

# The characterization of Active Citizenship in Europe

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## **Executive Summary**

Facilitating Active citizenship is one of the European Commission's strategies for increasing social cohesion and reducing the democratic deficit across Europe within the context of the wider Lisbon process. In this context, this report provides an evidence base for policy development, identifying the socio-demographic characteristics and determinants of active citizens and those who for one reason or another participate much less. The report provides a detailed identikit of the active citizen from 2002 across 14 European countries Austrian, Belgium, Germany, Denmark, Spain, Finland, United Kingdom, Greece, Italy, Luxemburg, Netherlands, Norway, Portugal, Sweden (the complete dataset available for this research is only available for the majority of old member states of the European Union and European Economic Area).

The results of our statistical analysis, based on a multilevel regression model, provide a clear identikit of the active citizen in Europe and the drivers of the phenomenon are identified both at the individual and at the country level.

At the individual level we can say that the active citizen is working age, male or female, and about 48-64 years old - the age of the baby boomers. They typically have a high level of education and are also active in lifelong learning. An active citizen typically has a clear idea of the importance of religion in their life and they typically attend religious service. He or She lives in the countryside and has a good income. Concerning the media, she or he watches TV a moderate amount of time and reads newspapers. In terms of employment she or he does not work in the labor market but is also not looking for a job which gives them the time to participate.

Conversely, the persons who are the least active are young people, living in big cities, with lower levels of education who are not participating in any lifelong learning activities. They are typically working in the labour market but with a low income and limited responsibility. They do not hold a strong position about the importance of the religion in their life and they do not attend any religious services apart from special occasions. They spend a considerable amount of time every day watching TV but they do not read newspapers.

In total the results of this research follow previous literature in this field; however, what is new from this research is the relationship between lifelong learning and active citizenship.

The bivariate statistics showed some intriguing findings concerning country differences in Europe, for example there are differences in the levels of active citizenship concerning gender. In Nordic countries women participated more than men but in southern Europe and Anglo-Saxon countries men participated more than women. For continental countries there were no significant differences.

There was no common trend from the bivariate statistics across the European countries for the place of residence. In Denmark, Belgium and Great Britain the most active are people are those who live in big city, whilst in Finland, Italy and Spain the most active citizens live in suburbs and in Luxemburg and Sweden the most active citizens live in the countryside.

There were common European trends for the bivariate statistical results for Education and age. There was a positive significant effect for each level of education and for each year of education in each country considered in Europe and lifelong learning was significant and positive in all countries considered. The age level of the active citizen was also similar in each country considered peaking somewhere after the age of 44 and at the lowest level in the earliest years 18-24 and over 65.

In terms of media usage there were general trends across Europe but also some specific country differences for the bivariate statistics. The general trend is that a small amount of TV is needed but not too much. The amount required depends on the country with Spain and the Netherlands having the highest threshold between 0.5-1 hour of television per day. In terms of radio the more the better across the whole of Europe but in Austria the most active are people who listen to radio more than 2.5 hours, while in Great Britain the most active listening to radio more than 1.5 hours. Reading newspapers follows a similar trend that the more that you read the better, however, in Italy and in Sweden, the most active are the ones who reads newspaper more than 3 hours a day, while in Belgium the most active are the one who read newspaper between 0.5 to 1 hour a weekday.

The country level features that facilitate greater participation in active citizenship are equality, wealth and tolerance towards diversity. In terms of equality the results show that the more equal societies are in terms of distribution of wealth the higher the levels of active citizenship. The high performing countries in Europe on active citizenship also tend to be the wealthy countries measured by their GDP, in this regard there are two groups of countries: poorer countries that are below the GDP average and have below average participation in active citizenship and more wealthy countries that have a higher levels of active citizenship. This reflects a two speed Europe. Greater levels of equality also increased the average levels of education but unlike years of individual levels of education, the national average education levels was not found to be associated with active citizenship. In addition to these findings, it is not only the more equal countries that do well on participation levels of active citizenship but it is also the countries that are more tolerant towards other religions who have higher levels of active citizenship

measured in terms of religious heterogeneity. This means that in countries with more diversity of religions there are also higher levels of active citizenship.

#### Introduction

'The fact that disparities in political involvement are so substantial and that so many citizens are not active at all potentially compromises democracy.' (Verba, Slozman and Brady 1995 p.11)

Facilitating Active citizenship is one of the European Commission's strategies for increasing social cohesion and reducing the democratic deficit across Europe within the context of the wider Lisbon process. In this regard indicators have been requested by member states (Council 2005 and Council 2007) then developed by CRELL (Hoskins et al 2006, Hoskins et al 2008 and Hoskins and Mascherini 2009) and used within the European Commission Progress reports on the Lisbon process (European Commission 2007 and European Commission 2008). The next research step, towards deepening the understanding of this phenomenon and towards providing an evidence base for policy development, was to identify the socio-demographic characteristics and determinants of active citizens and those who for one reason or another participate much less. This report provides a detailed identikit of the active citizen from 2002 across 14 European countries Austrian, Belgium, Germany, Denmark, Spain, Finland, United Kingdom, Greece, Italy, Luxemburg, Netherlands, Norway, Portugal, Sweden (the complete dataset available for this research is only available for the majority of old member states of the European Union and European Economic Area).

In this context, the aim of the report is to deepen the understanding of Active Citizenship by identifying the determinants of Active Citizenship through the application of a multilevel model that examines both the individual level and national level characteristics. Hoskins and Mascherini (2009) presented a composite indicator to measure Active Citizenship based on 61 basic indicators drawn from the 2002 European Social Survey data. Following this framework, individual level analysis is carried out using socio-demographic and behavioral variables of gender, occupation, income, age, religion and use of media of active citizens. On a national level it provides an analysis of the contextual features of the country which enhance active citizenship such as; GDP, income equality, national averages of education and religious diversity. This research also enables a greater understanding of who is much less active.

Research in the field of political participation has shown that in the US (Verba, Schlozman and Brady, 1995) and across 62 diverse countries in the world (Norris 2002) that the individual characteristics of gender, ethnicity and social class have not been found to be significant predictors of political participation after controlling for education, occupation and social and economic status. Norris (2002) across the 62 diverse countries and Lauglo and Oia (2002) in Norway found that age was a significant factor with participation increasing with age and in the case of Norris's research, she found that the middle aged participated the most. Verba, Slozman and Brady (1995), found that family income is a predictor of political voice and influence. Education across the years has been identified as the single most important predictor of different forms of political participation (Dee 2004, Finkel 2003, Print 2007, Galston 2001, Verba, Schlozsm and Hoskins et al 2008). The family has also often been cited as the source for the learning of citizenship. From early childhood onwards political socialization including identification and transmission of values has been considered an important element in the development of active citizenship (Lauglo and Oia 2002, Kahne and Sporte 2008 and Deli Caprapini and Keeter 1996). The effect of the media and news has had conflicting results as Semetko 2007 noted in a review of this literature for voter turn out. She highlighted that there was equal evidence of media increasing cynicism and reducing engagement as there was for it increasing the levels of citizen's involvement, trust and efficacy. Based on the previous literature, what we can expect to see is that age, education and wealth are the key features of active citizenship. In terms of age we would expect to see the middle age participate more. Concerning education and wealth the more you have the more we would expect that people participate.

The potential barriers to active citizenship have been described by Hoskins et al (2008) as 'financial concerns (e.g. paying subscriptions to be a party member), in terms of spare time (e.g. if an individual is both working and looking after a family), geographical location (e.g. in the countryside without good public transport) and information (e.g. being part of networks that keep you informed).' Verba, Slozman and Brady 1995 categorized the barriers that they had found from their research into 3 major reasons for not being able to participate, 1) they can't, due to a lack of money, time and skills, 2) they don't want to, due to no interest, they think it makes no difference and a limited knowledge of process 3) nobody asked (they lacked information). They suggest that the extent that these factors influence the levels of participation depends on which forms of participation are under discussion. This approach that is used predominantly on research on elections, does not help to explain why so many people actually vote. From this research we would expect to see that wealth, amount of free time, geographical location, information from various media sources and involvement in social networks would be crucial to whether people are active citizens.

In this report, we identify which socio-demographic features are critical to active citizenship in 14 European countries and which social groups are more isolated and participate much less.

This report is organized into three sections. Section 1 describes the active citizenship composite indicator, section 2 is the descriptive statistics for variables and the country differences and Section 3 is the multilevel analysis across Europe. In section 1 the data and the Active Citizenship Composite Indicator are briefly discussed. Then, in section 2, the socio-economic and behavioral variables considered in relation to the Active Citizenship Composite Indicator are described through their descriptive statistics. In section 3 the multilevel approach is shortly presented and the model and the model selection process are developed. The results are described, commented upon and conclusions drawn. Finally issues to be addressed by further research are presented.

# 1 The Active Citizenship Composite indicator

Building on the foundations of Marshall (1950) in terms of rights and obligations of citizenship and Verba and Nie (1972) in terms of participatory and influential action, Hoskins and Mascherini (2009) defined active citizenship as;

Participation in civil society, community and/or political life, characterised by mutual respect and non-violence and in accordance with human rights and democracy. (Hoskins, 2006<sup>1</sup>)

As can be seen within this definition, Active citizenship incorporates a wide spread of participatory activities containing political action, participatory democracy and civil society and community support. However, and in our view correctly, action alone is not considered active citizenship, the examples of Nazi Germany or Communist Europe can show mass participation without necessarily democratic or beneficial consequences. Instead participation is incorporated with democratic values, mutual respect and human rights. Thus what we are attempting to measure is value based participation. The difference between this concept and social capital is that the emphasis is placed on the societal outcomes of democracy and social cohesion and not on the benefits to the individual from participation. For further details on the conceptual development of active citizenship we address the reader to Hoskins and Mascherini, 2009.

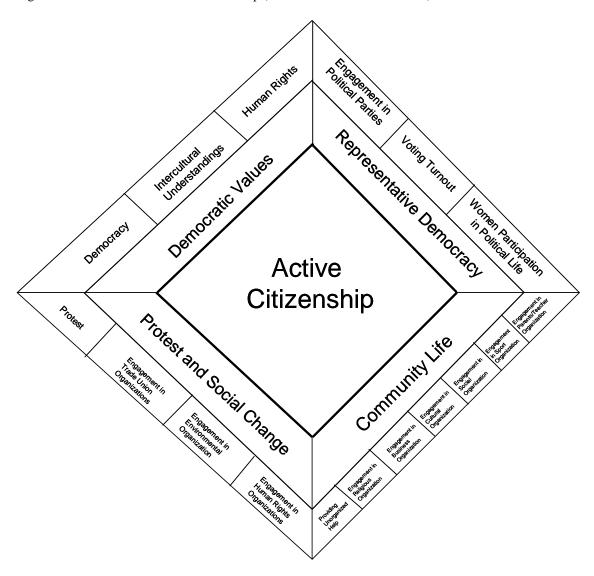
After defining the concept, Hoskins and Mascherini, 2009 based the operational model of active citizenship on four measurable and distinct dimensions of *Protest and social change*, *Community life*, *Representative democracy* and *Democratic values*. The dimension on *Protest and Social change* organisations is comprised of four components. The first component is protest activities which is a combination of 5 indicators: signing a petition, taking part in a lawful demonstration, boycotting products and contacting a politician. The next 3 components are three types of organizations; human rights organisations, trade unions and environmental organisations. Each of these components is comprised of four indicators on membership, participation activities, donating money and voluntary work. The *Community life* dimension is comprised of seven components. Six of these are community organisations: religious,

<sup>&</sup>lt;sup>1</sup> Developed by the CRELL research network "Active Citizenship for Democracy" as part of this project

business, cultural, social, sport and parent-teacher organisations. These 6 components contain 4 indicators each on membership, participation activities, donating money and voluntary work. The 7<sup>th</sup> component is a single indicator on unorganized help. The dimension Representative democracy is built from 3 sub-dimensions; engagement in political parties, voter turnout and participation of women in political life. The subdimension on engagement in political parties contains 4 indicators on membership, participation, donating money or voluntary work for political parties. The subdimension on voter turn out contains two indicators on voting, one on the national elections and one on European elections. The third sub-dimension is comprised of one indicator on the percentage of women in national parliaments. The fourth dimension is called *Democratic values* and consists of 3 sub-domains: democracy, intercultural understanding and human rights. The democracy sub-domain is comprised of 5 indicators on Democratic Values asked in relationship to citizenship activities. The intercultural sub-dimension contains 3 indicators on immigration. The human rights sub-dimension is comprised of 3 indicators on human rights in relationship to law and rights of migrants.

The operational model adopted to measure Active Citizenship is described in figure below. For the complete list of indicators we address the reader to and Hoskins and Mascherini 2009.

Figure 1 – The structure of Active Citizenship (Hoskins and Mascherini 2009)



## **Data and methods**

In the field of active citizenship availability of data is a serious problem. Not all dimensions are sufficiently covered and multi-annual data are generally not available. With this in mind, the selection of indicators for the composite measure of active citizenship has been based mostly upon one source of data, which helps to maximize the comparability of the indicators. The source of data chosen was the European Social Survey (http://www.europeansocialsurvey.org/) which ran a specific module on

citizenship in 2002. The European Social Survey (ESS) aimed to be representative of all residents among the population aged 15 years and above in each participating country. The size and the quality of the sample make the country coverage of Europe in the ESS data reasonably good, with 19 European countries, including 18 EU member states, providing sufficient quality of data.

Overall, the Active Citizenship Composite Indicator presented in this paper is based on a list of 61 basic indicators. As stated above, most of these indicators use individual data collected in the European Social Survey of 2002. In addition, voter turnout at national and European elections has also been considered, as well as the proportion of women in national parliaments. In order to complete the dataset, one missing value has been imputed for Norway.. The list of the 19 countries included in the analysis is given in table 1 below. The list of the basic indicators can be found in Hoskins and Mascherini 2008.

	List of Countries				
Austria	Netherlands	Finland	Slovenia		
Italy	Denmark	Portugal	Greece		
Belgium	Norway	France	Ireland		
Luxembourg	Spain	Sweden	Hungary		
Germany	Poland	United Kingdom			

Table 1: List of countries that have been analysed

Nardo et al. (2005) define a composite indicator as "a mathematical combination of individual indicators that represent different dimensions of a concept whose description is the objective of the analysis". Following this logic, here we summarize the concept of active citizenship into one number, a composite indicator, which encompasses different dimensions.

We built the composite indicators following the methodological guidelines given by Nardo et al. (2005). In this paper the different phases of the construction process of the composite indicators are just sketched and we address the reader to Hoskins and Mascherini, 2008 for details and wider description. Moreover, following Hoskins and Mascherini 2008, here we built an individual score on Active Citzenship based on 59 individual indicators drawn from the European Social Survey 2002 and on 2 country level indicators (voter turnout and women in national parliament) which for each individual are treated as country constant.

Given the structure of the Active Citizenship Composite Indicator shown in figure 1, the composite indicator is a weighted sum of the indices computed for the four dimensions  $D_i$  (Representative Democracy, Protest and social change, Community, Democratic Values) with weights  $w_i$ . The indices of each dimension  $D_i$  is then a linear weighted

sum of of the sub-dimension indices  $SD_{ij}$ . with weights  $w_j^*$ . Finally, each sub-dimension index  $SD_{ij}$  is a linear weighted aggregation of the  $s_{ij}$  normalized sub-indicators  $I_{h_{i,j}c}$  with weights  $w_{h_{i,j}}^{\#}$  The integration of the different equations into one gives the general formula for the Active Citizenship Composite Indicator:

$$Y_c = \sum_{i=1}^{4} w_i \sum_{j=1}^{k_i} w_j^* \sum_{h_{ij}=1}^{s_{ij}} w_h^* I_{h_{i,j}c}$$

Having defined the aggregation rule of the composite indicator, the construction and evaluation of the composite indicator (CI) involve several steps. In the next step the variables must be standardized and the weighting scheme for the indicators specified. Due to the fact that the 61 basic indicators have been constructed using different scales, a standardization process is needed before the data for the different indicators can be aggregated. Different standardization techniques are available for this (Nardo et al., 2005). The basic standardization technique that has been applied is the well known z\_score approach in which for each basic indicator  $x_{m,n}$ , the average across countries  $\overline{x}_m$  and the standard deviation across countries  $\sigma_{x_m}$  are calculated. The normalization formula is:

$$I_{m,n} = \frac{x_{mn} - \overline{x}_m}{\sigma_{x_m}}.$$

After the standardization process, the data have then been transformed to ensure that for each indicator a higher score would point to a better performance. This step was clearly necessary to make a meaningful aggregation of the different indicators. Based on the Active Citizenship Composite Indicator structure, in Hoskins and Mascherini, 2008, the weights were assigned after the consultation of experts in the field of active citizenship. This was done in order to assign different weights to the various dimensions on the basis of experts judgment which was elicited with a survey designed following the budget allocation approach. In order to permit the elicitation of the experts' judgment, on February 2007 we distributed a questionnaire to 27 leading experts on Active Citizenship. All of the people contacted for participating in the survey had been established as researchers or key experts in the field of the Active Citizenship domain and for this reason they were considered experts. In particular, the participants to the survey belong to 4 different areas of expertise: sociologists, political scientists, policy makers and educationalists.

