age	0.0257*** [0.00803]	0.0185* [0.00991]	0.0185* [0.00990]		0.105*** [0.0101]	0.0742*** [0.0126]	0.0741*** [0.0126]		0.00685 [0.0105]	0.0305** [0.0129]	0.0308** [0.0129]		-0.00121 [0.00797]	0.0159 [0.00966]	0.0156 [0.00968]		
age2	-0.0003*** [8.31e-05]	-0.0002** [9.76e-05]	-0.0002** [9.76e-05]		-0.001*** [0.000108]	-0.0009*** [0.000126]	-0.0009*** [0.000126]		-0.0001 [0.000107]	-0.0003** [0.000129]	-0.0003** [0.000128]		-0.0001 [8.26e-05]	-0.0002 [9.63e-05]	-0.0002** [9.65e-05]		
male	0.168*** [0.0504]	0.177*** [0.0528]	0.177*** [0.0528]		0.749*** [0.0575]	0.744*** [0.0605]	0.746*** [0.0605]		0.193*** [0.0645]	0.0832 [0.0688]	0.0829 [0.0687]		0.0772 [0.0480]	0.0455 [0.0504]	0.0441 [0.0504]		
n. of children		0.0363	0.0363			0.016	0.017			0.118*** [0.0687]	0.117*** [0.0687]			-0.0109 [0.0480]	-0.0115 [0.0504]		
28 single		[0.0246]	[0.0246]			[0.0280]	[0.0280]			[0.0295]	[0.0294]			[0.0215]	[0.0215]		
		0.424*** [0.100]	0.424*** [0.100]			-0.281** [0.121]	-0.284** [0.121]			0.420*** [0.130]	0.422*** [0.130]			0.351*** [0.0907]	0.347*** [0.0907]		
married		0.131* [0.0691]	0.130* [0.0692]			0.204** [0.0805]	0.199** [0.0807]			0.178* [0.0923]	0.181* [0.0924]			0.0862 [0.0648]	0.0823 [0.0648]		
illiterate			-0.0555 [0.350]				-1.906* [1.028]				0.442 [0.436]				-0.522** [0.245]		
Constant	-0.702*** [0.0368]	-1.289*** [0.178]	-1.243*** [0.238]	-1.241*** [0.238]	-1.613*** [0.0465]	-4.022*** [0.225]	-3.451*** [0.299]	-3.435*** [0.299]	-2.006*** [0.0535]	-2.190*** [0.237]	-3.259*** [0.313]	-3.272*** [0.314]	-0.591*** [0.0380]	-0.411** [0.177]	-0.958*** [0.231]	-0.948*** [0.231]	
Observations	6778	6775	6230	6230	6778	6775	6230	6230	6778	6775	6230	6230	7870	7861	7408	7408	
Wald chi2	235.1	255.3	207.7	207.6	430	724.6	701.5	696.8	166.1	181	217.4	217.2	5.639	37.74	46.37	50.7	
Pseudo R2	0.026	0.0285	0.0252	0.0252	0.0573	0.0985	0.105	0.106	0.0274	0.0291	0.0394	0.0396	0.000558	0.00382	0.00499	0.00551	
Prob > chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
log pseudolikelihood	-4502	-4489	-4170	-4170	-3814	-3647	-3366	-3363	-3115	-3109	-2826	-2826	-5045	-5022	-4717	-4715	

Robust z-statistics in brackets. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

1) Mean values

2) Demographic controls

3) Familiar status

4) Education

Table 18: Logit regression about the trends of relational goods in Netherlands.

Source: author's own elaboration of World Values Survey data

Netherlands	Putnam's group				Olson's group				Other's group				Trust				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
wave 2	0.566*** [0.0881]	0.544*** [0.0901]	0.235** [0.0962]	0.234** [0.0963]	0.303*** [0.0782]	0.287*** [0.0810]	0.268*** [0.0854]	0.268*** [0.0854]	0.464*** [0.0881]	0.452*** [0.0884]	0.405*** [0.0949]	0.408*** [0.0950]	0.053 [0.0781]	0.0567 [0.0787]	-0.0166 [0.0841]	-0.0175 [0.0842]	
age	0.0874*** [0.0120]	0.0556*** [0.0176]	0.0554*** [0.0175]		0.142*** [0.0133]	0.133*** [0.0175]	0.133*** [0.0176]		0.0136 [0.0139]	0.0354** [0.0176]	0.0365** [0.0174]		0.0158 [0.0119]	0.0275* [0.0160]	0.0272* [0.0160]		
age2	-0.0008*** [0.000124]	-0.0005*** [0.000170]	-0.0005*** [0.000169]		-0.001*** [0.000143]	-0.001*** [0.000176]	-0.001*** [0.000177]		-0.00003 [0.000140]	-0.0002 [0.000172]	-0.0002 [0.000170]		-0.0003** [0.000125]	-0.0004** [0.000157]	-0.0004** [0.000158]		
male	0.12 [0.0792]	0.255*** [0.0927]	0.255*** [0.0928]		0.594*** [0.0764]	0.572*** [0.0828]	0.572*** [0.0828]		0.0175 [0.0858]	-0.016 [0.0928]	-0.016 [0.0929]	-0.0139 [0.0929]	0.171** [0.0743]	0.116 [0.0823]	0.115 [0.0823]		
n. of children		-0.0775** [0.0370]	-0.0776** [0.0370]			-0.0843** [0.0353]	-0.0843** [0.0353]			0.000548 [0.0373]	0.00122 [0.0373]			-0.0131 [0.0346]	-0.0134 [0.0346]		
single		0.759*** [0.179]	0.758*** [0.179]			0.449*** [0.162]	0.449*** [0.162]			0.713*** [0.176]	0.717*** [0.177]			0.766*** [0.155]	0.765*** [0.155]		
2 married		0.298** [0.123]	0.298** [0.123]			0.410*** [0.120]	0.410*** [0.120]			0.355*** [0.135]	0.356*** [0.135]			0.220* [0.113]	0.219* [0.113]		
illiterate			-0.117 [0.725]				-0.0375 [0.805]				0.535 [0.706]					-0.178 [0.756]	
Constant	0.698*** [0.0450]	-1.407*** [0.262]	-0.695 [0.425]	-0.689 [0.425]	-0.700*** [0.0450]	-4.092*** [0.294]	-4.162*** [0.420]	-4.161*** [0.422]	-1.417*** [0.0535]	-1.942*** [0.315]	-2.851*** [0.431]	-2.878*** [0.428]	0.0861* [0.0440]	-0.00561 [0.264]	-0.514 [0.385]	-0.507 [0.387]	
Observations	3241	3217	2744	2744	3241	3217	2744	2744	3241	3217	2744	2744	3034	3014	2596	2596	
Wald chi2	41.36	107.4	44.9	44.91	15.05	183.3	135.6	135.9	27.72	43.56	46.11	46.58	0.46	48.07	76.57	76.46	
Pseudo R2	0.011	0.0302	0.0171	0.0171	0.00355	0.0472	0.0409	0.0409	0.00795	0.0131	0.0154	0.0155	0.00011	0.0121	0.023	0.023	
Prob > chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Log pseudolikelihood	-1950	-1894	-1506	-1506	-2099	-1994	-1739	-1739	-1699	-1682	-1469	-1468	-2099	-2060	-1752	-1752	

