Political knowledge and attitudes toward (de)centralization in Europe[§]

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Abstract

The allocation of competences between the EU and Member States is one of most burning issues in the history of the European integration. From a theoretical economic perspective, this ongoing process calls into question the theory of fiscal federalism. In this paper we study empirically the impact of European citizens' knowledge about the EU on their attitudes toward the allocation of competences. We use micro-data from the Eurobarometer survey. We find that more knowledgeable citizens are more willing to favour centralization of competences to the EU in areas where public intervention by individual Member States causes externalities and where scale economies in the provision of public goods are important. These results come in accordance with the prescriptions of the fiscal federalism literature.

Keywords: European Union, Information, Policy opinions, Political Economy

JEL classification: H7, D8

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1. Introduction

We analyze the impact of information on the attitudes of European citizens towards the possible distribution of responsibilities between the European Union and Member States. The main motivation of our analysis is twofold. Firstly, the allocation of competences in the EU is one of most burning issues in the history of the European integration because, as the transfers of sovereignty from the Member States to the EU proceeds, the process of European integration is strengthened. From a theoretical economic perspective, this ongoing process calls into question the theory of fiscal federalism.

Secondly, in recent years a popular view on part of the Commission is that the worrying phenomenon of decreasing support to the project of European integration in recent decades can be overcome if the European institutions become more committed to communicating the advantages of the European project. If citizens are more informed about how the EU works, they will be more conscious about the advantages of the policies adopted, and they will thus begin to appreciate the EU more. In this regard, it is useful to recall that back in February 2006 the European Commission adopted a White Paper on a European Communication Policy whose main purpose was to promote actions to inform citizens better and to be more responsive to their concerns.[1] In the Commission's view, those actions were crucial in raising awareness and creating commitment to the European project. It is important to note that this White Paper followed the main conclusion reached by the Commission the previous year (January 2005) when, after the draft of European Constitution by the European Convention (and never adopted after the rejection by a number of Member States) a special Eurobarometer survey on the draft Constitution was commissioned by the Commission. The survey showed to the Commission that the more people knew about the text of the Constitution, the more they were in favour of it. Based on this result, the Commission and other European Institutions started to professionalize their communication machinery (see Bijsman and Altides, 2007) and they have stressed their commitment to bring the Union closer to the citizens.[2] On the other hand, the same literature on European integration had always emphasized that increasing knowledge could be associated with increasing support. For instance, this idea was present in the Gabel path breaking study (1988a) explaining public

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[1] Commission of the European Communities, (2006). During the press conference announcing the White Paper, the Vice-President of the Commission Margot Walstrom said that "Communication is first and foremost a matter of democracy. People have a right to know what the EU does and what it stands for. And they have a right to fully participate in the European project. Communicating Europe is not just a Brussels affair. EU institutions and Member States must work on it together. The European Union has grown up as a political project but has not found a place in people's heart and minds".

[2] Recall that this commitment started for the first time in December 2001 with the *Laeken Declaration on the future of the European Union*.

support for European Union. However, if a lack of knowledge could potentially increase the gap between EU politics and citizens, to the best of our knowledge there are no studies that have properly investigated whether it is equally true that rendering more information to citizens about the EU and its policies would systematically increase popular support for the European project as such. In this paper we try to consider this research question.

We investigate citizens' support for integration in specific policy areas and we try to assess the role of citizens' information in shaping preferences for integration. In particular, the hypothesis under investigation is that if Europeans are poorly informed on the functioning of the European institutions, they are more likely to be wrong about the consequences of (de)centralization in some policy areas.