The questionnaire was designed following the budget allocation approach, that is a participatory method in which experts are given a "budget" of N points (in our case 100), to be distributed over a number of sub-indicators, paying more for those indicators whose importance they want to stress. (Moldan and Billharz, 1997). For each expert, the weights of the basic indicators were computed by a linear combination of normalized values of the median of the distribution of the weights assigned to dimensions and sub dimensions. For a detailed description of the computation of the weights and the experts' elicitation process we address the reader to Mascherini and Hoskins, 2009. Finally a consistent sensitivity analysis was performed in order to show the robustness of the composite indicator which is not affected by the assumption made in the construction process.

In order to deepen the analysis and provide relations with other variables, in this paper, the active citizenship composite indicator is used at the individual level. Using the individual score of this composite indicator it is possible to study the determinants which foster the level of active citizenship among the individuals. In the next section, bivariate relations between Active Citizenship and possible determinants are analyzed at the individual and country level. This preliminary analysis allows us to understand how the level of Active Citizenship varies with respect to the level of the all variables considered. As descriptive statistics can provide only preliminary associations between variables not allowing for any inferential conclusion, in section 3 the existence of multivariate relations between the considered variables and the level of active citizenship is explored through the application of a multilevel regression model. The results of the multilevel model permit to draw a robust picture of the identikit of the active citizenship in Europe.

### 2 Active Citizenship and its possible determinants

In this section after presenting the country ranking of individual active citizenship composite indicator, we draw a descriptive picture of the relations between the individual level of active citizenship and a set of its possible determinants. Hoskins and Mascherini 2009 showed a polarization of the active citizenship phenomenon on the north-south axis. The same axis is also found in Canoy et al. 2007 in a more general study on participation. For this reason, in this paper two sets of variables are considered. Firstly, relations between the individual levels of active citizenship and the individual level variables of socio-economic (gender, educational attainment, age etc.) and behavioral variables (as the use of tv, radio etc.) are analyzed. Then, at the aggregated level, the relationship between active citizenship and country level variables (as GDP, GINI index etc) are analyzed.

Individual active				
citizenship				
composite indicator				
Rank	Country			
1	SE			
2 LU				
3 NO				
4 DK				
5	BE			
6	AT			
7	NL			
8	DE			
9	FI			
10	ΙΤ			
11	ES			
12 GB				
13	PT			
14	GR			

Table 2: Country classification by individual active citizenship composite indicator

The individual composite indicator on active citizenship shows how the most active are Sweden at the top of the league; Luxemburg and Norway follow in the second and third position respectively. Continental countries perform very well with the second position of Luxemburg, the 4<sup>th</sup> of Denmark followed by Belgium and Austria. The worse performance among continental countries is made by Great Britain which occupies the 12<sup>th</sup> position. Mediterranean countries close the league.

#### Individual level variables

We assessed the relationship between active citizenship and two groups of individual variables: the socio-demographic group, which refers to objective variables that describe the respondents gender, age, educational attainment, etc., and the behavioral group, which include variables that describe some of the reported behaviors of the respondents in terms of their religiosity, time spent in watching tv, listing to the radio etc. All these variables characterize individuals and their relation with their levels of active citizenship. For all the variables concerned descriptive statistics are given in relation to their level of active citizenship

#### **Socio-Demographic Variables**

#### **Gender**

Firstly, gender differences are explored in regards to their level of participation. An aggregated picture of the entire Europe shows that on average males recorded a higher level of active citizenship than female. The mean comparison test assessed that this difference is significant. Deepening the analysis into the singles countries this phenomenon presents an interesting picture. Women are significantly more active than men in the Nordic countries , while the opposite is true for Mediterranean countries where men are significantly more active. The same phenomenon is present in Anglo-Saxon countries. On the other hand, there are no significant differences recorded for the majority of the continental European countries such as France or Germany.

Sum of Squares	df	Mean Square	F	Sig.
6.529289509	1	6.529289509	67.684	0.000
3995.405192	41417	0.096467759		
4001.934481	41418			
	6.529289509 3995.405192	6.529289509 1 3995.405192 41417	6.529289509 1 6.529289509 3995.405192 41417 0.096467759	6.529289509 1 6.529289509 67.684 3995.405192 41417 0.096467759

Table 3 - Anova Model for gender in Europe

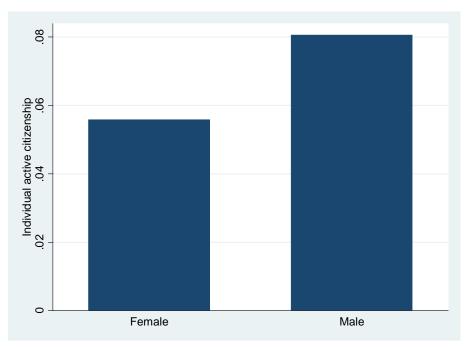


Figure 2:Individual level of active citizenship by sex in all Europe

Country	Mean difference	P>p	
AT	-0.079	0.000	***
BE	-0.032	0.023	**
DE	0.000	0.323	
DK	0.000	0.364	
ES	-0.032	0.000	***
FI	0.057	0.000	***
GB	-0.028	0.000	***
GR	-0.034	0.002	***
IT	-0.030	0.000	***
LU	0.000	0.163	
NL	-0.021	0.038	*
NO	0.000	0.124	
PT	-0.040	0.001	***
SE	0.027	0.047	*
*** < 0.0	1		
0.01 < **	° < 0.025		

0.025 < \* < 0.05

Table 4: Mean comparison test for gender

#### **Education**

The relationship between active citizenship and education is analyzed by taking into consideration two variables: completed educational level and the total number of years of education completed by the respondents. Results are very similar for both variables and show the strong importance of education in relation with active citizenship.

#### **Completed Educational level**

The variables measuring the completed educational level of the respondents are composed by seven different items starting from the lowest, "not completed primary education", to the highest, "second stage of tertiary school". Figure 3 shows the results of the relation of the individual active citizen with these variables in the whole Europe: a higher level of active citizenship is associated to a higher education attainment.

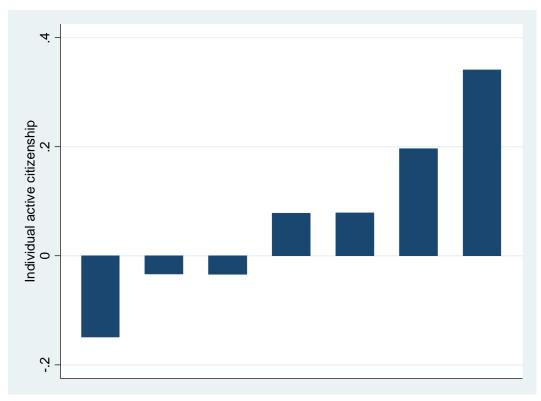


Figure 3: Individual level of active citizenship by education in all Europe

In order to test whether the level of active citizenship is significantly different among the different levels of education an ANOVA test was performed for the whole Europe. The results confirm the existence of significant differences among the classes as shown in table 5.

Active					
Citizenship	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	419.834736	6	69.972456	833.078	0.000
Within Groups	3307.462692	39378	0.083992653		
Total	3727.297428	39384			

Table 5: Anova Model for education in all Europe

In order to provide a more exhaustive picture, the situation for each country is presented in figure 4. In general, the higher the level of education, the higher the level of active

citizenship. For each country, an anova test was performed in order to assess the existence of significant differences between the various education levels with respect to the level of active citizenship: as we can see from table 6 significantly differences were found for each country.

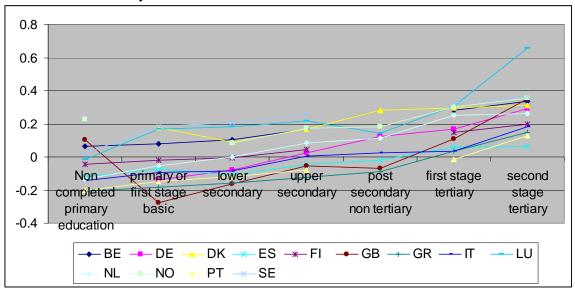


Figure 4: Education gap by country

ctive Citizenship	Sum of Squares	df	Mean Square	F	Sig.
BE Between Gro	oups 15.878	5	3.176	30.965	0.000
Within Group	os 215.266	2099	0.103		
Total	231.144	2104			
DE Between Gro	oups 52.307	5	10.461	109.981	0.000
Within Group	os 756.495	7953	0.095		
Total	808.803	7958			
DK Between Gro	oups 8.066	5	1.613	21.051	0.000
Within Group	os 113.265	1478	0.077		
Total	121.332	1483			
ES Between Gro	oups 12.965	6	2.161	37.580	0.000
Within Group		3434	0.058		
Total	210.424	3440			
FI Between Gro	oups 8.652	5	1.730	38.760	0.00
Within Group	s 87.322	1956	0.045		
Total	95.974	1961			
GB Between Gro	oups 88.171	6	14.695	205.817	0.00
Within Group		6002	0.071		
Total	516.707	6008			
GR Between Gro		6	2.180	32.896	0.00
Within Group	•	2473	0.066		
Total	176.926	2479			
IT Between Gro		6	2.636	59.120	0.00
Within Group	•	4560	0.045		
Total	219.142	4566			
LU Between Gro		6	0.918	12.483	0.00
Within Group	-	927	0.074		
Total	73.664	933			
NL Between Gro	oups 34.881	6	5.814	79.603	0.00
Within Group	•	3136	0.073		
Total	263.909	3142			
NO Between Gro	oups 13.221	5	2.644	26.284	0.00
Within Group	•	2099	0.101		
Total	224.381	2104			
PT Between Gro		5	0.693	13.113	0.00
Within Group		1555	0.053	-	
Total	85.616	1560			
SE Between Gro		5	1.955	20.837	0.00
Within Group		2094	0.094		2.00
Total	206.225	2099	2.00.		

Table 6: ANOVA model for education for all countries

#### Years of education

This variable goes from 0 to 25 years of education; it has been cut to 25 years of education, which can be considered a reasonable number of years to complete education course, in order to eliminate people who have self reported an exaggerated number of years of education.

As shown in figure 5 people with a low education attainment can be seen to have a low level of active citizenship, while the threshold from which the level of active citizenship increases constantly is 10 years of education.

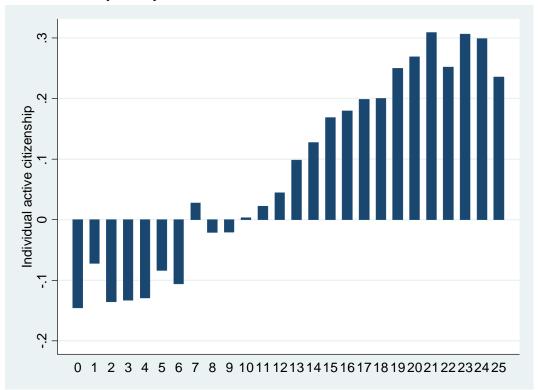


Figure 5: Individual level of active citizenship by years of education in all Europe

The anova test for the entire Europe shows significant differences between the years of education in respect to the level of active citizenship as shown in table 7.

Active					
Citizenship	Sum of Squares	df	Mean Square	F	Sig.
Between	46.21230098	5	9.242460196	96.682	0.000
Groups	40.21230090	5	9.242400190	90.002	0.000
Within	3912.266285	40925	0.005506		
Groups	3912.200203	40925	0.095596		
Total	3958.478586	40930			

Table 7: Anova model for years of education in all Europe

Moving towards country level analysis we perform an anova test in order to assess if there are significant differences between the different years of education in respect to the level of active citizenship across countries. As shown in table 8 for each country there are significant differences in the level of active citizenship between years of education.

Active						
Citizenship		Sum of Squares	df	Mean Square	F	Sig.
	veen Groups	18.591	20	0.930	8.123	0.000
	in Groups	174.517	1525			
Tota		193.108	1545			
	veen Groups	12.171	23	0.529	5.102	0.000
	in Groups	148.411	1431	0.104		
Tota		160.583	1454			
	veen Groups	24.592	25	0.984	10.841	0.000
	in Groups	209.961	2314			
Tota		234.553	2339			
DK Betv	veen Groups	9.227	19	0.486	6.597	0.000
	in Groups	82.961	1127	0.074		
Tota		92.188	1146			
	veen Groups	3.986	25	0.159	2.668	0.000
With	in Groups	62.802	1051	0.060		
Tota	l	66.788	1076			
FI Betv	veen Groups	7.811	25	0.312	6.996	0.000
With	in Groups	71.408	1599	0.045		
Tota	l	79.219	1624			
GB Betv	veen Groups	25.321	23	1.101	14.730	0.000
With	in Groups	133.111	1781	0.075		
Tota	l	158.432	1804			
GR Betv	veen Groups	10.461	25	0.418	6.637	0.000
With	in Groups	114.802	1821	0.063		
Tota	l	125.263	1846			
IT Betv	veen Groups	3.490	24	0.145	3.182	0.000
With	in Groups	39.073	855	0.046		
Tota	I	42.564	879			
LU Betv	veen Groups	4.615	24	0.192	2.856	0.000
With	in Groups	59.580	885	0.067		
Tota	I	64.195	909			
NL Betv	veen Groups	18.488	22	0.840	11.111	0.000
	in Groups	152.330	2014	0.076		
Tota	l	170.818	2036			
NO Betv	veen Groups	18.124	20	0.906	9.347	0.000
With	in Groups	173.154	1786	0.097		
Tota	•	191.278	1806			
PT Betv	veen Groups	3.007	20	0.150	3.108	0.000
With	in Groups	48.085	994	0.048		
Tota	•	51.093	1014			
	veen Groups	8.395	21	0.400	4.248	0.000
	in Groups	142.932	1519			

Table 8: ANOVA model for years of education by country

#### **Age**

The relation between age and active citizenship is very interesting. At Europe level we can see from

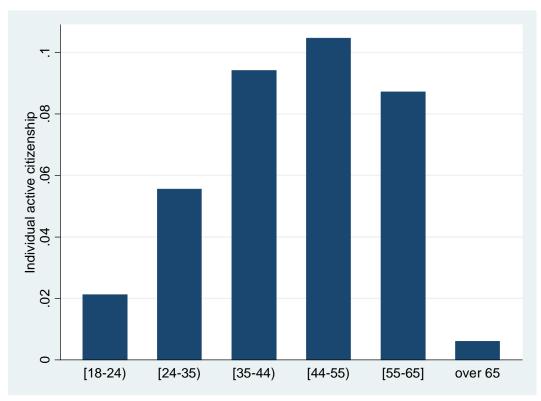


Figure 6: Individual level of active citizenship by age in all Europe

figure 6 that the highest level active citizenship is reached in the class (44-55). There is a trend which starts from the youngest (18-24) to the pick of (44-55) and than decreases slowly for the class (55-65) years old and falls down drastically for people over 65 years old.

The level of active citizenship changes significantly among the groups of ages for the level of active citizenship: this phenomenon is confirmed at Europe level as shown table 9.