Robust z-statistics in brackets. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

1) Mean values

2) Demographic controls

3) Familiar status

4) Education

Table 19: Logit regression about the trends of relational goods in Belgium.  
 Source: author's own elaboration of World Values Survey data

Belgium	Putnam's group				Olson's group				Other's group				Trust			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
wave 2	0.238*** [0.0532]	0.222*** [0.0535]	0.0914 [0.0561]	0.0856 [0.0563]	-0.0109 [0.0611]	-0.0524 [0.0624]	-0.106 [0.0649]	-0.109* [0.0651]	0.209*** [0.0627]	0.212*** [0.0629]	0.146** [0.0656]	0.143** [0.0658]	0.200*** [0.0588]	0.191*** [0.0591]	0.196*** [0.0618]	0.190*** [0.0620]
age		0.0266*** [0.00845]	0.0273*** [0.0103]	0.0270*** [0.0103]		0.103*** [0.0121]	0.0668*** [0.0144]	0.0666*** [0.0144]		0.00693 [0.00994]	0.0123 [0.0117]	0.0121 [0.0117]		0.00414 [0.00934]	0.0111 [0.0114]	0.0107 [0.0114]
age2		-0.0003*** [8.78e-05]	-0.0003*** [0.000103]	-0.0003*** [0.000103]		-0.001*** [0.000133]	-0.0008*** [0.000151]	-0.0008*** [0.000151]		-7.00E-05 [0.000103]	-0.0001 [0.000116]	-0.0001 [0.000116]		-0.00009 [9.71e-05]	-0.0001 [0.000114]	-0.0001 [0.000114]
male		0.261*** [0.0535]	0.272*** [0.0564]	0.273*** [0.0564]		0.618*** [0.0629]	0.656*** [0.0662]	0.656*** [0.0662]		-0.136** [0.0631]	-0.166** [0.0662]	-0.166** [0.0662]		0.157*** [0.0590]	0.140** [0.0621]	0.141** [0.0621]
n. of children			0.0503** [0.0221]	0.0508** [0.0221]			0.0313 [0.0256]	0.0316 [0.0256]			0.119*** [0.0237]	0.120*** [0.0237]			0.0331 [0.0239]	0.0334 [0.0239]
single			0.536*** [0.108]	0.532*** [0.108]			-0.159 [0.133]	-0.161 [0.133]			0.621*** [0.123]	0.620*** [0.123]			0.297** [0.117]	0.293** [0.117]
3) married			0.0728 [0.0761]	0.0681 [0.0762]			0.141 [0.0912]	0.139 [0.0913]			0.108 [0.0901]	0.105 [0.0903]			0.119 [0.0841]	0.115 [0.0843]
illiterate				-0.401 [0.354]				-0.222 [0.425]				-0.19 [0.412]				-0.373 [0.403]
Constant	-0.463*** [0.0371]	-1.013*** [0.187]	-1.139*** [0.248]	-1.127*** [0.248]	-1.136*** [0.0422]	-3.353*** [0.256]	-2.575*** [0.329]	-2.569*** [0.330]	-1.339*** [0.0446]	-1.424*** [0.220]	-1.875*** [0.278]	-1.869*** [0.278]	-0.886*** [0.0414]	-0.916*** [0.206]	-1.297*** [0.270]	-1.285*** [0.270]
Observations	5849	5842	5340	5340	5849	5842	5340	5340	5849	5842	5340	5340	5401	5395	4958	4958
Log pseudolikelihood	-3957	-3928	-3606	-3605	-3237	-3117	-2887	-2887	-3114	-3107	-2890	-2890	-3349	-3337	-3075	-3075
Wald chi2	20.07	65.23	86.54	87.11	0.0319	176	183.4	183.4	11.15	15.33	48.24	48.38	11.57	29.73	29.67	30.29
Prob > chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Pseudo R2	0.00253	0.00863	0.0123	0.0125	4.93E-06	0.0355	0.0367	0.0368	0.00179	0.00264	0.00816	0.0082	0.00173	0.0044	0.00486	0.00501

Robust z-statistics in brackets. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

- 1) Mean values
- 2) Demographic controls
- 3) Familiar status
- 4) Education

Table 20: Logit regression about the trends of relational goods in Denmark.  
 Source: author's own elaboration of World Values Survey data