Active					
Citizenship	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	71.51224899	77	0.928730506	9.758	0.000
Within Groups	3912.747976	41109	0.095179838		
Total	3984.260225	41186			

Table 9: ANOVA model for age in European countries

In order to provide a more exhaustive analysis the situation for each country is presented in figure 7. In general, the youngest and the oldest people are not so active with respect to the working age population: this trend is present for almost all the European countries - even if each country presents its' own peculiarity.

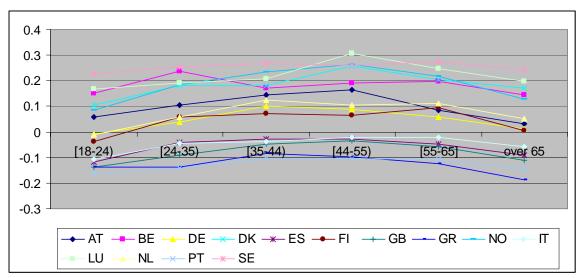


Figure 7: Age gap by country

As shown in table 10 the anova test shows significant differences between the age group with respect to the level of active citizenship for some countries; Norway, Netherlands Finland and Austria in northern Europe and in southern Europe, Spain and Greece. For all the other countries no significant differences are recorded.

Citizenship	)	Sum of Squares	df	Mean Square	F	Sig.
А	T Between Groups	12.560	74	0.170	1.377	0.021
	Within Groups	180.221	1462	0.123		
	Total	192.782	1536			
Bl	E Between Groups	9.053	75	0.121	1.087	0.290
	Within Groups	146.798	1322	0.111		
	Total	155.851	1397			
DI	E Between Groups	9.192	75	0.123	1.230	0.090
	Within Groups	224.026	2249	0.100		
	Total	233.218	2324			
DI	K Between Groups	7.104	72	0.099	1.246	0.085
	Within Groups	84.877	1072	0.079		
	Total	91.981	1144			
E;	S Between Groups	6.633	71	0.093	1.558	0.003
	Within Groups	59.787	997	0.060		
	Total	66.421	1068			
F	I Between Groups	4.811	74	0.065	1.354	0.026
	Within Groups	74.408	1550	0.048		
	Total	79.219	1624			
Gl	Between Groups	6.714	75	0.090	1.020	0.433
	Within Groups	151.635	1727	0.088		
	Total .	158.349	1802			
GI	R Between Groups	7.757	74	0.105	1.579	0.001
	Within Groups	117.483	1770	0.066		
	Total	125.240	1844			
I	T Between Groups	4.121	73	0.056	1.183	0.149
	Within Groups	38.369	804	0.048		
	Total	42.490	877			
L	J Between Groups	5.907	71	0.083	1.181	0.154
	Within Groups	56.295	799	0.070		
	Total	62.202	870			
N	L Between Groups	8.442	74	0.114	1.376	0.020
	Within Groups	162.325	1958	0.083		
	Total	170.767	2032			
NO	D Between Groups	13.058	74	0.176	1.715	0.000
- • •	Within Groups	178.220	1732	0.103		
	Total	191.278	1806			
Р	T Between Groups	3.203	73	0.044	0.862	0.787
•	Within Groups	47.890	941	0.051	- · - <b>· -</b>	2 3.
	Total	51.093	1014			
SI	E Between Groups	8.817	73	0.121	1.243	0.084
0.	Within Groups	142.510	1467	0.097		5.001
	Total	151.327	1540	0.007		

Table 10: ANOVA model for age by country

#### **Income**

The income variable is computed in 12 different groups. Figure 8 shows the income trend in Europe: the level of active citizenship increases constantly for people with an income over 18000 euros per year. The richest people have a slight decrease of level of active citizenship respect to the pick which is represented by people who earns 90000 Euros per year. This trend is quite different for people who earn an income under 12000 euros per year: this is the threshold where people do not care about active citizenship issues; one possible reason is due to the fact that they have to cope with their own everyday survival.

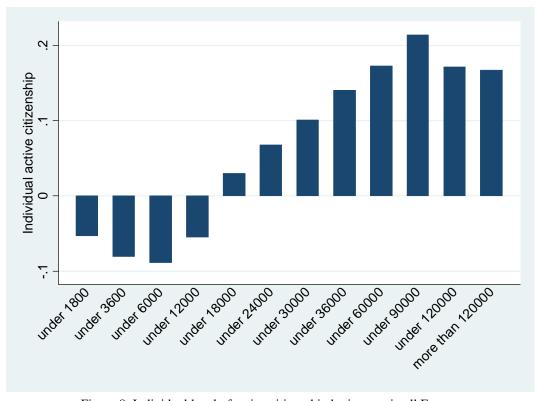


Figure 8: Individual level of active citizenship by income in all Europe

The anova test for the entire Europe (table 11) shows significant differences in the level of active citizenship among the income classes.

Active						
Citizenship	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	221.1138713	11	20.10126103	212.390	0.000	
Within Groups	3155.306504	33339	0.094643106			
Total	3376.420375	33350				

Table11: Anova Model for income class in all Europe

In order to provide a more exhaustive picture, the situation for each country is presented in figure 9. In general, in the most part of European countries the most active citizens are those who earns around 60000 euros per year. Some exceptions are presented in Spain, Great Britain and Greece, where richer people who earns around 90000 Euros, are more active than the others.

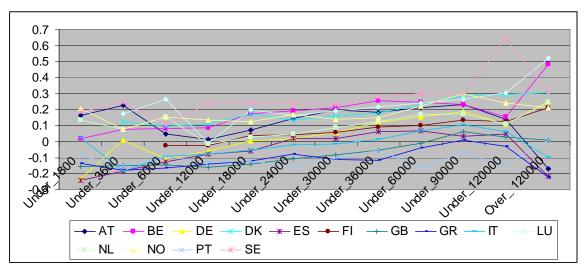


Figure 9: Income gap by country

In order to test whether the level of active citizenship is significantly different among income groups an anova test has been performed. The results are shown in table 12. For all countries except for Portugal, the level of active citizenship changes significantly among the different income groups.

Citizenship			Sum of Squares	df	Mean Square	F	Sig.
	АТ	Between Groups	6.519	11	0.593	4.249	0.000
		Within Groups	188.545	1352	0.139		
		Total	195.064	1363			0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
	BE	Between Groups	5.521	11	0.502	4.417	0.000
		Within Groups	199.289	1754	0.114		0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
		Total	204.810	1765			
	DE	Between Groups	40.401	11	3.673	37.361	0.000
		Within Groups	657.654	6690	0.098		
		Total	698.055	6701			0.000 0.000 0.000 0.000 0.000 0.000 0.000
	DK	Between Groups	3.603	10	0.360	4.509	0.000
		Within Groups	107.640	1347	0.080		
		Total	111.243	1357			
	ES	Between Groups	9.154	11	0.832	13.918	0.000
		Within Groups	126.638	2118	0.060		
		Total	135.793	2129			0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
	FI	Between Groups	3.532	9	0.392	8.373	0.00
		Within Groups	86.615	1848	0.047		
		Total	90.148	1857			
	GB	Between Groups	27.976	11	2.543	30.525	0.00
		Within Groups	438.505	5263	0.083		
		Total	466.481	5274			
	GR	Between Groups	2.752	11	0.250	3.367	0.00
		Within Groups	134.119	1805	0.074		
		Total	136.871	1816			
	IT	Between Groups	7.758	11	0.705	15.830	0.00
		Within Groups	116.368	2612	0.045		
		Total	124.126	2623			361     0.000       09     0.000       73     0.000       67     0.000       330     0.000       032     0.000       032     0.000       033     0.000       03     0.000       00     0.141
	LU	Between Groups	2.201	10	0.220	2.908	0.00
		Within Groups	49.211	650	0.076		
		Total	51.413	660			
	NL	Between Groups	10.158	11	0.923	11.032	0.00
		Within Groups	232.618	2779	0.084		
		Total	242.776	2790			
	NO	Between Groups	6.908	11	0.628	6.003	0.00
		Within Groups	216.659	2071	0.105		
		Total	223.567	2082			
	PT	Between Groups	0.923	11	0.084	1.460	0.14
		Within Groups	64.197	1117	0.057		•
		Total	65.120	1128	0.00.		
	SF	Between Groups	3.916	11	0.356	3.638	0.00
		Within Groups	198.146	2025	0.098	5.500	2.00
		Total	202.062	2036	0.000		

Table 12: ANOVA model for income class in European countries

#### **Domicile**

This variable records where people live; it counts five different categories (big city, suburbs, small city, country village and country side).

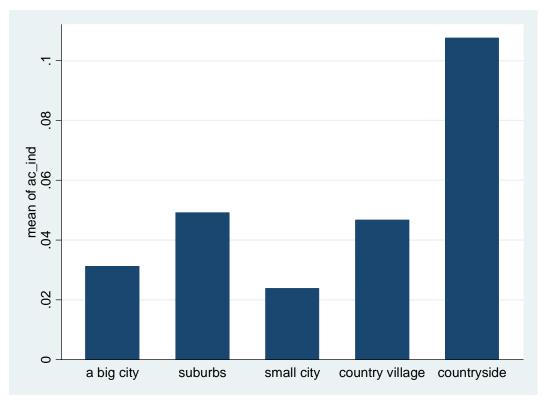


Figure 10: Individual level of active citizenship by domicile in all Europe

In order to assess if the differences in the level of active citizenship in the different domiciles are significant an anova test has been performed. The results confirm the existence of significant differences among the domiciles at Europe level as shown in table 13.

Active					
Citizenship	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15.08633393	4	3.771583484	39.184	0.000
Within Groups	3977.410408	41322	0.096254063		
<u>Total</u>	3992.496742	41326			

Table 13: Anova model for domicile in all Europe

Figure 10 shows that at a European level the most active are people are those who live in the country side, while the least active are people who leave in small cities. This phenomenon has been analyzed at a country level and the results are shown in figure 11. There is no common trend across all the European countries, but each country has its own particularity: for instance in Denmark, Belgium and Great Britain the most active are people are those who live in big city, while in Finland, Italy and Spain the most active citizens live in suburbs, in Luxemburg and Sweden the most active citizens live in the countryside. The anova test has been performed in order to assess if the differences in the level of active citizenship are significant among the different kind of domicile. Table 14 shows the results of the anova test and confirm the existence of significant differences among domiciles for all European countries except for some northern countries like Austria, Denmark, Netherlands, Luxemburg, Norway, Sweden and Finland.

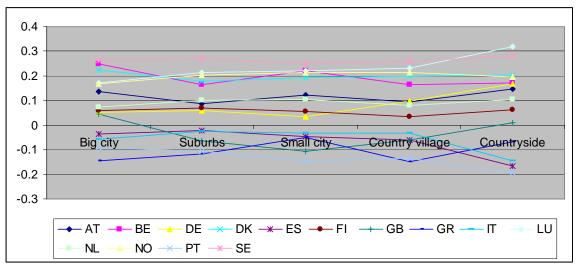


Figure 11: Domicile Gap Active Citizenship Index

Citizenship         Sum of Squares         df         Mean Square         F         Signature           AT Between Groups         0.813634474         4         0.203408618         1.570773         0.1           Within Groups         257.6968628         1990         0.129495911         1.570773         0.1           BE Between Groups         1.90260026         4         0.475650065         4.358185         0.0           Within Groups         228.5380553         2094         0.109139472         1.510097         0.0           DE Between Groups         6.093477816         4         1.523369454         15.10097         0.0
Within Groups       257.6968628       1990       0.129495911         Total       258.5104973       1994         BE Between Groups       1.90260026       4       0.475650065       4.358185       0.0         Within Groups       228.5380553       2094       0.109139472         Total       230.4406556       2098    DE Between Groups     6.093477816     4     1.523369454     15.10097     0.0
Total         258.5104973         1994           BE Between Groups         1.90260026         4         0.475650065         4.358185         0.0           Within Groups         228.5380553         2094         0.109139472         230.4406556         2098           DE Between Groups         6.093477816         4         1.523369454         15.10097         0.0
BE Between Groups       1.90260026       4       0.475650065       4.358185       0.0         Within Groups       228.5380553       2094       0.109139472         Total       230.4406556       2098    DE Between Groups     6.093477816     4     1.523369454     15.10097     0.0
Within Groups       228.5380553       2094       0.109139472         Total       230.4406556       2098    DE Between Groups     6.093477816     4     1.523369454     15.10097     0.0
Total         230.4406556         2098           DE Between Groups         6.093477816         4         1.523369454         15.10097         0.00
Total         230.4406556         2098           DE Between Groups         6.093477816         4         1.523369454         15.10097         0.00
DE Between Groups 6.093477816 4 1.523369454 15.10097 0.0
Within Groups 802.2899016 7953 0.100878901
Total 808.3833795 7957
DK Between Groups 0.304773652 4 0.076193413 0.932048 0.4
W:11 0 400 0075500 4400 0 004740054
Within Groups 120.9875593 1480 0.081748351
Total 121.2923329 1484
ES Between Groups 1.505317988 4 0.376329497 6.179627 0.0
Within Groups 208.6379665 3426 0.060898414
Total 210.1432845 3430
FI Between Groups 0.264722569 4 0.066180642 1.356336 0.2
11 Botwooti Groups 0.204122000 4 0.000100042 1.000000 0.2
Within Groups 95.78201042 1963 0.048793688
Total 96.04673299 1967
GB Between Groups 8.940807304 4 2.235201826 26.43257 0.0
Within Groups 508.0509651 6008 0.084562411
Total 516.9917724 6012
GR Between Groups 2.679498914 4 0.669874728 9.471057 0.0
Within Groups 173.9923887 2460 0.070728613
Total 176.6718876 2464
IT Between Groups 2.367962498 4 0.591990624 12.4648 0.0
Within Groups 216.9005598 4567 0.047493006
Total 219.2685223 4571
LU Between Groups 0.397779502 4 0.099444876 1.288658 0.2
Within Groups 73.92819256 958 0.077169303
Total 74.32597206 962
NL Between Groups 0.515881779 4 0.128970445 1.534627 0.1
Within Groups 261.8694296 3116 0.084040253
Total 262.3853114 3120
NO Between Groups 0.328012537 4 0.082003134 0.767164 0.5
Within Groups 226.9301607 2123 0.106891267
Total 227.2581732 2127
PT Between Groups 0.649436685 4 0.162359171 2.970108 0.0
Within Groups 84.83914578 1552 0.054664398
Total 85.48858247 1556
SE Between Groups 0.257956908 4 0.064489227 0.655904 0.6
Within Groups 205.9826504 2095 0.098321074
Total 206.2406073 2099

Table14: ANOVA model for domicile in European countries

#### **Main Activity**

This variable is computed into 4 groups: employed, unemployed, retired and other, that is unemployed people who are not looking for a job. This variable is a simplification of the variable presented in the ESS which contained 7 categories.

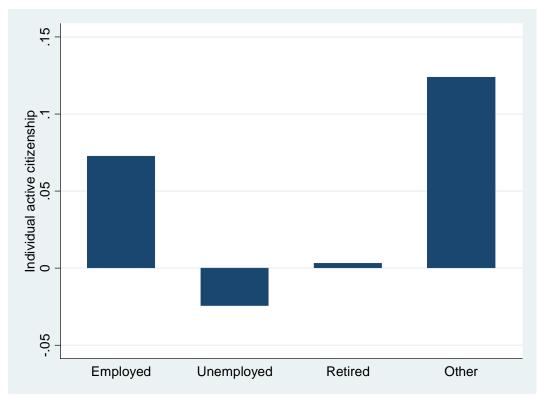


Figure 12: Individual level of active citizenship by main activity in all Europe

As shown in figure 12 the most active citizens are people who are not looking for a job. One could hypothesis that this group is predominantly comprised of mothers/housewives who are not in the workforce but have the financial possibility to do some voluntary work. In second position are the persons who are employed. Unemployed persons do not participate in active citizenship activities, perhaps as a result of focusing more on day to day survival. It is also relevant to note that the level of active citizenship of retired people is very low.

The anova test for the entire Europe shows significant differences in the level of active citizenship among the main activities as table 15 shown.