Denmark	Putnam's group				Olson's group				Other's group				Trust				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
wave 2	0.659*** [0.0766]	0.660*** [0.0769]	0.460*** [0.0807]	0.459*** [0.0808]	0.180** [0.0766]	0.180** [0.0829]	0.163* [0.0872]	0.160* [0.0872]	0.123 [0.0913]	0.114 [0.0911]	0.154 [0.0962]	0.161* [0.0963]	-0.0702 [0.0785]	-0.0662 [0.0792]	-0.0765 [0.0842]	-0.0737 [0.0842]	
age	0.0576*** [0.0116]	0.0465*** [0.0152]	0.0464*** [0.0152]		0.192*** [0.0142]	0.185*** [0.0182]	0.184*** [0.0183]		0.0271** [0.0136]	0.0512*** [0.0174]	0.0525*** [0.0174]		0.0216* [0.0114]	0.0309** [0.0153]	0.0315** [0.0154]		
age2	-0.0006*** [0.000122]	-0.0005*** [0.000149]	-0.0005*** [0.000149]		-0.002*** [0.000158]	-0.002*** [0.000188]	-0.002*** [0.000189]		-0.0002 [0.000137]	-0.0004*** [0.000167]	-0.0004*** [0.000167]		-0.0003*** [0.000117]	-0.0004*** [0.000147]	-0.0004*** [0.000147]		
male	0.0663 [0.0729]	0.119 [0.0780]	0.117 [0.0780]		0.547*** [0.0764]	0.528*** [0.0831]	0.523*** [0.0832]		0.119 [0.0865]	0.159* [0.0929]	0.166* [0.0931]		-0.0996 [0.0746]	-0.115 [0.0806]	-0.112 [0.0806]		
n. of children		-0.141*** [0.0380]	-0.141*** [0.0380]			-0.115*** [0.0398]	-0.116*** [0.0398]			0.0614 [0.0399]	0.0618 [0.0400]			-0.0744** [0.0366]	-0.0742** [0.0366]		
single		0.213 [0.138]	0.215 [0.138]			-0.392*** [0.146]	-0.382*** [0.146]			0.328* [0.168]	0.314* [0.168]			0.357** [0.145]	0.350** [0.145]		
3 married		0.0382 [0.101]	0.0384 [0.101]			-0.0474 [0.110]	-0.0469 [0.110]			0.0957 [0.119]	0.0942 [0.119]			0.223** [0.103]	0.222** [0.103]		
illiterate			-0.551 [1.278]								2.429** [1.198]						
Constant	-0.589*** [0.0445]	-1.663*** [0.254]	-1.132*** [0.351]	-1.127*** [0.351]	0.205*** [0.0428]	-3.367*** [0.289]	-2.941*** [0.403]	-2.927*** [0.404]	-1.353*** [0.0527]	-2.102*** [0.309]	-2.966*** [0.419]	-3.004*** [0.420]	0.379*** [0.0450]	0.292 [0.254]	-0.0532 [0.364]	-0.0687 [0.364]	
Observations	3235	3235	2812	2812	3235	3235	2812	2809	3235	3235	2812	2812	3037	3037	2659	2656	
Wald chi2	73.97	102.6	89.7	89.89	5.555	278.3	260.2	259	1.811	10.58	25.02	29.13	0.799	49.77	58.28	57.38	
Log pseudolikelihood	-2150	-2129	-1875	-1875	-2212	-1977	-1705	-1703	-1671	-1666	-1457	-1455	-2057	-2031	-1770	-1769	
Pseudo R2	0.017	0.0265	0.0278	0.0278	0.00126	0.108	0.113	0.113	0.00054	0.00353	0.00856	0.00993	0.000194	0.0129	0.0176	0.0174	
Prob > chi2	-2187	-2187	-1929	-1929	-2215	-2215	-1922	-1919	-1671	-1671	-1469	-1469	-2058	-2058	-1802	-1800	

Robust z-statistics in brackets. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

1) Mean values

2) Demographic controls

3) Familiar status

4) Education

Table 21: Logit regression about the trends of relational goods in Norway.  
 Source: author's own elaboration of World Values Survey data

Norway	Putnam's group				Olson's group				Other's group				Trust			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
wave 2	1.168*** [0.0895]	1.162*** [0.0898]	1.138*** [0.105]	1.138*** [0.105]	0.430*** [0.0844]	0.434*** [0.0873]	0.611*** [0.101]	0.611*** [0.101]	0.746*** [0.0966]	0.750*** [0.0970]	0.707*** [0.110]	0.707*** [0.110]	0.180** [0.0905]	0.181** [0.0922]	0.190* [0.104]	0.189* [0.104]
wave 3													0.191** [0.0913]	0.173* [0.0926]	0.193* [0.105]	0.217** [0.106]
age	0.0423*** [0.0159]	0.0303 [0.0209]	0.0303 [0.0209]		0.170*** [0.0163]	0.158*** [0.0217]	0.158*** [0.0217]		0.0254 [0.0172]	0.0147 [0.0218]	0.0147 [0.0218]		0.0449*** [0.0135]	0.0368** [0.0172]	0.0354** [0.0172]	
age2	-0.0005*** [0.000170]	-0.0004* [0.000212]	-0.0004* [0.000212]		-0.002*** [0.000172]	-0.002*** [0.000218]	-0.002*** [0.000218]		-0.0002 [0.000181]	-0.0002 [0.000219]	-0.0002 [0.000219]		-0.0007*** [0.000142]	-0.0006*** [0.000171]	-0.0006*** [0.000172]	
male	-0.119 [0.0883]	-0.0696 [0.0943]	-0.0696 [0.0943]		0.563*** [0.0874]	0.617*** [0.0950]	0.617*** [0.0950]		0.343*** [0.0946]	0.348*** [0.100]	0.348*** [0.100]		0.117 [0.0746]	0.127 [0.0790]	0.127 [0.0791]	
n. of children		0.104** [0.0419]	0.104** [0.0419]			-0.0184 [0.0415]	-0.0184 [0.0415]			0.0368 [0.0437]	0.0368 [0.0437]			-0.0325 [0.0354]	-0.0334 [0.0354]	
B3 single		0.593*** [0.189]	0.593*** [0.189]			-0.630*** [0.204]	-0.630*** [0.204]			0.0978 [0.198]	0.0978 [0.198]			-0.177 [0.147]	-0.172 [0.147]	
married		0.186 [0.132]	0.186 [0.132]			0.0781 [0.131]	0.0781 [0.131]			0.0518 [0.140]	0.0518 [0.140]			0.125 [0.102]	0.129 [0.102]	
illiterate															-1.400*** [0.538]	
Constant	-0.955*** [0.0689]	-1.695*** [0.348]	-1.812*** [0.470]	-1.812*** [0.470]	-0.270*** [0.0623]	-4.150*** [0.362]	-4.016*** [0.490]	-4.016*** [0.490]	-1.346*** [0.0762]	-2.052*** [0.381]	-1.884*** [0.491]	-1.884*** [0.491]	0.441*** [0.0662]	-0.0966 [0.300]	0.0752 [0.390]	0.0936 [0.391]
Observations	2290	2290	1997	1997	2290	2290	1997	1997	2290	2290	1997	1997	3232	3232	2968	2968
Log Pseudolikelihood	-1473	-1468	-1298	-1298	-1574	-1494	-1294	-1294	-1341	-1333	-1196	-1196	-2111	-2065	-1891	-1887
Wald chi2	170.2	176.8	138.4	138.4	25.95	162.6	158.5	158.5	59.62	74.71	55.63	55.63	5.448	96.37	91.16	97.06
Prob > chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Pseudo R2	0.0574	0.0608	0.0562	0.0562	0.00823	0.0586	0.0648	0.0648	0.0226	0.0283	0.0234	0.0234	0.00128	0.0233	0.024	0.026