Active						
Citizenship	Sum of Squares	df	Mean Square	F	Sig.	
Between	66.05723738	2	33.02861869	247 550	0.000	
Groups	00.03723730	2	33.02001009	347.339	0.000	
Within	2016 055701	41218	0.00502022			
Groups	3916.955701	41216	0.095030222			
Total	3983.012938	41220				

Table 15: Anova Model for main activity in all Europe

This trend has been confirmed also in the country by country analysis as shown figure 13. Table 16 presents the results for the anova test for each European country which confirms the existence of significant differences among the main activities except for Luxemburg.

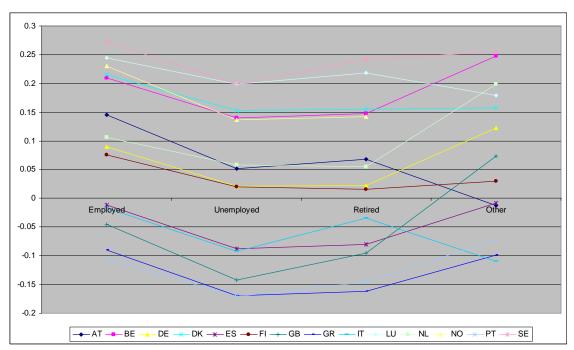


Figure 13: Main activity Gap Active Citizenship Index

Active Citizenship	Sum of Squares	df	Mean Square	F	Sig.
AT Between Groups	2.548	3	0.849	6.820	0.000
Within Groups	190.155	1527	0.125		
Total	192.703	1530			
BE Between Groups	1.689	3	0.563	5.081	0.002
Within Groups	157.903	1425	0.111		
Total	159.593	1428			
DE Between Groups	2.781	3	0.927	9.341	0.000
Within Groups	231.768	2335	0.099		
Total	234.549	2338			
DK Between Groups	0.879	3	0.293	3.661	0.012
Within Groups	91.224	1140	0.080		
Total	92.103	1143			
ES Between Groups	1.454	3	0.485	7.956	0.000
Within Groups	65.328	1072	0.061		
Total	66.782	1075			
FI Between Groups	1.318	3	0.439	9.136	0.000
Within Groups	77.886	1620	0.048		
Total	79.204	1623			
GB Between Groups	3.240	3	1.080	12.532	0.000
Within Groups	155.192	1801	0.086		
Total	158.432	1804			
GR Between Groups	2.891	3	0.964	14.501	0.000
Within Groups	122.356	1841	0.066		
Total	125.248	1844			
IT Between Groups	0.944	3	0.315	6.620	0.000
Within Groups	41.534	874	0.048		
Total	42.478	877			
LU Between Groups	0.300	3	0.100	1.384	0.246
Within Groups	60.675	839	0.072		
Total	60.975	842			
NL Between Groups	2.038	3	0.679	8.181	0.000
Within Groups	166.778	2008	0.083		
Total	168.817	2011			
NO Between Groups	3.249	2	1.625	15.585	0.000
Within Groups	187.957	1803	0.104		
Total	191.207	1805			
PT Between Groups	0.786	3	0.262	5.254	0.001
Within Groups	50.155	1006	0.050		
Total	50.941	1009			
SE Between Groups	0.852	3	0.284	2.976	0.031
Within Groups	146.388	1534	0.095		
Total	147.240	1537			

Table 16: ANOVA model for main activity in European countries

#### Behavioral variables

#### **Religion**

In order to analyze the relation between active citizenship and religion we study the phenomenon through three different variables: belonging to a particular religious, the degree of religiosity and religious attendance.

#### Belonging to a particular religious

This variable is dichotomous (0/1) and registers if people belong to a certain religion or not. Through this variable, a map of Europe has been drawn and underlines the most active citizens between religious and non religious groups of people. The mean difference test for all Europe has been performed in order to assess if people who declare themselves religious are the most active. The results confirm that the level of active citizenship is significantly different between the two groups.

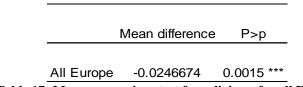


Table 17: Mean comparison test for religious for all Europe

Deepening the analysis into the singles countries this phenomenon presents some intriguing results. The mean difference test is significant for some countries as table 18 shows. Weber's notion of the protestant work ethic appears to still be present in Europe. In particular in protestant countries, Finland Great Britain, Netherlands, Norway and Sweden, the most active citizens are people who declare themselves religious. In Southern European catholic countries there are no significant differences between religious and non religious levels of active citizenship. There is one exception in southern Europe and that is for Spain where, curiously, the more active people are those who are not religious. This result is also found in Luxembourg.

.

	Mean differen	P>p	
AT	-0.0124	0.493	
BE	-0.0353	0.014	**
DE	-0.062915	0.000	***
DK	-0.0185	0.221	
ES	0.0377	0.001	***
FI	-0.0273	0.019	**
GB	-0.0785	0.000	***
GR	0.0286	0.364	
IT	0.0097	0.257	
LU	0.0446	0.046	*
NL	-0.0519	0.000	***
NO	-0.0399	0.005	***
PT	-0.0118	0.511	
SE	-0.1087	0.000	***

```
*** < 0.01
0.01 < ** < 0.025
0.025 < * < 0.05
```

Table 18: Mean comparison test for religious by countries

## Religiousness

This variable goes from 0, not at all religious, to 10, very religious: it measures the self perception of personal religiosity. At a European level, as shown in figure 14, the distribution presents three peaks: people who declare themselves as not very religious, quite religious and very religious are also the most active citizens. People who declare themselves in the middle of the range are also the less active.

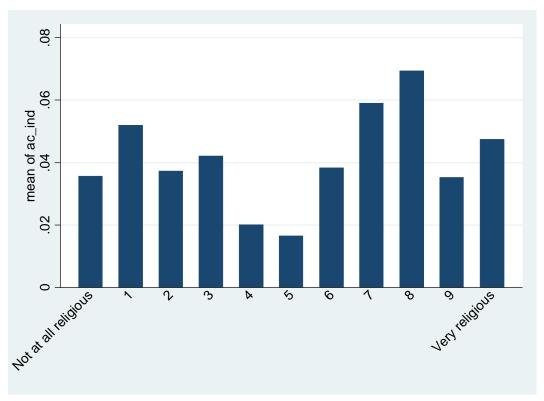


Figure 14: Individual level of active citizenship by religious degree in all Europe

The anova test for the entire Europe shows significant differences in the level of active citizenship among the different degree of religiosity as shown in table 19.

Active Citizenship	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11.0549376	10	1.10549376	11.460	0.000
Within Groups	3987.519943	41338	0.096461366		
<u>Total</u>	3998.574881	41348			

Table 19: Anova model for religious degree in all Europe

In order to provide a more exhaustive picture, the situation for each country is presented in figure 15. In general the higher levels of active citizenship are associated to higher levels of religiosity.

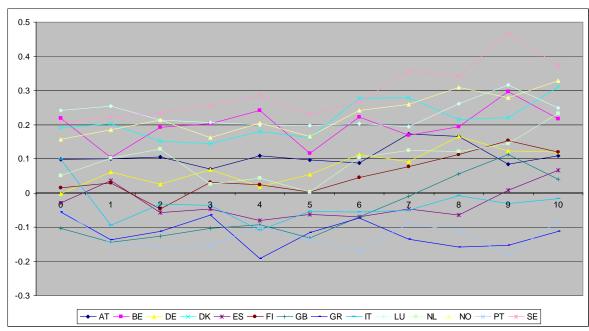


Figure 15: Religion degree Gap Active Citizenship Index

From table 20 the anova test is presented. The results confirm the existence of significant differences in level of active citizenship among the level of religiousness; this is significant for almost all the European countries except for Austria and Luxemburg.

Active			_		
Citizenship	Sum of Squares	df	Mean Square	F	Sig.
AT Between Groups	1.254	10	0.125	1.002	0.439
Within Groups	191.473	1530	0.125		
Total	192.727	1540			
BE Between Groups	3.166	10	0.317	2.898	0.001
Within Groups	157.016	1437	0.109		
Total	160.182	1447		<b>-</b>	
DE Between Groups	5.785	10	0.579	5.884	0.000
Within Groups	228.604	2325	0.098		
Total	234.389	2335			
DK Between Groups	2.784	10	0.278	3.538	0.000
Within Groups	89.161	1133	0.079		
Total	91.945	1143			
ES Between Groups	1.193	10	0.119	1.933	0.037
Within Groups	65.404	1060	0.062		
Total	66.597	1070			
FI Between Groups	3.927	10	0.393	8.427	0.000
Within Groups	75.167	1613	0.047		
Total	79.094	1623			
GB Between Groups	8.405	10	0.840	10.050	0.000
Within Groups	150.027	1794	0.084		
Total	158.432	1804			
GR Between Groups	1.643	10	0.164	2.448	0.007
Within Groups	122.962	1832	0.067		
Total	124.605	1842			
IT Between Groups	1.335	10	0.133	2.810	0.002
Within Groups	41.229	868	0.047		
Total	42.563	878			
LU Between Groups	0.750	10	0.075	1.061	0.390
Within Groups	63.361	896	0.071		
Total	64.111	906			
NL Between Groups	4.885	10	0.489	5.960	0.000
Within Groups	165.819	2023	0.082		
Total	170.704	2033			
NO Between Groups	3.945	10	0.395	3.780	0.000
Within Groups	187.123	1793	0.104		
Total	191.069	1803			
PT Between Groups	1.037	10	0.104	2.082	0.023
Within Groups	49.619	996	0.050		
Total	50.656	1006			
SE Between Groups	4.971	10	0.497	5.189	0.000
Within Groups	146.101	1525	0.096		
Total .	151.072	1535			

Table 20: ANOVA model for religious degree in European countries

## **Religious attendance**

This variable measures the attendance of religious services apart from special occasions. It uses a scale of 1-7 where 1 means never and 7 every day. For the entire Europe this variable presents a unique pick for people who declare to participate at religious services at least one a month. People who never attend religious services or attend it once a week present the lowest level of active citizenship.

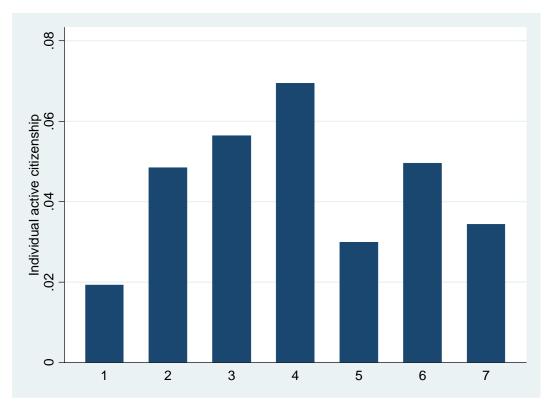


Figure 16: Individual level of active citizenship by religious attendance in all Europe

In order to test whether the level of active citizenship is significantly different among the different levels of religious attendance, the anova test was performed for the entire Europe. The result shown in table 21 confirms the existence of significant differences among the range of religious attendance.

Active					
Citizenship	Sum of Squares	df	Mean Square	F	Sig.
Between	13.20401102	6	2.200668503	22.894	0.000
Groups	13.20401102	O	2.200000303	22.094	0.000
Within	3977.487231	41379	0.096123329		
Groups	3911.401231	41379	0.090123329		
Total	3990.691242	41385			

Table 21: Anova model for religious attendance in all Europe

Moving towards country level analysis we perform an anova test. The results presented in figure 17 shows that there is no common trend in all European countries: in Denmark, Spain and Finland people who declare to participate at religious services every day have also the highest level of active citizenship. This phenomenon is not true in Austria, Belgium, Norway and Sweden where the most active citizens are people who attend religious services at least one a month.

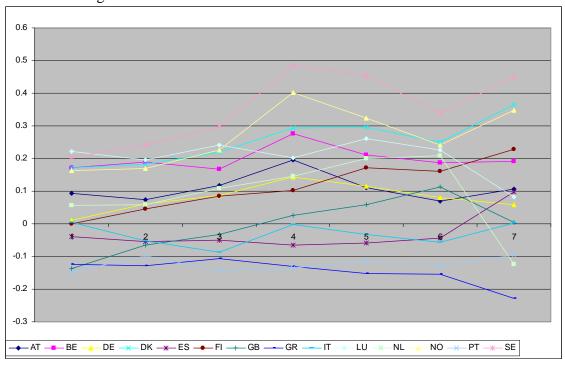


Figure 17: Religion attendance Gap Active Citizenship Index

In table 22 are shown the results for the anova test which confirm the existence of significant differences among the religious attendance. The test is not significant for Austria, Belgium, Spain, Greece, Luxemburg and Portugal.

Active Citizenship		Sum of Squares	df	Mean Square	F	Sig.
ΑT	Between Groups	1.484	6	0.247	1.983	0.065
	Within Groups	190.633	1529	0.125		
	Total	192.117	1535			
BE	Between Groups	1.194	6	0.199	1.803	0.095
	Within Groups	159.347	1444	0.110		
	Total	160.541	1450			
DE	Between Groups	4.755	6	0.793	8.044	0.000
	Within Groups	229.657	2331	0.099		
	Total	234.412	2337			
DK	Between Groups	1.426	6	0.238	2.985	0.007
	Within Groups	90.762	1140	0.080		
	Total	92.188	1146			
ES	Between Groups	0.373	6	0.062	1.062	0.384
	Within Groups	62.440	1066	0.059		
	Total	62.814	1072			
F	Between Groups	2.698	6	0.450	9.516	0.000
	Within Groups	76.396	1617	0.047		
	Total	79.094	1623			
GB	Between Groups	10.079	6	1.680	20.360	0.000
	Within Groups	148.352	1798	0.083		
	Total	158.432	1804			
GR	Between Groups	0.683	6	0.114	1.678	0.122
	Within Groups	124.443	1835	0.068		
	Total	125.126	1841			
IT	Between Groups	0.975	6	0.163	3.411	0.002
	Within Groups	41.588	873	0.048		
	Total	42.564	879			
LU	Between Groups	0.400	6	0.067	0.943	0.463
	Within Groups	63.795	903	0.071		
	Total	64.195	909			
NL	Between Groups	4.827	6	0.804	9.835	0.000
	Within Groups	165.962	2029	0.082		
	Total	170.789	2035			
NO	Between Groups	7.206	6	1.201	11.747	0.000
	Within Groups	183.918	1799	0.102		
	Total	191.124	1805			
PT	Between Groups	0.121	6	0.020	0.399	0.880
	Within Groups	50.741	1005	0.050		
	Total	50.862	1011			
SE	Between Groups	8.890	6	1.482	15.940	0.000
	Within Groups	142.397	1532	0.093		

Table 22: ANOVA model for religious attendance in European countries

#### **Lifelong learning**

This variable is dichotomous (0/1) and registers if people in the last 12 months have improved their skills. It thus can be considered a good proxy of lifelong learning. Figure 18 shows the bivariate relationship between the individual active citizen and the lifelong learning: the most active citizens are people who improve their skills, while people who do not improve their skills do not participate to active citizenship activities.

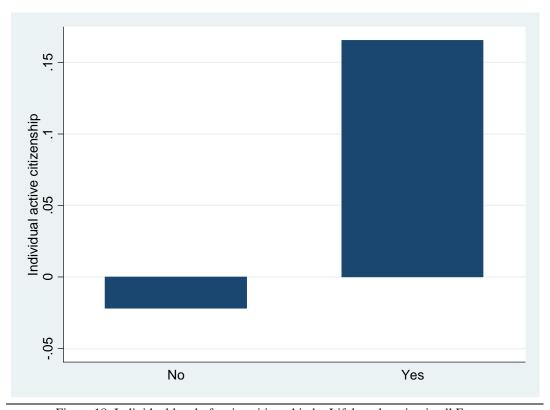


Figure 18: Individual level of active citizenship by Lifelong learning in all Europe

The anova test for the entire Europe shows significant differences in the level of active citizenship between the two categories of lifelong learning variable. The results are presented in table 23.