Robust z-statistics in brackets. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

1) Mean values

2) Demographic controls

3) Familiar status

4) Education

Table 22: Logit regression about the trends of relational goods in Sweden.  
Source: author's own elaboration of World Values Survey data

Sweden	Putnam's group				Olson's group				Other's group				Trust				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
wave 2	-0.124 [0.0773]	-0.124 [0.0792]	-0.401*** [0.0835]	-0.400*** [0.0836]	0.117 [0.0787]	0.124 [0.0839]	0.0918 [0.0869]	0.09 [0.0869]	0.313*** [0.0819]	0.329*** [0.0839]	0.257*** [0.0865]	0.256*** [0.0865]	0.187** [0.0838]	0.173** [0.0860]	0.161* [0.0884]	0.161* [0.0884]	
wave 3													-0.0888 [0.0814]	-0.0888 [0.0819]	-0.0849 [0.0848]	-0.0848 [0.0848]	
age	0.0237* [0.0134]	0.0347** [0.0176]	0.0354** [0.0176]		0.204*** [0.0161]	0.201*** [0.0201]	0.200*** [0.0201]		0.0345** [0.0149]	0.0179 [0.0181]	0.0176 [0.0182]		0.0366*** [0.0125]	0.0274* [0.0153]	0.0274* [0.0153]		
age2	-0.0003** [0.000144]	-0.0004** [0.000180]	-0.0004** [0.000180]		-0.002*** [0.000180]	-0.002*** [0.000213]	-0.002*** [0.000213]		-0.0002 [0.000158]	-9.00E-05 [0.000185]	-9.00E-05 [0.000186]		-0.0005*** [0.000133]	-0.0004*** [0.000156]	-0.0004*** [0.000156]		
male	-0.184** [0.0748]	-0.188** [0.0809]	-0.189** [0.0809]		0.238*** [0.0786]	0.224*** [0.0834]	0.226*** [0.0835]		0.0579 [0.0805]	0.106 [0.0837]	0.106 [0.0837]		0.0504 [0.0683]	0.0537 [0.0715]	0.0537 [0.0715]	0.0538	
n. of children		-0.110*** [0.0400]	-0.110*** [0.0401]			-0.0880** [0.0427]	-0.0882** [0.0427]			0.0133 [0.0412]	0.0131 [0.0412]			-0.0494 [0.0363]	-0.0494 [0.0362]		
3) single		0.540*** [0.150]	0.541*** [0.150]			-0.437*** [0.146]	-0.438*** [0.146]			-0.169 [0.154]	-0.169 [0.154]			-0.0653 [0.123]	-0.0653 [0.123]		
married		-0.166* [0.0958]	-0.169* [0.0959]			-0.191* [0.103]	-0.188* [0.103]			0.00709 [0.0996]	0.00835 [0.0997]			0.298*** [0.0862]	0.298*** [0.0862]		
illiterate			0.846 [1.122]				-0.866 [1.378]				-0.402 [1.143]				-0.043 [0.778]		
Constant	0.360*** [0.0458]	0.0689 [0.292]	0.202 [0.389]	0.188 [0.390]	0.400*** [0.0460]	-3.568*** [0.331]	-3.171*** [0.421]	-3.157*** [0.421]	-0.930*** [0.0500]	-1.962*** [0.331]	-1.514*** [0.408]	-1.508*** [0.408]	0.480*** [0.0479]	-0.0578 [0.274]	0.0921 [0.339]	0.0926 [0.339]	
Observations	3016	2962	2700	2700	3016	2962	2700	2700	3016	2962	2700	2700	3751	3700	3452	3452	
Wald Chi2	2.587	14.95	79.32	79.97	2.211	178	153	152.8	14.66	37.03	27.53	27.71	8.828	42.32	54.29	54.31	
Prob > chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Log pseudolikelihood	-2052	-2008	-1768	-1767	-2018	-1855	-1681	-1681	-1851	-1802	-1677	-1677	-2480	-2430	-2257	-2257	
Pseudo R2	0.000629	0.00368	0.0218	0.022	0.000549	0.0633	0.0607	0.0609	0.00392	0.0107	0.00859	0.00863	0.00179	0.00873	0.012	0.012	

Robust z-statistics in brackets. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

1) Mean values

2) Demographic controls

3) Familiar status

4) Education

Table 23: Logit regression about the trends of relational goods in Finland.  
Source: author's own elaboration of World Values Survey data