Active					
Citizenship	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	319.5763646	1	319.5763646	3596.513	0.000
Within Groups	3672.116178	41326	0.088857285		
Total	3991.692543	41327			

Table23: Anova model for lifelong learning in alla Europe

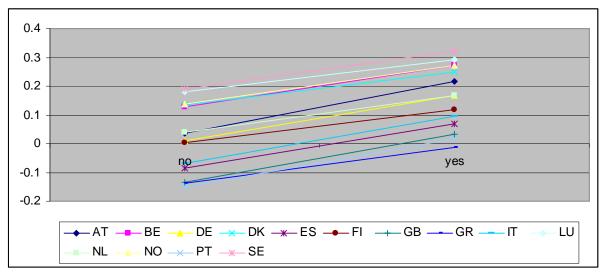


Figure 19: Lifelong Learning Gap Active Citizenship Index

Moving towards country level analysis we perform a mean test in order to assess if being in a lifelong learning process motivates the active citizenship more than do not improve our skills. As table 24 shows the mean differences are all significant for all European countries. This result confirms the trend previously found.

Country	Mean Difference	P>p	
AT	-0.185	0.000	***
BE	-0.145	0.000	***
DE	-0.156	0.000	***
DK	-0.111	0.000	***
ES	-0.149	0.000	***
FI	-0.115	0.000	***
GB	-0.173	0.000	***
GR	-0.142	0.000	***
IT	-0.159	0.000	***
LU	-0.099	0.000	***
NL	-0.135	0.000	***
NO	-0.138	0.000	***
PT	-0.141	0.000	***
SE	-0.130	0.000	***

```
*** < 0.01
0.01 < ** < 0.025
0.025 < * < 0.05
```

Table 24: Mean comparison test for lifelong learning by country

## **Media variables**

In this section we analyze the relation between the individual active citizen and the main variables related with the media, like Tv, radio, newspapers and internet in order to test if and how much media influence the level of active citizenship. For each variable we performed the analysis at an aggregated level, for the entire Europe, and than we move towards deepening this through a country level analysis.

#### **Watching TV**

This variable counts how many hours people watches TV a weekday and as shown figure 20 there is a threshold in "less than 0,5 hours" from which the level of active citizenship decreases constantly toward negative levels: watching too much tv does not encourage active citizenship until reaching the level where people do not participate at all in active citizenship activities.

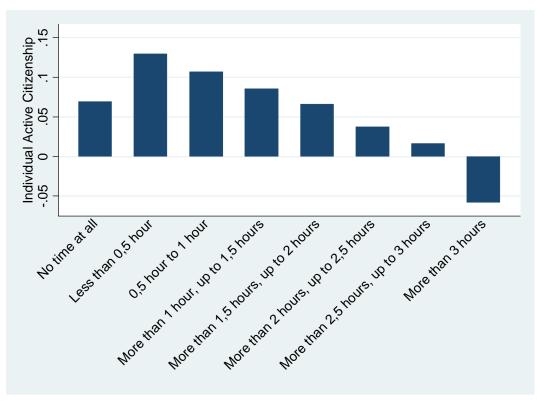


Figure 20: Individual level of active citizenship by watching tv in all Europe

The anova test for the entire Europe shows significant differences in the level of active citizenship among the different time people watch tv as shows in table 25.

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$\overline{}$						

Citizenship	Sum of Squares	df	Mean Square	F	Sig.
Between	148.5690619	7	21.2241517	228.065	0.000
Groups	140.3090019	7	21.2241317	220.003	0.000
Within	2052 42000	44404	0.00000004.4		
Groups	3853.139608	41404	0.093062014		
Total	4001.70867	41411			

Table 25: Anova model for watching tv in all Europe

This trend is confirmed at a country level as figure 21 shows. In general for most countries, the most active citizens watch tv for less than half an hour a day. There are few exceptions like for Spain and Netherlands where the threshold is in "0.5 to 1 hour" and Greece, where the level of active citizenship is in general very low. The anova test has been performed in order to assess if there are significant differences in the level of

active citizenship among the hours spent watching tv. Table 26 presented the results which confirm the existence of significant differences for all European countries except for Italy, Luxemburg and Portugal.

Thus in conclusion watching too much TV does not stimulate active citizenship, while it looks like the right "dose" of TV to be an active citizen is half an hour for the whole of Europe.

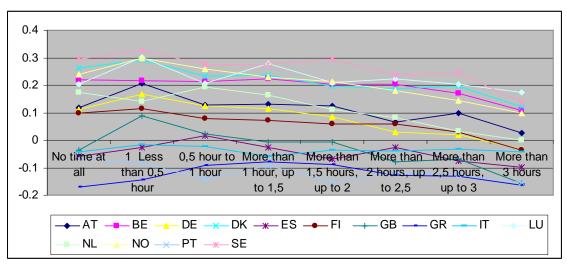


Figure 21: Watching TV Gap Active Citizenship Index

Active Citizenship		Sum of Squares	df	Mean Square	F	Sig.
AT	Between Groups	3.909	7	0.558	4.541	0.000
	Within Groups	188.548	1533	0.123		
	Total	192.457	1540			
BE	Between Groups	2.602	7	0.372	3.409	0.001
	Within Groups	157.670	1446	0.109		
	Total	160.272	1453			
DE	Between Groups	8.268	7	1.181	12.170	0.000
	Within Groups	226.229	2331	0.097		
	Total	234.497	2338			
DK	Between Groups	1.910	7	0.273	3.439	0.001
	Within Groups	90.276	1138	0.079		
	Total	92.186	1145			
ES	Between Groups	1.448	7	0.207	3.383	0.001
	Within Groups	65.341	1069	0.061		
	Total	66.788	1076			
FI	Between Groups	2.596	7	0.371	7.822	0.000
	Within Groups	76.610	1616	0.047		
	Total .	79.206	1623			
GB	Between Groups	9.177	7	1.311	15.785	0.000
	Within Groups	149.254	1797	0.083		
	Total	158.432	1804			
GR	Between Groups	2.039	7	0.291	4.347	0.000
	Within Groups	123.224	1839	0.067		
	Total	125.263	1846			
IT	Between Groups	0.160	7	0.023	0.469	0.858
	Within Groups	42.376	870	0.049		
	Total	42.536	877			
LU	Between Groups	0.958	7	0.137	1.946	0.060
	Within Groups	63.212	899	0.070		
	Total	64.170	906			
NL	Between Groups	9.677	7	1.382	17.418	0.000
	Within Groups	160.800	2026	0.079		
	Total	170.477	2033			
NO	Between Groups	5.127	7	0.732	7.078	0.000
	Within Groups	186.152	1799	0.103		
	Total	191.278	1806			
PT	Between Groups	0.389	7	0.056	1.104	0.358
	Within Groups	50.704	1007	0.050		
	Total .	51.093	1014			
	Between Groups	3.478	7	0.497	5.152	0.000
	Within Groups	147.848	1533	0.096		
	Total	151.327	1540			

Table 26: ANOVA model for watching tv in European countries

## Listening to radio

This variable computes how many hours in a total weekday people listening to the radio. From figure 22 we can see how much active citizens listen to the radio. There are two peaks "less than 0.5 hours" and "more than 2 hours-up to 2.5 hours", while people who do not listen to the radio at all are not interested in active citizenship activities.



Figure 22: Individual level of active citizenship by listening to radio in all Europe

The anova test for the entire Europe shows significant differences in the level of active citizenship among the different time people listening to radio as shown in table 27.

Active					
Citizenship	Sum of Squares	df	Mean Square	F	Sig.
Between	63.56975952	7	9.081394217	95.528	0.000
Groups	03.30973932	,	9.001394217	95.526	0.000
Within	3936.161788	41405	0.09506489		
Groups	3930.101700	41405	0.09306469		
Total	3999.731548	41412			

Table 27: ANOVA model for listening to radio in all Europe

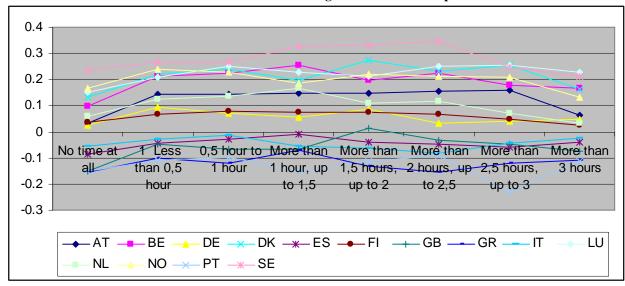


Figure 23: Listening to radio Gap Active Citizenship Index

We studied the bivariate relation between active citizenship and listening to the radio variable at a country level in order to highlight differences. As figure 23 shows each country presents its own trend, for instance, in Austria the most active are people who listen to radio more than 2.5 hours, while in Great Britain the most active listening to radio more than 1.5 hours. Nevertheless for all countries the less active are people who do not listen to radio at all. The anova test for each country shows significant differences in the level of active citizenship amongst the different time people listen to radio. The result are shown in table 28.

Active Citizenship	•	Sum of Squares	df	Mean Square	F	Sig.
	T Between Groups	3.470	7	0.496	4.041	0.000
,,	Within Groups	187.772	1531	0.123	1.011	0.000
	Total	191.242	1538	0.120		
В	E Between Groups	3.320	7	0.474	4.361	0.000
<u> </u>	Within Groups	157.261	1446	0.109	1.001	0.000
	Total	160.581	1453	0.100		
D	E Between Groups	1.018	7	0.145	1.452	0.180
	Within Groups	233.535	2332	0.100	11.102	0.100
	Total	234.553	2339	0.100		
D	K Between Groups	1.771	7	0.253	3.184	0.002
٥,	Within Groups	90.406	1138	0.079	0.101	0.002
	Total	92.176	1145	0.070		
E:	S Between Groups	0.756	7	0.108	1.749	0.094
	Within Groups	65.937	1068	0.062		0.00
	Total	66.693	1075	0.00=		
F	FI Between Groups	0.714	7	0.102	2.100	0.041
•	Within Groups	78.505	1617	0.049		0.0
	Total	79.219	1624	0.0.0		
G	B Between Groups	3.249	7	0.464	5.375	0.000
	Within Groups	155.183	1797	0.086	0.0.0	0.000
	Total	158.432	1804			
G	R Between Groups	1.195	7	0.171	2.531	0.014
	Within Groups	124.067	1839	0.067		
	Total	125.263	1846			
	T Between Groups	0.381	7	0.054	1.123	0.346
	Within Groups	42.164	871	0.048		
	Total	42.545	878			
L	U Between Groups	1.119	7	0.160	2.285	0.026
	Within Groups	62.994	900	0.070		
	Total	64.113	907			
N	L Between Groups	4.312	7	0.616	7.509	0.000
	Within Groups	166.215	2026	0.082		
	Total	170.527	2033			
N	O Between Groups	2.519	7	0.360	3.429	0.001
	Within Groups	188.760	1799	0.105		
	Total	191.278	1806			
Р	T Between Groups	0.888	7	0.127	2.539	0.014
	Within Groups	50.149	1004	0.050		
	Total	51.037	1011			
S	E Between Groups	2.269	7	0.324	3.333	0.002
	Within Groups	149.058	1533	0.097		
	Total	151.327	1540			

Table 28: ANOVA model for listening to radio in European countries

## **Reading newspapers**

This variable, like the other media variables, counts how many hours in average a weekday people read newspapers. As figure 26 shows active citizens are people who read newspapers and in particular the most active are those who reads from 1 to 1,5 hours a day or more than 3 hours a day: the bivariate distribution increase from "less than 0.5 hours" reaching its first peak and than decreases slowly until "more than 2 hours, up to 2.5 hours". People who do not read newspapers are not active citizens.

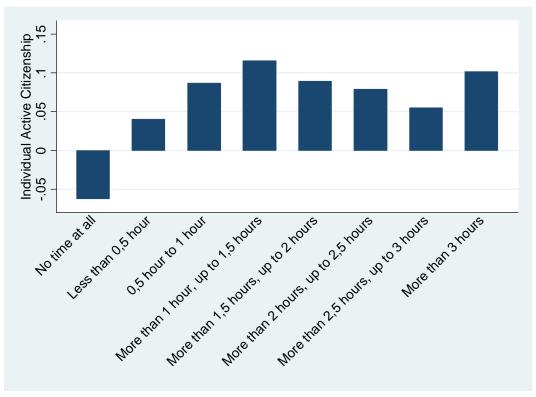


Figure 24: Individual level of active citizenship by reading newspapers in all Europe

The anova test for the entire Europe shows significant differences in the level of active citizenship among the different time people spend reading newspapers (as table 29 shows).

Active					
Citizenship	Sum of Squares	df	Mean Square	F	Sig.
Between	156.2479402	7	22.32113432	240 265	0.000
Groups	100.2 17 0 102	•	22.02110102	210.200	0.000
Within	3844.477115	41382	0.092902158		
Groups	3044.477113	+130Z	0.032302130		
Total	4000.725055	41389			

Table 29: ANOVA model for reading newspapers in all Europe

We deepened the analysis by analyzing the relation between the two variables at a country level. As shown in figure 25 there is a big variability across countries and each one present its own trend like for instance in Italy and in Sweden, the most active are the ones who reads newspaper more than 3 hours a day, while in Belgium the most active are the one who read newspaper between 0.5 to 1 hour a weekday. The anova test has been performed in order to assess if the differences in the level of active citizenship among the categories of this variable are significant. As table 30 shows in all countries there are significant differences.

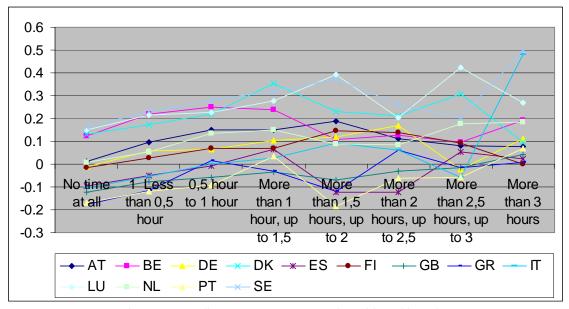


Figure 25: Reading newspapers Gap Active Citizenship Index

Active				_	
Citizenship	Sum of Squares	df -	Mean Square	F	Sig.
AT Between Group		7	0.393	3.180	0.002
Within Groups	189.657	1534	0.124		
Total	192.410	1541	0.005	0.440	0.000
BE Between Group		7	0.695	6.446	0.000
Within Groups	155.533	1442	0.108		
Total	160.400	1449	0.000	2.04.4	0.000
DE Between Group		7	0.389	3.914	0.000
Within Groups	231.830	2332	0.099		
Total	234.553	2339	0.545	7.040	0.000
DK Between Group		7	0.545	7.013	0.000
Within Groups	88.374	1138	0.078		
Total	92.186	1145 7	0.200	6.437	0.000
ES Between Group		=	0.386	6.437	0.000
Within Groups Total	63.861	1064	0.060		
	66.565	1071	0.004	F F40	0.000
FI Between Group		7	0.264	5.516	0.000
Within Groups	77.371	1617	0.048		
Total	79.219	1624	0.005	0.700	0.000
GB Between Group		7	0.325	3.739	0.000
Within Groups	156.157	1797	0.087		
Total CR Patrice of Crown	158.432	1804	4.055	40.707	0.000
GR Between Group		7	1.255	19.797	0.000
Within Groups	116.480	1838	0.063		
Total	125.262	1845	0.050	7.040	0.000
IT Between Group		7	0.359	7.810	0.000
Within Groups	39.984	870	0.046		
Total	42.497	877	0.200	F 207	0.000
LU Between Group		7	0.368	5.387	0.000
Within Groups	61.551	900	0.068		
Total	64.130	907	0.720	0.040	0.000
NL Between Group		7	0.730	8.940	0.000
Within Groups	165.451	2026	0.082		
Total	170.561 s 1.974	2033	0.282	0.004	0.000
NO Between Group		7		2.681	0.009
Within Groups	189.304	1799	0.105		
Total	191.278	1806		6 204	0.000
PT Between Group		7	0.311	6.384	0.000
Within Groups	48.884	1004	0.049		
Total	51.060	1011	0.400	4 470	0.000
SE Between Group		7	0.433	4.473	0.000
Within Groups	148.297	1533	0.097		
Total	151.327	1540			

Table 30: ANOVA model for reading newspapers in European countries

## **Surfing the web**

This variable counts how many hours on average weekday people surf the web. As figure 26 shows there is an increase in the level of active citizenship as the use of internet increases: therefore the more people surf the web the more active they are. This result has clear implications concerning the digital divide.

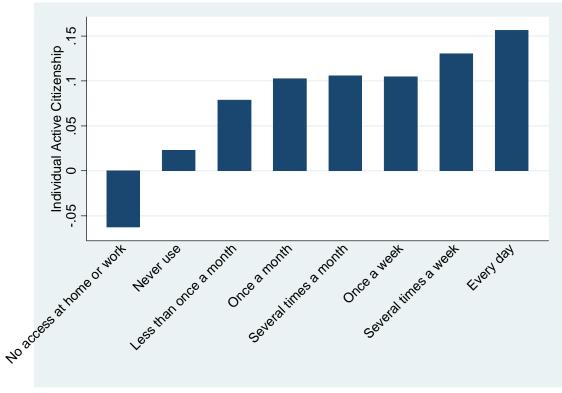


Figure 26: Individual level of active citizenship by surfing the web in all Europe

The anova test for the entire Europe shows significant differences in the level of active citizenship among the different time people spend surfing the web shown in table 31.

Active					
Citizenship	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	270.16446	7	38.59492286	441.905	0.000
Within Groups	2920.74244	33442	0.087337553		
Total	3190.9069	33449			

Table 31: ANOVA model for surfing the web in all Europe

As figure 27 shows, we moved toward country level analysis also for this variable. We found different trends in each country, for instance in Luxembourg the most active people are those who surf the web once a week, while in Belgium once a month and in Austria several time a week. The less active are the one who do not use internet at all: this trend is constant for each country. In table 32 the anova test has been reported in order to assess the differences in the level of active citizenship among the categories of this variable. The results confirm the existence of specific trends across the countries and of significant differences.

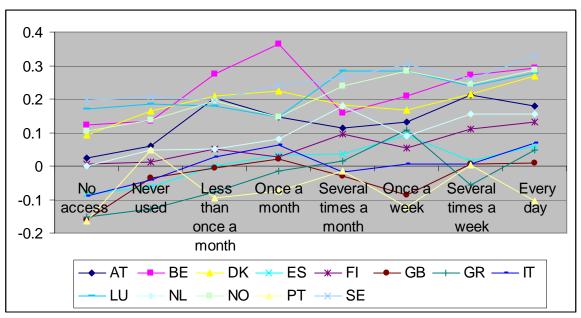


Figure 27: Reading newspapers Gap Active Citizenship Index

Citizenshi		Sum of Squares	df	Mean Square	F	Sig.
P	T Between Groups	10.140	7	1.449	12.121	0.000
	Within Groups	182.366	1526	0.120		
	Total	192.506	1533			
В	E Between Groups	8.927	7	1.275	12.156	0.000
	Within Groups	151.587	1445	0.105		
	Total	160.513	1452			
D	K Between Groups	5.052	7	0.722	9.433	0.000
	Within Groups	87.136	1139	0.077		
	Total	92.188	1146			
Е	S Between Groups	3.196	7	0.457	7.656	0.000
	Within Groups	63.383	1063	0.060		
	Total	66.579	1070			
	FI Between Groups	4.188	7	0.598	12.893	0.000
	Within Groups	75.031	1617	0.046		
	Total	79.219	1624			
G	B Between Groups	10.455	7	1.494	18.138	0.000
	Within Groups	147.977	1797	0.082		
	Total	158.432	1804			
G	R Between Groups	5.940	7	0.849	13.051	0.000
	Within Groups	119.173	1833	0.065		
	Total	125.113	1840			
	IT Between Groups	2.452	7	0.350	7.599	0.000
	Within Groups	40.104	870	0.046		
	Total	42.556	877			
L	U Between Groups	2.044	7	0.292	4.244	0.000
	Within Groups	61.999	901	0.069		
	Total	64.043	908			
N	L Between Groups	9.692	7	1.385	17.435	0.000
	Within Groups	161.056	2028	0.079		
	Total	170.748	2035			
N	O Between Groups	10.670	7	1.524	15.183	0.000
	Within Groups	180.608	1799	0.100		
	Total	191.278	1806			
F	T Between Groups	2.911	7	0.416	8.690	0.000
	Within Groups	48.182	1007	0.048		
	Total	51.093	1014	<del>-</del>		
.5	E Between Groups	4.238	7	0.605	6.316	0.000
_	Within Groups	146.838	1532	0.096	3.0.0	3.300
	Total	151.075	1539			

Table 32: ANOVA model for surfing the web in European countries

### Summary of descriptive statistical results of individual socio-economic variables

In summary the descriptive statistical results for the individual level of Active Citizenship show that there were a mixed pattern of gender differences with more women participating than men in Nordic countries and more men participating than women in Southern and Anglo-Saxon countries. In terms of education both years and levels of education had high associations with high levels of active citizenship across all countries. As hypothesized from the literature, age is an important factor with those who are of working age participating the most although there were some difference between the countries for concerning which age this was. Again as highlighted by the literature, wealth matters across Europe and the more you have the more you participate and the evidence shows that those below 12 000 euros do not participate. Where active citizens live depends on the country, but overall in Europe they tend to live more in the countryside whilst in contrast non active citizens live in small towns. Across almost all Europe it is those people who are not in work and not looking for a job who are the most active i.e. those with the most amount of free time. Concerning religion, if you come from a predominantly protestant country and you are religious then it is more likely that you are an active citizen. The trend is that in Catholic countries being religious has no association with active citizenship. However, high levels of religious beliefs and high levels of church attendance are associated with high levels of active citizenship across Europe. Participating in Lifelong learning has a high association with active citizenship across all European countries. 30 minutes of television across the whole of Europe is the amount of time which has the highest association with active citizenship and those who do not listen to the radio, do not read news papers and do not surf the web are the least active citizens across European countries. Thus information collected from media is important for participation but too much watching of the television reduces participation.

## **Country level variables**

In this section of this report we will investigate the level of active citizenship in relation to the main features of a country concerning their economic, social and cultural sphere. In the first step, we analyse the bivariate relationships between four different variables, GDP, Gini Index, average years of education per country and religious heterogeneity, compared with the countrys levels of active citizenship.

In table 33 the correlation matrix among the variables are presented. There is a strong negative relation (-0.79) between the GINI index and the level of active citizenship.

This relation suggests that the less income inequality there is the higher the levels of active citizenship. Table 33 shows another strong negative correlation (-0.78) between years of education and the GINI index which describes that the less years of education there are, the more income inequalities is recorded.

	Level Active			Year of	
	Citizenship	GDP pro	GINI	Education	Religious
	(country mean)	capita	Index	(country mean)	heterogeneity
Level Active					
Citizenship	1				
(country mean)					
GDP pro capita	0.630	1			
GINI Index	-0.796	-0.463	1		
Year of					
Education	0.592	0.526	-0.7844	1	
(country mean)					
Religious	0.558	0.435	-0.5921	0.8454	1
heterogeneity	0.000	0.433	-0.5921	0.0434	Į

Table 33: correlation matrix between country level variables and active citizenship

In this report the focus is on the relationship between the four variables with respect to the levels of active citizenship. Table 19 shows that the higher levels of active citizenship are associated with higher level of GDP per capita, more years of education and greater religious heterogeneity. In the next paragraphs we describe the bivariate relation between each variable and the level of active citizenship.

#### **Gross Domestic Product**

The GDP per capita has been added to the original data set as country level variable; it has been taken from the Eurostat database. The GDP is a measure for the economic activity: it is defined as the value of all goods and services produced less the value of any goods or services used in their creation. The volume index of GDP per capita in Purchasing Power Standards (PPS) is expressed in relation to the European Union (EU-27) average set to equal 100. It means that if the index of a country is higher than 100, this country's level of GDP per capita is higher than the EU average and vice versa. The index is expressed in PPS, i.e. a common currency that eliminates the differences in price levels between countries allowing meaningful volume comparisons of GDP between countries.

In table 34 are presented the GDP distribution per each country in 2002.

Country	GDP
PT	77.00
GR	90.10
ES	100.40
IT	111.90
DE	115.10
FI	115.20
GB	120.60
SE	121.10
BE	125.00
AT	126.20
DK	128.40
NL	133.30
NO	154.60
LU	240.20
EU-27	100.00

Table 34: GDP per capita in PPS

Since our interest is to characterize the economic dimension of each country by the level of active citizenship the relation between these two variables has been investigated.

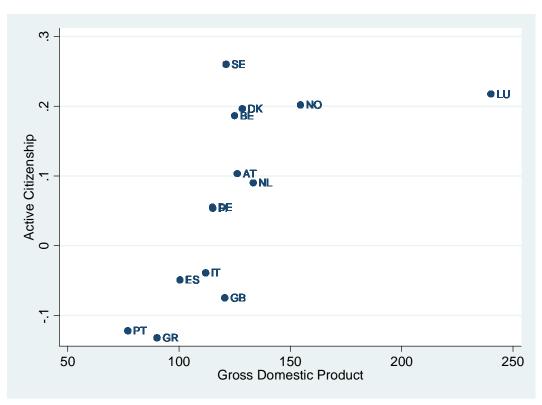


Figure 28: Level of Active citizenship by GDP

Figure 28 highlights how countries are clustered in two groups around the European GDP average: countries below the European GDP average present the least participation in active citizenship activities, with the exception of Italy and Great Britain, while countries with a GDP higher than the European average have higher level of active citizenship. There is a positive relation between GDP and level of active citizenship with some exception like Great Britain, which present a GDP higher than the EU average but a lower level of active citizenship, and Luxemburg which even if it has the highest level of GDP is not the country with the highest level of active citizenship. Active

Citizenship	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	534.5382309	13.000	41.11832546	491.031	0.000
Within Groups Total	3469.128011 4003.666242	41428.000 41441	0.083738728		

Table35: ANOVA model for GDP in Europe

The anova test for the entire Europe shows significant differences in the level of active citizenship among the different countries.

#### **Gini Index**

The Gini index is a measure of inequality of income distribution or inequality of wealth distribution. It has been taken from the Eurostat database. It is defined as a ratio with values between 0 and 100: a low Gini index indicates more equal income or wealth distribution, while a high Gini index indicates more unequal distribution. 0 corresponds to perfect equality, everyone having exactly the same income, and 100 correspond to perfect inequality, where one person has all the income, while everyone else has zero income.

Country	GINI index
AT	24
BE	28
DE	25
DK	22
ES	33
FI	24
GB	31
GR	33
ΙΤ	29
LU	27
NL	26
NO	25
PT	37
SE	24

Table 36: Gini index country distribution

Table 36 shows the Gini index distribution in each country and all the countries we study are in a range between 24 to 37, which is acceptable in term of wealth distribution: in other word there are not big income inequalities across the European countries we are analyzing. The Gini index is a good proxy for measuring the countries level of economic inequalities. The scale independence means that it does not consider the size of the economy, the way it is measured, or whether on average it is a rich or poor country, it is population independent because does not matter how large the population of the country is, but on the other hands it measures current income rather than lifetime income: a society in which everyone earned the same over a lifetime would appear unequal because of people at different stages in their life; a society in which students study rather than save can never have a coefficient of 0.

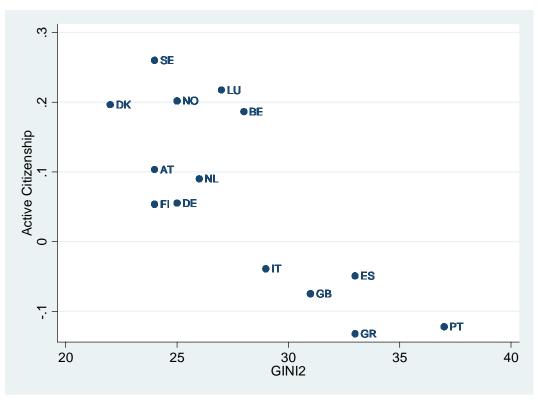


Figure 29: Level of Active citizenship by Gini Index

Since we are interested in the relation between active citizenship and socio-economic dimension of each European country bivariate relations between the Gini index and active citizenship are presented in figure 29. They show that more income inequalities there are the lower the level of active citizenship.

## Active

Citizenship	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	444.7701049	9.000	49.41890055	575.326	0.000
Within Groups Total	3558.896137 4003.666242	41432.000 41441	0.085897281		

Table 37: ANOVA model for GDP in Europe

The anova test shown in table 37 confirm the existence of statistical differences in the level of active citizenship among the Gini index.

## Years of education

This variable compute the average year of education in each country and it has been built from the same variable at the individual level. This variable has previously been considered as proxy of human capital.

	Year of
Country	education
	(country mean)
PT	7.09
GR	9.51
ES	9.94
IT	10.43
LU	11.92
FI	11.94
SE	11.99
BE	12.18
AT	12.27
GB	12.66
NL	12.81
DE	12.90
NO	13.21
DK	13.26

Table 38: Average years of education per country

Table 38 shows the distribution of year of education for each country. Countries with lower number of years of education belong to southern Europe, as Portugal, Greece, Spain and Italy, while countries with the highest number of years of education are Denmark, Norway and Germany. The relation between the years of education and the level of active citizenship is presented in figure 30 and shows that low years of education are associated to low level of active citizenship; there is an exception for Great Britain which has on average high numbers of years of education but lower levels of active citizenship.

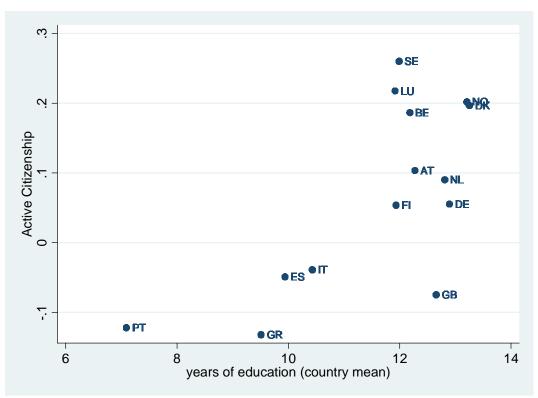


Figure 30: Level of Active citizenship by years of education Countries with a high number of years of education register also high level of active citizenship.

Active					
Citizenship	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	534.5382309	13.000	41.11832546	491.031	0.000
Within Groups	3469.128011	41428.000	0.083738728		
Total	4003.666242	41441			

Table 39: ANOVA model for years of education in Europe

The anova test presented in table 39 shows significant differences in the level of active citizenship among the years of education.

### **Religious heterogeneity index**

This variable measures religious diversity by taking into account the different religious denominations in each country as suggested by Hello et al. 2008. It has been constructed as:

$$rel_het = (1 - \sum x_n^2)/1 - 1/k$$

where x indicates the different proportion of denominations in each country and k the number of denomination: lower value of the index means less religious denomination and more homogeneity, while higher value means more numbers of religious and consequently more heterogeneity. This variable has been used as a picture of the religious dimension at country level and it has been computed using the index developed in Hello et al. 2008 using the European Social Survey 2002 data.

	Religious			
Country	Heterogeinity			
	Index			
GR	0.163			
PT	0.404			
ES	0.485			
FI	0.569			
IT	0.571			
AT	0.722			
LU	0.781			
DK	0.801			
BE	0.919			
NO	0.923			
DE	0.993			
GB	0.993			
NL	1.060			
SE	1.066			

Table 40: Distribution of religious heterogeneity index by country based on ESS 2002 data

Table 40 presents the distribution of the index for each country. Greece emerges as the most homogenous country while Sweden the most heterogeneous one. Figure 31 shows the relation between the index and the level of active citizenship in each country. The lowest level of active citizenship is recorded in the most religious homogenous countries. Great Britain does not follow this trend because it has a high level on the religious heterogeneity index but it is characterized by lower levels of active citizenship. In general, however, countries who score higher on the religious

heterogeneity index present also higher levels of active citizenship. Sweden confirms its position as the most active country.