Finland	Putnam's group				Olson's group				Other's group				Trust			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
wave 2	-0.577*** [0.106]	-0.575*** [0.108]	-0.640*** [0.114]	-0.640*** [0.114]	0.243** [0.104]	0.105 [0.108]	-0.00879 [0.115]	-0.00879 [0.115]	0.0754 [0.118]	0.0986 [0.120]	0.0114 [0.126]	0.0114 [0.126]	0.221** [0.108]	0.237** [0.110]	0.143 [0.113]	0.143 [0.113]
wave 3													-0.347*** [0.0904]	-0.357*** [0.0911]	-0.374*** [0.0931]	-0.374*** [0.0931]
age	0.0113 [0.0190]	-0.00449 [0.0214]	-0.00449 [0.0214]		0.206*** [0.0215]	0.175*** [0.0236]	0.175*** [0.0236]		0.0315 [0.0223]	0.00862 [0.0245]	0.00862 [0.0245]		-0.0312** [0.0145]	-0.0442*** [0.0162]	-0.0442*** [0.0162]	
age2	-8.00E-05 [0.0002]	5.00E-05 [0.0002]	5.00E-05 [0.0002]		-0.00228*** [0.0002]	-0.00197*** [0.0002]	-0.00197*** [0.0002]		-0.0001 [0.0002]	1.00E-04 [0.0002]	1.00E-04 [0.0002]		0.000293* [0.0001]	0.000415** [0.0001]	0.000415** [0.0001]	
male	-0.138 [0.105]	-0.14 [0.108]	-0.14 [0.108]		-0.0708 [0.104]	-0.0829 [0.108]	-0.0829 [0.108]		-0.0233 [0.115]	-0.037 [0.118]	-0.037 [0.118]		-0.140* [0.0809]	-0.171** [0.0831]	-0.171** [0.0831]	
n. of children		-0.0149 [0.0375]	-0.0149 [0.0375]			-0.0481 [0.0381]	-0.0481 [0.0381]			0.00475 [0.0381]	0.00475 [0.0381]			0.0139 [0.0296]	0.0139 [0.0296]	
3) single		-0.153 [0.178]	-0.153 [0.178]			-0.297 [0.184]	-0.297 [0.184]			-0.137 [0.213]	-0.137 [0.213]			0.191 [0.131]	0.191 [0.131]	
married		0.232* [0.131]	0.232* [0.131]			0.558*** [0.131]	0.558*** [0.131]			0.343** [0.141]	0.343** [0.141]			0.367*** [0.0985]	0.367*** [0.0985]	
Constant	0.768*** [0.0667]	0.538 [0.405]	0.872* [0.462]	0.872* [0.462]	-0.338*** [0.0630]	-4.386*** [0.440]	-3.812*** [0.498]	-3.812*** [0.498]	-1.111*** [0.0719]	-2.194*** [0.498]	-1.783*** [0.546]	-1.783*** [0.546]	0.300*** [0.0635]	1.090*** [0.313]	1.197*** [0.353]	1.197*** [0.353]
Observations	1626	1605	1532	1532	1626	1605	1532	1532	1626	1605	1532	1532	2542	2520	2451	2451
Wald Chi2	29.38	31.99	36.47	36.47	5.479	96.65	124.1	124.1	0.407	26.96	33.81	33.81	30.61	39.74	53.31	53.31
Prob > chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Pseudo R2	0.0138	0.0152	0.0183	0.0183	0.00246	0.0513	0.0664	0.0664	0.00022	0.0154	0.0202	0.0202	0.00884	0.0117	0.0166	0.0166
Log pseudolikelihood	-1053	-1038	-987.4	-987.4	-1112	-1045	-983.4	-983.4	-919.1	-894.8	-855.7	-855.7	-1732	-1713	-1657	-1657

Robust z-statistics in brackets. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

1) Mean values

2) Demographic controls

3) Familiar status

4) Education

## 6 Appendix: figures

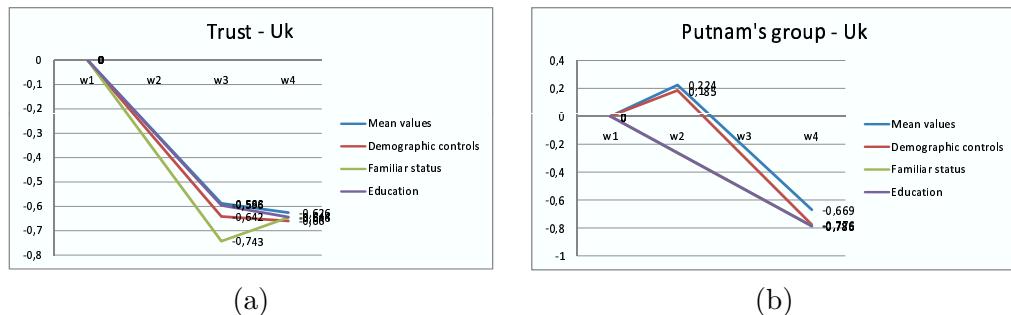


Figure 1: Relational social capital trends for Great Britain from 1980 to 2000. a trust in others; b membership in Putnam's groups.

Source: author's elaboration of World Values Survey data

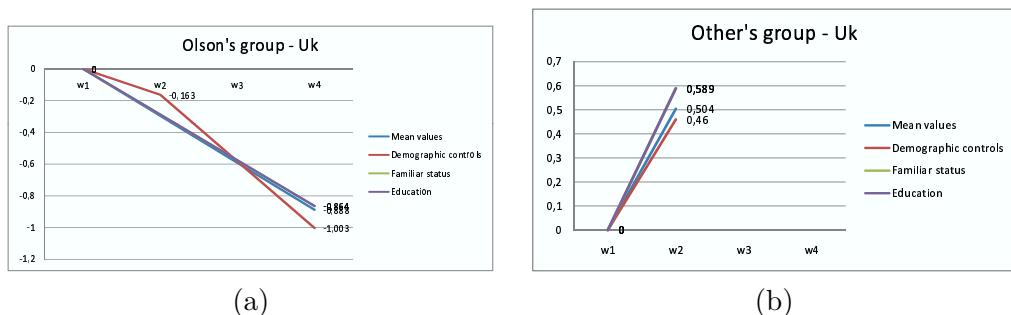


Figure 2: Trends about membership in Olson's and other groups for Great Britain from 1980 to 2000. a Membership in Olson's groups; b Membership in other groups.

Source: author's elaboration of World Values Survey data

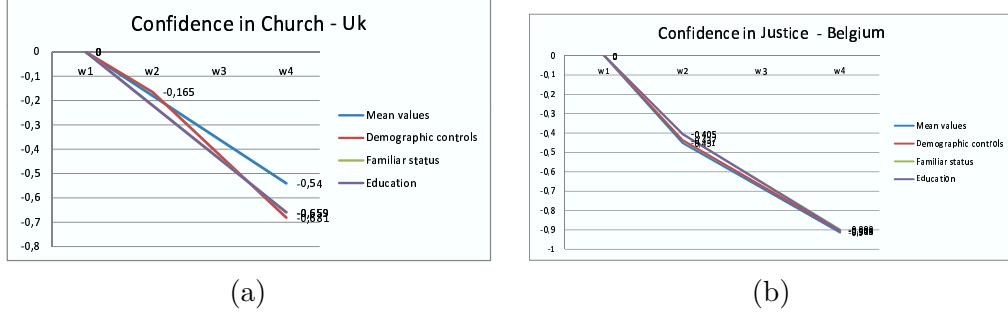


Figure 3: Trends about confidence in institutions for Great Britain from 1980 to 2000. a Confidence in religious institutions; b Confidence in judicial system.

Source: author's elaboration of World Values Survey data

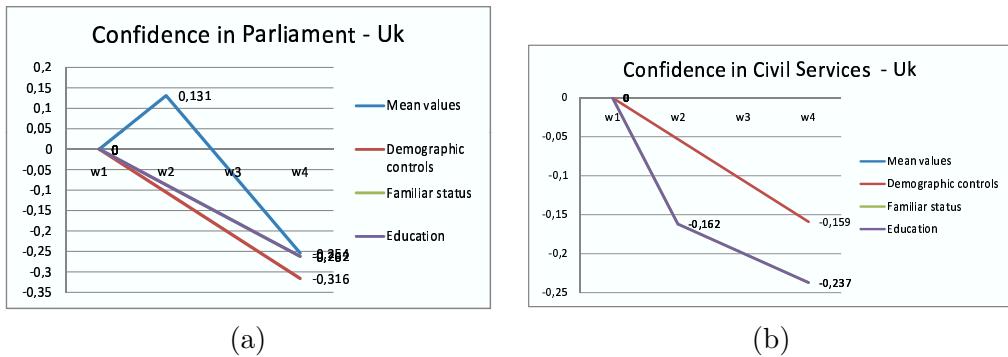


Figure 4: Trends about confidence in institutions for Great Britain from 1980 to 2000. a Confidence in parliament; b Confidence in civil services.

Source: author's elaboration of World Values Survey data

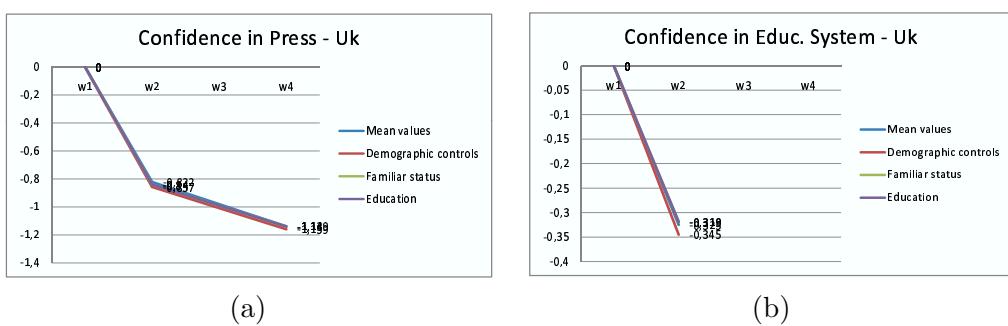


Figure 5: Trends about confidence in institutions for Great Britain from 1980 to 2000. a Confidence in press; b Confidence in educational system.

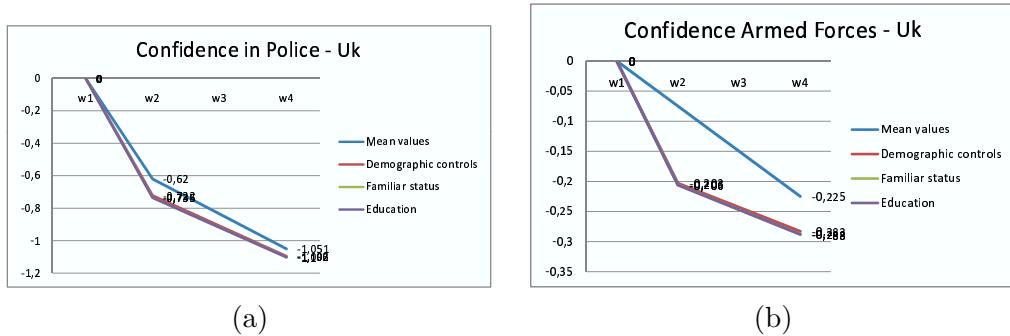


Figure 6: Trends about confidence in institutions for Great Britain from 1980 to 2000. a Confidence in police; b Confidence in armed forces.

Source: author's elaboration of World Values Survey data

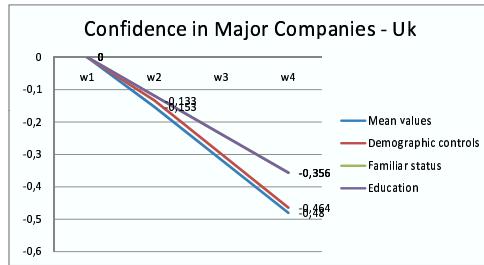


Figure 7: Trends about confidence in major companies for Great Britain from 1980 to 2000.

Source: author's elaboration of World Values Survey data

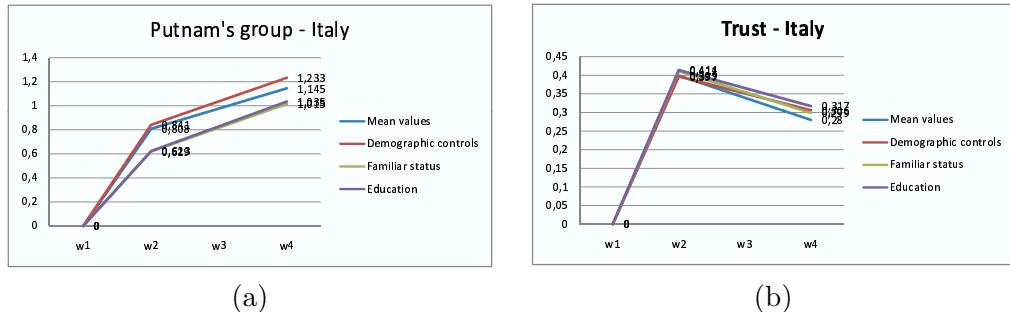


Figure 8: Trends about membership in Putnam's groups (a) and trust in others (b) for Italy from 1980 to 2000.

Source: author's elaboration of World Values Survey data

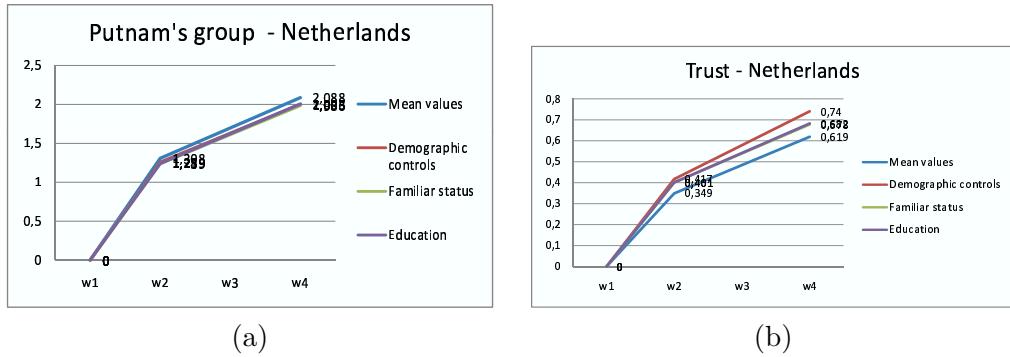


Figure 9: Trends about membership in Putnam's groups (a) and trust in others (b) for the Netherlands from 1980 to 2000.