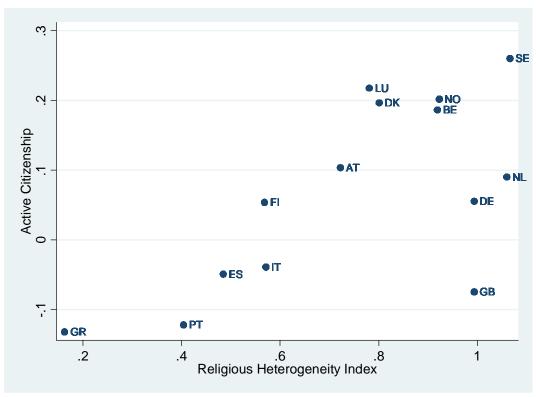


Figure 31: Level of Active citizenship by religious heterogeneity

Regarding the five countries with lower levels of active citizenship they are the same cluster we found for the previous country level variables. In table 41 the anova test shows that there are significant differences in the level of active citizenship among the religious index.

Active Citizenship	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	473.8958646	12.000	39.49132205	463.511	0.000
Within Groups Total	3529.770377 4003.666242	41429.000 41441	0.085200473		

Table 41: ANOVA model for religious heterogeneity index in Europe

## 3 The need of a model

In the previous section we studied the bivariate relations among all the variables, both at the individual level and the aggregate level. This preliminary analysis allows us to understand how the levels of active citizenship varies with respect to the level of the all variables considered; thus this type of descriptive analysis can provide only preliminary associations between variables and inferences are not possible. In fact, we remind the reader that in general descriptive statistics focus on describing and summarizing the data. Alternatively, inferential technique, such the regression analysis, goes beyond the immediate and infers the characteristics of the population based on the sample and controlling for the value of all the variables included in the model. This is the reason why some variables that appear to have an influence on active citizenship based on descriptive statistics may not surface as important predictors of active citizenship in the regression analyses. Moreover, when these variables are found to be influential, it is not necessarily in the same way as suggested by the descriptive statistics.

For these reasons, the next step is to investigate the existence of any multivariate relation between the considered variables and the level of active citizenship; in other words we need to model the relation propsed and hypothesized at the descriptive level. One possible model we can use is a regression model for studying how changes in one or more variables will change the value of another variable. We define the dependent variable, a variable whose value depends on the value of other variables, in our case the level of active citizenship and a set of independent variables whose values are not dependent on other variables. In our model this set of variables is represented by all the individual and aggregated variables introduced in the previous sections. Regression models consider the dependent variable as a function of the independent variables, corresponding parameters and an error term. The function which links the dependent variable to the independent one can be liner or not depending on the data structure. The error term is treated as a random variable and represents unexplained variation in the dependent variable. The parameters are estimated so as to give a "best fit" of the data. The regression model allows us to explain the active citizenship phenomenon through the independent variables: in this way we are able to sketch an active citizenship identikit.

In the next section we show the model selection process and the methodological assumptions adopted for the analysis.

# The methodological assumptions

The nature of data in our dataset presents a nested pattern of variability: in particular we have a nested source of variability due to individuals and countries. In literature this type of data are known as hierarchical or nested data and are modeled by using multilevel models. Here we present the best way to deal with multilevel approach by challenging both substantive and statistical motivations.

In general multilevel data structures exists if some units of analysis can be considered as a subset of other units, like for instance time series for different countries, individuals grouped in clusters or in countries. The goal of multilevel is to account for variance in a dependent variable which is measured at the lowest level of analysis by considering information from all levels of analysis: a multilevel data structure may count more than one level of analysis (Snijders and Bosker, 1999). The substantive motivations of using multilevel analysis are different: the first reason is the possibility to combine multiple level of analysis in a single comprehensive model by specifing predictors at different levels: in this way, spanning multiple level of analysis the model suffers less for misspecification than models with single levels. The second reason for using multilevel models is that it is possible to specify cross levels interactions. In this way we can detect if the causal effect of lower level predictors is conditioned by higher level predictors.

In additions to these substantive motivations there are also important statistical motivations for using multilevel models. In particular ignoring the multilevel structure of data carries significant statistical costs in term of possibly incorrect standard errors. In other words if individual levels, for example citizens, are influenced by contextual factors, then individuals sampled by the same context share common behaviors, that is the observations at the individual level are influenced by each other.

In terms of statistical models this mutual influence violates the assumption that the errors are independent. The violation of this assumption produces too low standard errors and consequently the t test tend to be too high, in other words predictors appear to have significant effect when in reality they do not have. Clustering in multilevel data structures pose a challenge to statistical analysis. One approach to solve this problem is to absorb contextual and subgroup differences by using dummy variables but this practice even if it is able to take into account the subgroup effect, is not able to explain why there is an effect at the subgroup level; dummies are not able to explain cross level interactions.

The best way to analyze hierarchical data is by using multilevel models which provide correct estimations of standard errors and allows simultaneous modeling of individual level and country level effects. We performed our analysis with Stata software.

# The Models selection

The case study we deal with has a structure which presents a hierarchical structure with two different levels, individuals, at the lower level, and countries at the higher level. The models we performed are presented in the table 43 which shows deviances for each models defined as minus twice the natural logarithm of the likelihood.

Model		-2Loglikelihood	∆2Loglikelihood	∆ df
0	Intercept	11292.5044		
1	0 + random variation at country level	7858.6448	3433.8596	1
2	1 + Individual variables	4386.733	3471.9118	2
3	2 + country characteristics	4363.4656	23.2674	20

Table 42: Model selections based on deviance test

The deviance can be regarded as a measure of lack of fit between model and data, as we can see from the table 41 we interpret the deviance as values differences for the four models we run. The deviance difference follows a  $\chi^2$  distribution with degrees of freedom equal to the number of parameters to be estimated.

The first model we run is the null model which includes only the intercept and allows variation only at individual level. Model one is a two levels model and the intercept varies across individuals as well as across countries. By confronting the two models we can conclude that the second one is better than the first one because there is a large improvement in the deviance. This means that the level of active citizenship significantly varies both at individual and countries level. The difference between the two deviances is 3434 and it is significant with one degree of freedom. We can calculate the intraclass correlation coefficient  $\rho$  as proportion of variance that is accounted for the group level: in model 1  $\rho$ =0.016 which is high, compared to similar case study related to social context. This means that there are significant similarities between individuals in the same country: this justify the use of hierarchical models.

Since we are interested in characterizing the individual identikit of active citizens we introduced variables at the individual level in the model, which, as we can see from table 27, improve significantly the model: the deviance decrease of 3471 with two

degree of freedom and the variance at individual level is decreased significantly, from 0.084 to 0.075, as we can see from table 42. In this model we assume that countries specific regression lines are parallel, this assumption allows individual varying differently across countries, but countries differ with respect to the average value of the dependent variable. In model 3 we introduce the country variables because we want to define the peculiarity of each country taking into account the social, economic and cultural dimension. As we can see from table 27 the model improves significantly, a change of 23 in the deviance with 20 degree of freedom. By introducing group level variables the unexplained variance at group level decreased from 0.01 to 0.001, while the variance at individual level is unchanged, this means that the model catches the group level effect.

# The Model

In this section we present the model selected according with the procedure introduced in the previous paragraph.

The model has been performed on a set of 14 European Countries, which are almost all the old member states plus Norway. The total number of observations considered in the model is equal to 24915. In particular the countries included in the analysis are:

List of countries in the model						
Austria	Finland					
Belgium	United Kingdom					
Germany	Greece					
Denmark	Italy					
Spain	Luxembourg					
Netherlands	Norway					
Portugal	Sweden					

Table 43: List of countries in the model

The remaining countries (Poland, France, Hungary, Slovenia and Ireland) have been excluded from the analysis due to the fact that some individual level variables were missing.

People in education has been excluded from the analysis so, the results are referred to those who have already completed their formal education.

The model we performed is a linear random slope model:

$$Y_{ij} = \gamma_{00} + \gamma_{10}x_{1j} + \dots + \gamma_{i0}x_{ij} + \gamma_{01}z_{.1} + \dots + \gamma_{0j}z_{.j} + U_{0j} + U_{1j}z_{ij} + R_{ij}$$
(1)

```
for i=1,..., 24915 and for j=1,...,14
```

where  $\gamma_{00}$  is the intercept, that is the random effect at group level,  $\gamma_{10}$  -  $\gamma_{i0}$  are the coefficients for level one variables, this is the fixed part of the model,  $x_{1j}$ -  $x_{ij}$  are the individual variables, that is variables associated to level one,  $\gamma_{01}$  -  $\gamma_{0j}$  are coefficients for second level variables as fixed effect,  $z_{1}$ -  $z_{1j}$  are variables for second level,  $U_{0j}$  is the residual for second level variables,  $R_{ij}$  is the residual for individual level,

In particular, the individual variables considered in the model are:

- Age: age of the respondent at the time of the interview.
- Gender: dichotomous (male=1, reference category)
- Years of education: self reported number of years of formal education attended
- LifeLongLearning: participation at conferences, courses or other learning activities during the past 12 months (yes/no)
- Attendance of Religious service apart special occasion: (1: Never, ..., &:Every Day recoded: scale inverted)
- How religious are you: subjective feeling (0-10)
- Watching TV: average hours spent in watching TV on a weekday (0:never 7: more than 3 hours)
- Listening to the radio: average hours spent in listening to the radio on a weekday (0:never 7: more than 3 hours)
- Listening to the radio: average hours spent in reading newspaper on a weekday (0:never 7: more than 3 hours)
- Domicile: urban=0/rural=1 (our elaboration of the original 5 categories variables with urban=living in a big city/suburbs/small city; rural: living in a country village/ countryside)
- Self Reported Income: self reported income of the respondent, coded following the ESS coding ( 1 to 12)
- Main Activity: our elaboration from the original ESS question (with: 1-employed: in a paid work/ military service; 2-unemployed: unemployed, looking for a job; 3- Retired: retired; 4- Other: Sick, Housework, Other.). For computational reason the variable has been transformed in four dummy variables
  - main activity: employed (reference category)
  - main activity: unemployed
  - main activity: retired
  - main activity: other

To facilitate the coefficients comparison all the variables have been standardized using the z-score formula. During the analysis the quadratic effect of some variables has been included in the model.

Then, at the country level the following variables were considered in to the model:

- GDP pro capita: year 2002, Eurostat source
- GINI index: year 2002 (2001 or 2003, when 2002 was not available)
- Years of Education (country mean)
- Religious Heterogeneity: (elaboration of ESS data following the Hello et al. paper)

Due to the country level variables considered, the individual level variables "years of education" and "self-reported income" have been standardized at the country level in order to avoid the inclusion of redundant information.

The model has been applied to the entire set of countries considered in the analysis, so the model has to be read for the entire Europe. The application of this model to clusters of countries is not possible due to the collinearity problem: not enough countries for the number of country level variables included in the model. Furthermore, we ran a new model to the four clusters (Nordic, Continental, Mediterranean and Anglo-Saxon Countries) with the same set of individual variables and a restricted number of country level variables. The results recorded in the 4 clusters are approximately the same. For this reason, we present in this report only the multilevel model refering to the whole of the dataset (14 European countries).

# Results

In this section, the results of the model are presented and the effects of the individual and country level variables are discussed.

#### Individual Variable.

The results of the multilevel models are presented in table 44 (see the end of the paper). Since we are interested in sketching the identikit of active citizens in Europe we present here first the discussion on the effect of the individual variables and then on country level variables...

#### Age and Active Citizenship

The effect of age on active citizenship is significant and is quadratic. This means that the effect of the age is positive until reaching a maximum and then this effect start to decrease. *Ceteris paribus* for the effect of the other variables, the maximum effect of age is recorded for people of 58 years old after this level, the effect of age decreases. The age-interval where people are more active is from 48 to 64 years old. Figure 32 shows the trend of the predicted values of age effect where we can conclude that the phenomenon of being an active citizenship belong to people in working age *ceteris paribus* al the other variables. Moreover, older people are more active than the young generation. This result follows previous research in the field that through out the lifecycle it is the middle-aged who participate much more. It equally points towards the downwards trend in participation levels from the Baby Boomers/ 68 generation who have always been active in comparison with the new generation of less engaged youth.

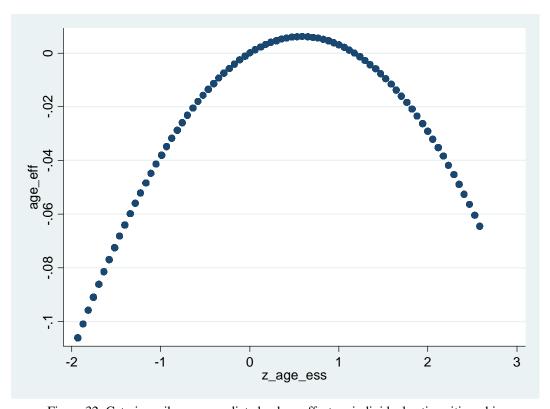


Figure 32: Ceteris paribus age predicted values effect on individual active citizenship

## Gender and Active Citizenship

As shown in table 44 the gender is not significant: no statistical difference is found for the level of active citizenship between male and female, this means that the level of active citizenship is not influenced by the gender.

### Education, Life Long Learning and Active Citizenship

As predicted from the previous literature, the effect of education is positive and is strengthened by considering its quadratic trend, which is positive and reinforces the effect of the variable. *Ceteris paribus*, the level of active citizenship increase when the number years of education completed increases. This effect is not linear but quadratic (so it is stronger) and this imply that people with a great number of years of education participate in more active citizenship activities than the others. Figure 33 shows the predicted value education trend.

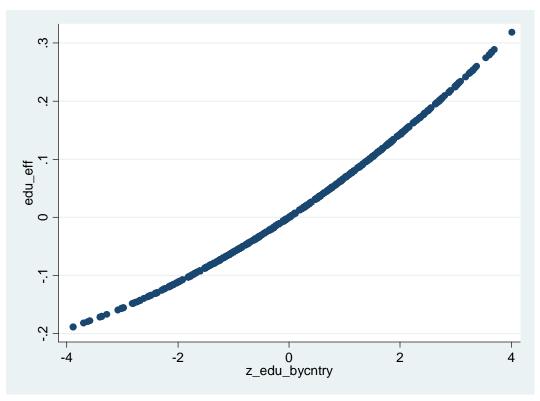


Figure 33: Ceteris paribus predicted values education effect on individual active citizenship

A fact which has been less investigated in debates on education and it relationship with participation is the relationship between lifelong learning and levels of active citizenship. Life long learning (measured as: attended conferences or other learning

activities in the last 12 months) has also a considerable positive effect on the level of active citizenship. In fact, people who attended conferences or other learning activities in the past 12 months have a higher level of active citizenship than those who do not participate in Lifelong learning.

### Religion and Active Citizenship

Religion has been included in the model with two questions: Importance of Religion and attendance of religious services apart from special occasions. The two variables show a very interesting picture of the respondent behavior and clearly show the effect of religion in the model. In particular the importance of religion which is measured with a Likert scale 0-10. In order to capture the real effect of religion, the quadratic effect of the variable was also included in the model. The effect is unusual, as shown in figure 34, where the predicted values presents an interesting U-shape. In fact, *ceteris paribus*, people declaring that in their life the religion has an importance equal to 0 have a level of active citizenship higher than those who declared an importance of religion varying from 1 to 6. Then, a higher level of active citizenship is recorded by those who declared an importance of religion greater than 6. In some sense a possible interpretation can be that people having clear ideas in their mind about religion (either absolutely no importance or very important) have a higher level of active citizenship with respect to those who are a little more vague about the role of religion in their lives.

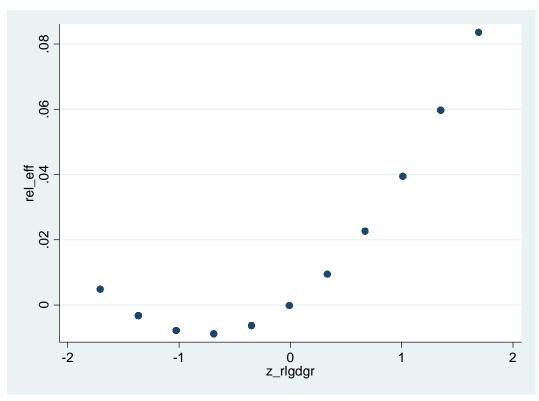


Figure 34: Ceteris paribus predicted values religion effect on individual active citizenship

The effect of attending religious services is significant, linear and positive. So increasing the frequency of attendance at religious services increases also the level of active citizenship. This result is in-line with the previous one: people who are really religious (religion is very important and they attend religious services) has a higher level of active citizenship with respect to the others.