Source: author's elaboration of World Values Survey data

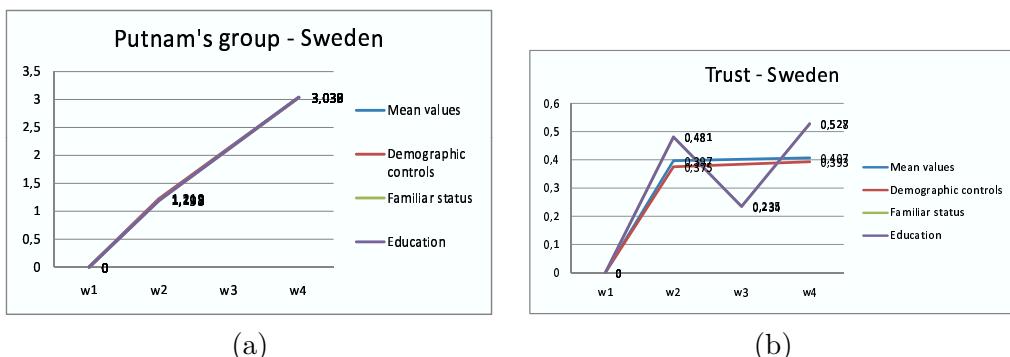


Figure 10: Trends about membership in Putnam's groups (a) and trust in others (b) for Sweden from 1980 to 2000.

Source: author's elaboration of World Values Survey data

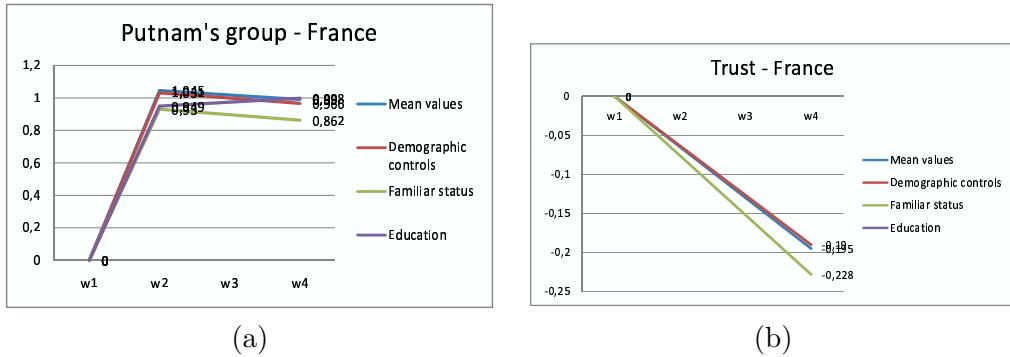


Figure 11: Trends about membership in Putnam's groups (a) and trust in others (b) for France from 1980 to 2000.

Source: author's elaboration of World Values Survey data

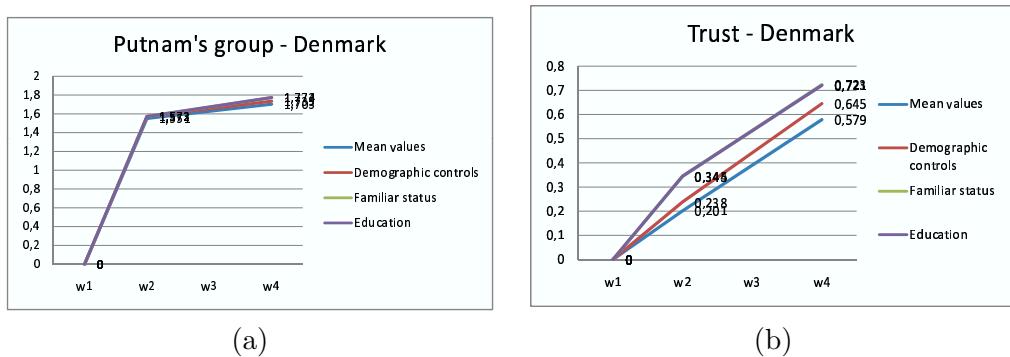


Figure 12: Trends about membership in Putnam's groups (a) and trust in others (b) for Denmark from 1980 to 2000.

Source: author's elaboration of World Values Survey data

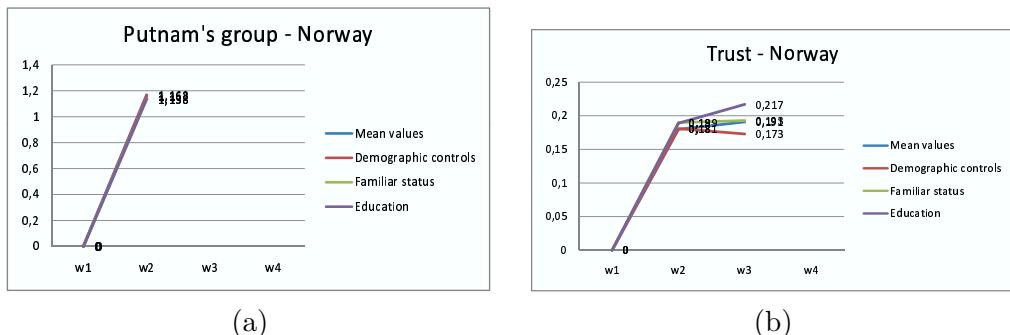


Figure 13: Trends about membership in Putnam's groups (a) and trust in others (b) for Norway from 1980 to 2000.

Source: author's elaboration of World Values Survey data

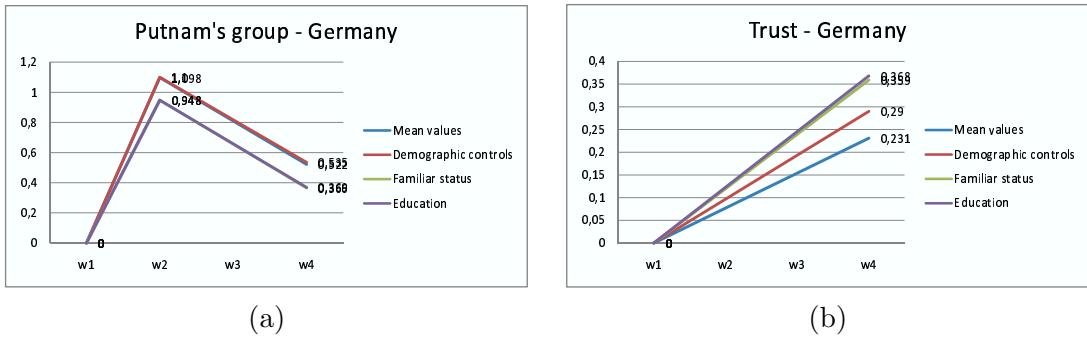


Figure 14: Trends about membership in Putnam's groups (a) and trust in others (b) for Germany from 1980 to 2000.

Source: author's elaboration of World Values Survey data

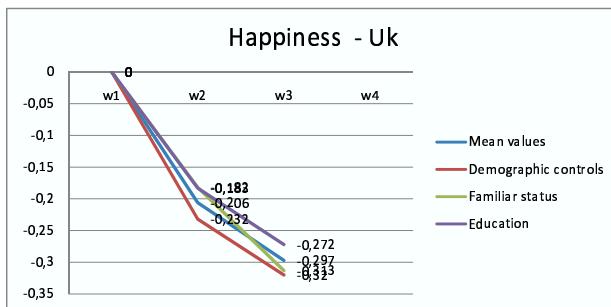


Figure 15: Subjective well-being trends for Great Britain from 1980 to 2000

Source: author's elaboration of World Values Survey data

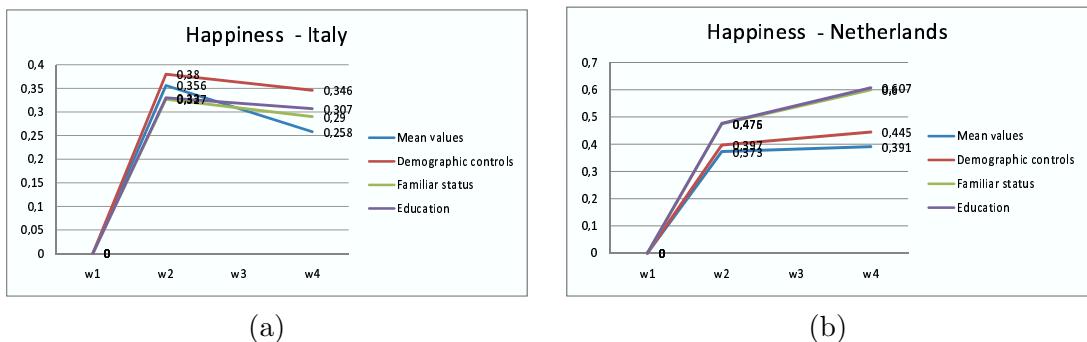


Figure 16: Subjective well-being trends for (a) Italy and (b) Netherlands from 1980 to 2000.

Source: author's elaboration of World Values Survey data

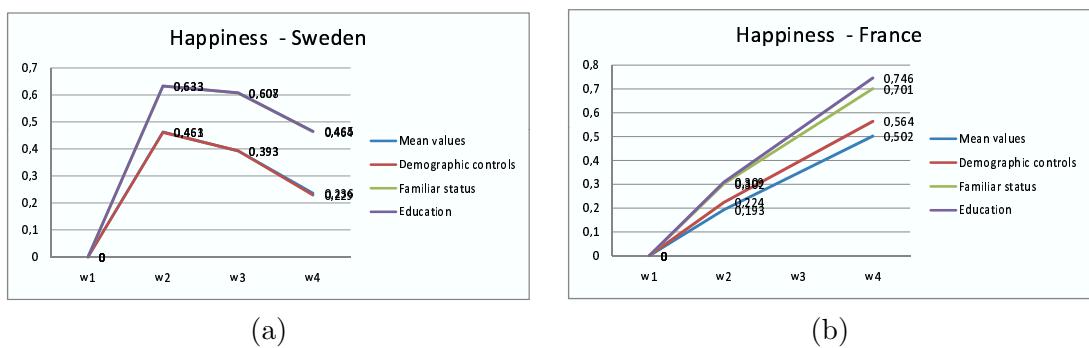


Figure 17: Subjective well-being trends for (a) Sweden and (b) France from 1980 to 2000.

Source: author's elaboration of World Values Survey data

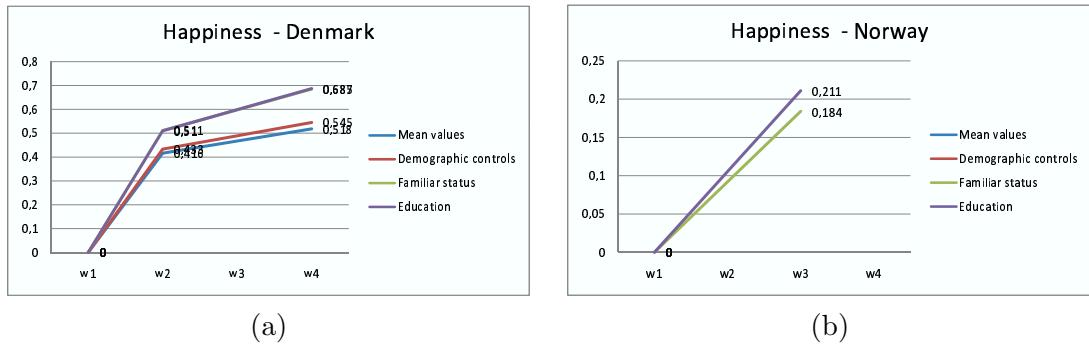


Figure 18: Subjective well-being trends for (a) Denmark and (b) Norway from 1980 to 2000.

Source: author's elaboration of World Values Survey data

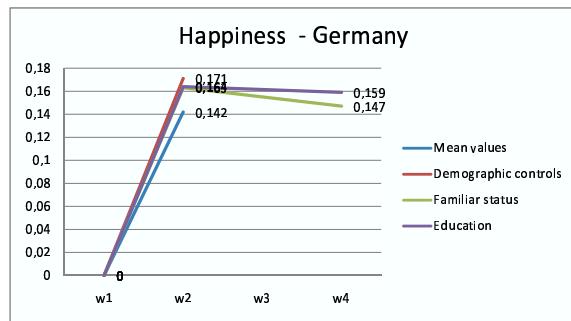


Figure 19: Subjective well-being trends for Germany from 1980 to 2000

Source: author's elaboration of World Values Survey data

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