#### Citizenship and Active Citizenship

We introduced in the model the legal citizenship variable, however, being a citizen of the country is not significant and has no effect on active citizenship as shown in table 44.

### Media Impact on Active Citizenship

The next variables we put in the model are related to the use of media. In particular the variable "time spent in watching TV on a average weekday" was included in the model together with its quadratic effect. The result is very interesting. In fact, the inclusion of a quadratic variable gives a U-shape to the effect of TV permitting a more complete analysis as shown in figure 37 where predicted values of watching tv are presented.

People who do not watch TV have a lower level of active citizenship than those who watch TV for one hour per day. After that value, increasing the time in watching TV decreases the level of active citizenship in a very consistent way. TV has a very negative effect for people who watch TV for more than 2 hours per day. In figure 35 are shown the *ceteris paribus* predicted values of watching tv.

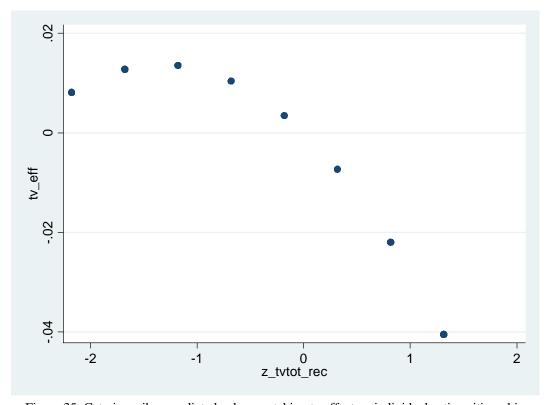


Figure 35: Ceteris paribus predicted values watching tv effect on individual active citizenship

The next media variable is "Time spent in listening to the radio on an average weekday": it is not significant in the model and has no effect on the level of active citizenship. The list of the media variables is ended by reading newspaper which has a positive effect on active citizenship. Its effect is linear. Increasing the time on reading newspaper increases also the level of active citizenship. Thus certain forms of information gathering have a positive effect on participation whilst watching tv for long periods and listening to the radio have no positive effects.

### Domicile and Active Citizenship

We were interested also to discover if living in cities or in the country side influences the level of active citizenship. The variable we used is an elaboration of the original "domicile of the respondent" which has been recoded in Urban/Rural as a dummy variable. The result is significant and shows that people living in a rural area have a higher level of active citizenship. This results was quite surprising considering those in the countryside have typically further to travel to participate in activities, however, and as noted by Putnam 2001, communities in the countryside are often stronger than in the towns

### Self-reported household income and Active Citizenship

The next two variables are related to the economic aspect of each individual. In particular we introduce in the model the self-reported household income, standardized within each county. It has a significant positive effect and shows that in every country, the higher the household income, the higher the levels of active citizenship recorded by the respondents. This result is confirmed also by GDP, which has a positive sign. We can interpret both the variables as the level of active citizenship is higher for individuals with high household income and for countries with a high GDP.

### Employment and Active Citizenship

We also studied if the different professional status influences the level of active citizenship. The "main activity" variable presents no difference on the effect of active citizenship if the respondent is employed (reference category), unemployed or retired. The only category which turned out to be significant is "others": (housewives, not looking for a job, others). People belonging to this category have a higher level of active citizenship largely we would suspect from having a greater amount of time to participate.

### **Country Level Variables**

Since we are interested also to know the differences between countries in the level of active citizenship we introduced country level variables. The multilevel model we run also allows us to define country characteristics. We introduced four second level variables each for a different dimension which contributes to define the country dynamics like the economic, the social, cultural and religious one. As we can see from table 44 GDP pro capita Gini Index and Religious heterogeneity are significant. The average years of education by country are not significant. The interpretation of these results are that the level of active citizenship is higher in countries with a higher GDP pro capita, a lower GINI index, so a higher level of income equality, and a greater Religious homogeneity. Below we examine these results in detail.

The GDP pro capita is significant with a positive sign, in figure 36 we show the *ceteris* paribus predicted values effect of GDP on the level of active citizenship. The relation is

linear and shows that countries with higher GPD per capita have also higher levels of active citizenship.

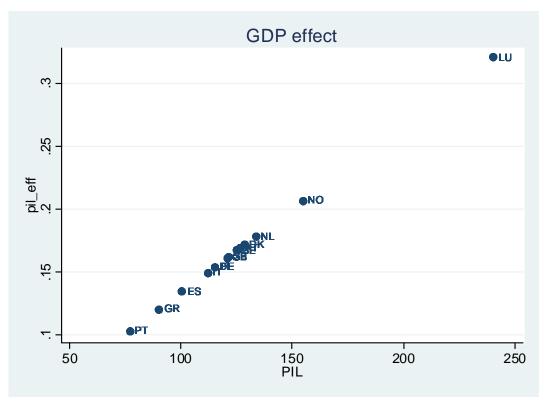


Figure 36: Ceteris paribus predicted values GDP effect on active citizenship at country level

In figure 37 is shown the *ceteris paribus* predicted value effect for the Gini index. Also in this case the trend is linear but the slope is negative: this means that countries with big differences in distributional income have also low level of active citizenship, while the highest level of active citizenship are registered for countries with more equal income distribution.

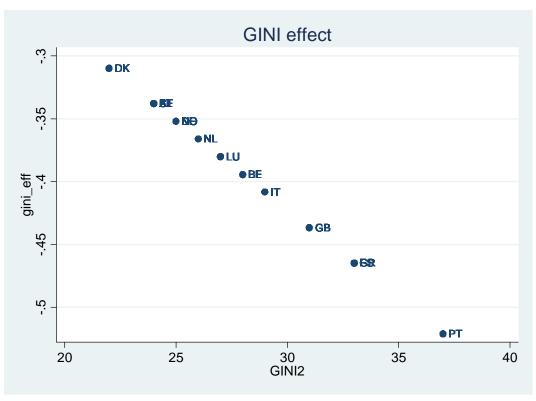


Figure 37: Ceteris paribus predicted values GINI effect on active citizenship at country level

Figure 38 shows the *ceteris paribus* predicted values *effect* of the religiosity heterogeneity index on active citizenship: countries with more religious heterogeneity are characterized by higher level of active citizenship.

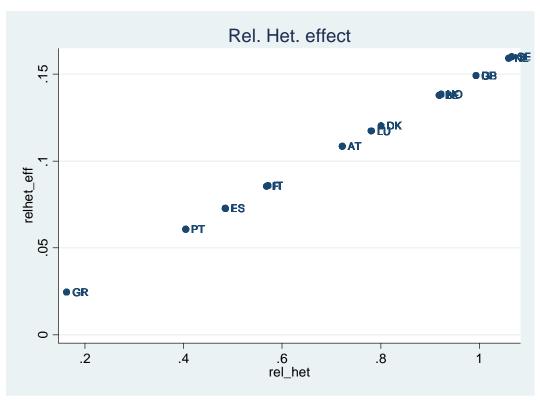


Figure 38: Ceteris paribus predicted values Religious heterogeneity index effect on active citizenship at country level

Dependent: Individual Active Citizenship		model 0		model 1		model 2		model 3	
Fixed effect		Coef.	P> z	Coef.	P> z	Coef.	P> z	Coef.	P> z
	age					0.021	0.000	0.021	0.000
	age (quadratic)					-0.018	0.000	-0.018	0.000
	gender:male					0.002	0.650	0.002	0.632
	years of education					0.064	0.000	0.064	0.000
	years of education (quadratic)					0.004	0.021	0.004	0.022
	LifeLongLearning					0.092	0.000	0.092	0.000
<u> </u>	Attendance Relig. Service					0.027	0.000	0.027	0.000
Individual Level	Religious Feeling					0.024	0.000	0.024	0.000
	Religious Feeling (quadratic					0.015	0.000	0.015	0.000
gns	Citizenship					0.015	0.215	0.015	0.203
ĬŽ	Watching Tv					-0.021	0.000	-0.020	0.000
<u>pr</u>	Watching TV (quadratic)					-0.008	0.001	-0.008	0.001
	Listening to the Radio					0.001	0.522	0.001	0.526
	reading Newspaper					0.032	0.000	0.032	0.000
	Domicile:Rural					0.020	0.000	0.020	0.000
	Self Reported income					0.013	0.000	0.013	0.000
	Main Activity: unemployed					-0.010	0.118	-0.010	0.118
	Main Activity: retired					0.011	0.176	0.011	0.183
	Main Activity: other					0.076	0.000	0.075	0.000
>	GDP pro capita							0.001	0.002
country	Gini index							-0.022	0.001
Country Level	Years of Education (country mean)							-0.041	0.061
	Religious heterogeneity							0.227	0.011
	Constant	0.068	0.002	0.068	0.034	0.02318	0.508		0.044
Random-effects Parameters		Estimate	Std. Err	Estimate	Std. Err.	Estimate	Std. Err.	Estimate	Std. Err.
Level two random effect									
var(_cons)				0.016435	0.00624	0.01484	0.0056	0.00276	0.00107
Level one variance									
var(Residual)		0.10011	0.001	0.084756	0.00083	0.07533	0.0008	0.07533	0.00081

**Table 44: Parameters estimates from multilevel models** 

# **Conclusions**

The results of our research at the individual level predominantly support the trends in the current literature in terms of individual characteristics of age - the young participate less (Putnam 2001), gender - is not significant (Norris 2002), education on an individual level being highly important (Dee 2004, Finkel 2003, Print 2007, Galston 2001, Verba, Schlozsm and Hoskins et al 2008) and income - the more you have, the more you participate (Verba, Slozman and Brady, 1995). Our empirical results also sustain the analysis of Putnam and De Tocqueville concerning the link between religious attendance and active citizenship and the location of the countryside as a stronger bed of community spirit as opposed to the city. In addition, our results also enhance the argument put forward by Putnam that those without occupation and not looking for work, which as a group is dominated by housewives, provide substantial community support in terms of volunteering, participation in associations and generators of social capital (Putnam 2001). Finally our results also support Putnam's thesis on the negative effect of watching television (Putnam 2001).

In addition to providing support towards the previous literature results, the empirical analysis in this article has identified a number of new and intriguing findings concerning the individual characteristics of the active citizen, for example, deepening the understanding of religious beliefs. According to our results, active citizens typically have a clear conviction of the importance of religion in their life (either religious or not religious). Thus the persons who are sure that they are not religious are as active as those who are sure that they are. It is the persons who lack a strong belief who are not active. Thus a motivating factor for participation can be considered to be a strong conviction towards religion and not a religious belief in itself.

The second interesting finding is the relationship between active citizenship and lifelong learning. Previous research by Deakin Crick et al., (2005) and Hoskins and Deakin-Crick (2008) has shown a relationship between citizenship knowledge and values, and the knowledge and values needed for learning providing evidence that education strategies that facilitate one could aid the other. However, to the best of our knowledge, this is the first time that actual participation in lifelong learning and the practice of active citizenship have been identified to be empirically related. Thus active citizens are also active learners and vice versa and that the motivation to participate in society is broader than these individual phenomena and the types of societies and government actions that facilitate one can be considered to be beneficial towards the other.

The country level features that facilitate greater participation in active citizenship are equality, wealth and tolerance towards diversity. In terms of equality the results show that the more equal societies are in terms of distribution of wealth the higher the levels of active citizenship. These findings follow previous research such as Wilkinson and Pickett (2009) that equal societies tend to be more beneficial for most social and health outcomes. The high performing countries in Europe on active citizenship also tend to be the wealthy countries measured by their GDP, in this regard there are two groups of countries: poorer countries that are below the GDP average and have below average participation in active citizenship and more wealthy countries that have higher levels of active citizenship reflecting a two speed Europe. Greater levels of equality also increased average levels of education but unlike years of individual education average levels of education was not found to be associated with active citizenship. In addition to these findings, it is not only equal countries that do well on participation levels of active citizenship it is also the countries that are more tolerant towards other religions who have higher levels of active citizenship measured in terms of religious heterogeneity. This means that in countries with more diversity of religions there are also higher levels of active citizenship. These results are quite the opposite to Huntington's thesis on the clash of civilizations that proposed a lack of social cohesion as a result of greater diversity of religions.

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#### **Abstract**

Facilitating Active citizenship is one of the European Commission's strategies for increasing social cohesion and reducing the democratic deficit across Europe within the context of the wider Lisbon process. In this context, this report provides an evidence base for policy development, identifying the socio-demographic characteristics and determinants of active citizens and those who for one reason or another participate much less. The report provides a detailed identikit of the active citizen from 2002 across 14 European countries Austrian, Belgium, Germany, Denmark, Spain, Finland, United Kingdom, Greece, Italy, Luxemburg, Netherlands, Norway, Portugal, Sweden (the complete dataset available for this research is only available for the majority of old member states of the European Union and European Economic Area). The results of our statistical analysis, based on a multilevel regression model, provide a clear identikit of the active citizen in Europe and the drivers of the phenomenon are identified both at the individual and at the country level. At the individual level we can say that the active citizen is working age, male or female, and about 48-64 years old - the age of the baby boomers. They typically have a high level of education and are also active in lifelong learning. An active citizen typically has a clear idea of the importance of religion in their life and they typically attend religious service. He or She lives in the countryside and has a good income. Concerning the media, she or he watches TV a moderate amount of time and reads newspapers. In terms of employment she or he does not work in the labor market but is also not looking for a job which gives them the time to participate. Conversely, the persons who are the least active are young people, living in big cities, with lower levels of education who are not participating in any lifelong learning activities. They are typically working in the labour market but with a low income and limited responsibility. They do not hold a strong position about the importance of the religion in their life and they do not attend any religious services apart from special occasions. They spend a considerable amount of time every day watching TV but they do not read newspapers. In total the results of this research follow previous literature in this field; however, what is new from this research is the relationship between lifelong learning and active citizenship. The bivariate statistics showed some intriguing findings concerning country differences in Europe, for example there are differences in the levels of active citizenship concerning gender. In Nordic countries women participated more than men but in southern Europe and Anglo-Saxon countries men participated more than women. For continental countries there were no significant differences. There was no common trend from the bivariate statistics across the European countries for the place of residence. In Denmark, Belgium and Great Britain the most active are people are those who live in big city, whilst in Finland, Italy and Spain the most active citizens live in suburbs and in Luxemburg and Sweden the most active citizens live in the countryside. There were common European trends for the bivariate statistical results for Education and age. There was a positive significant effect for each level of education and for each year of education in each country considered in Europe and lifelong learning was significant and positive in all countries considered. The age level of the active citizen was also similar in each country considered peaking somewhere after the age of 44 and at the lowest level in the earliest years 18-24 and over 65. In terms of media usage there were general trends across Europe but also some specific country differences for the bivariate statistics. The general trend is that a small amount of TV is needed but not too much. The amount required depends on the country with Spain and the Netherlands having the highest threshold between 0.5-1 hour of television per day. In terms of radio the more the better across the whole of Europe but in Austria the most active are people who listen to radio more than 2.5 hours, while in Great Britain the most active listening to radio more than 1.5 hours. Reading newspapers follows a similar trend that the more that you read the better, however, in Italy and in Sweden, the most active are the ones who reads newspaper more than 3 hours a day, while in Belgium the most active are the one who read newspaper between 0.5 to 1 hour a weekday. The country level features that facilitate greater participation in active citizenship are equality, wealth and tolerance towards diversity. In terms of equality the results show that the more equal societies are in terms of distribution of wealth the higher the levels of active citizenship. The high performing countries in Europe on active citizenship also tend to be the wealthy countries measured by their GDP, in this regard there are two groups of countries: poorer countries that are below the GDP average and have below average participation in active citizenship and more wealthy countries that have a higher levels of active citizenship. This reflects a two speed Europe. Greater levels of equality also increased the average levels of education but unlike years of individual levels of education, the national average education levels was not found to be associated with active citizenship. In addition to these findings, it is not only the more equal countries that do well on participation levels of active citizenship but it is also the countries that are more tolerant towards other religions who have higher levels of active citizenship measured in terms of religious heterogeneity. This means that in countries with more diversity of religions there are also higher levels of active citizenship.

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