It is possible to address this link bringing together two different strands of studies. The first one refers to the recently growing body of literature which seeks to understand the attitudes of individuals towards various issues such as redistribution (Alesina and Fuchs-Schundeln, 2007), pension reform (Boeri and Tabellini, 2012), immigration (Facchini and Mayda, 2008) and economic policy issues (Page and Shapiro, 1983; Blinder and Krueger, 2004). In these papers, among the determinants much emphasis has been placed on factors linked to the self-interest of individuals (Facchini and Mayda, 2008). Moreover, quite interestingly, some authors (Blinder and Krueger, 2004; Boeri and Tabellini, 2012) emphasize and include among the determinants the role of information which turns out having a significant effect in shaping these attitudes. From the above mentioned papers we have thus borrowed the idea to include the role of information in shaping preferences of European citizens that, in the context of our paper, are namely the attitudes towards (de)centralization. We also follow a second strand of studies, wedged in the literature on fiscal federalism, that try to: i) assess if the current EU architecture follows the normative principles of optimal task allocation among levels of government (decentralization versus centralization) as suggested by the theory;[3] ii) analyse empirically the attitudes of European citizens toward the allocation of competences between the EU and Member States. Alesina, Angeloni and Schuknecht (2005) and Ahrens et al. (2008) provide only descriptive results; Cerniglia and Pagani (2009) use multivariate analysis to explain Europeans' attitudes in terms of almost exclusively socio-economic determinants; Mazzaferro and Zanardi (2008) try to estimate (using data from the International Social Survey Programme) individual preferences of European citizens for some public goods in

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[3] See Inmand and Rubinfeld (1992), Tabellini (2003) and Alesina and Spolaore (2003, chapter 12)

order to verify the dominance of centralization over decentralization or vice versa. Notice that in this latter strand of literature, the role of information is completely neglected.

The main novelty of our study concerns the role of information, which we include among the variables explaining citizens' assessment of the most appropriate decision-making level. What we mean by information is actual (or objective) knowledge possessed by European citizens about the functioning of certain European institutions. We refer to this knowledge as `political knowledge'. To measure citizens' assessment of the most appropriate decision-making level we consider questions that elicit information on citizens' opinion regarding the enhancement of EU involvement in the areas of defence, foreign policy and immigration. The reason why we consider these three policy areas is that, as said, we follow the theory of fiscal federalism according to which centralization of competences to the European Union should be optimal when public intervention by individual Member States causes externalities on other Member States and where scale economies in the provision of public goods are important. In this paper we then want to understand if the political knowledge possessed by European citizens has a role in determining preferences to centralize these policy areas to EU. Our hypothesis is that more informed Europeans are better able to understand the potential benefits deriving from a more efficient allocation of those competencies between the European Union and the Member States. The analysis is interesting to us since, *prima facie*, Eurobarometer data show that citizens' preferences about the allocation of these policies between the EU and Member States fit quite well with the argument of fiscal federalism (see Alesina, Angeloni and Schuknecht, 2005 and Cerniglia and Pagani, 2009). In other words, data show that a deeper EU intervention in these areas is the wish of a majority of citizens. In this paper, through the econometric analysis, we want to understand if such preferences for centralization are stronger among citizens possessing an higher level of political knowledge about EU institutions.

As far as we know, this is the first analysis trying to understand to which extent a better information about EU institutions affects individual preferences for (de)centralization. A very recent exception in the political science literature is a paper by Clark and Helling (2012). In this study the authors analyse the link between information and citizens' support for the EU in specific policy domains and they find a positive relationship for areas involving cross-border political issues. However, a severe shortcoming of this paper is that endogeneity issues are completely overlooked. Instead, in our econometric analysis possible sources of endogeneity are properly taken into account.

To sum up, the questions that we try to answer are: 1) Does more political knowledge increase support for European integration? 2) What other factors determine support for the EU? Our results confirm the positive effect of political knowledge on support for EU integration and they highlight other interesting factors related to citizens' opinions about the allocation of competences.

The remainder of the paper is organized as follows. Section 2 explains the theoretical argument underpinning our hypothesis. Section 3 describes the sample, explains how the variables of interest to us - support for European integration and political knowledge - are measured and it also reports descriptive evidence on the relationship between these two variables. Section 4 presents the estimation strategy and discusses some methodological issues; Section 5 shows the results of econometric analysis. Sections 6 concludes and discusses the policy relevance of our findings.

2. Theoretical background

Generally, studies on support for European integration measure it through a very simple question, present in every Eurobarometer survey since the beginning, that is "*Generally speaking, do you think your country's membership of the European Union is a good thing, a bad thing, neither good nor bad, or dont' know?*". This question - very simple to understand for respondents - has then become the standard measure of citizens' support for European integration, or – equally - the standard measure for public Euroscepticism in Europe.[4] Looking at this measure across time, public support for Europe collapsed in the post-Mastricht period and it has continued to drop afterwards. In recent years, the most marked increase in Euroscepticism has taken place in the countries most affected by the crisis.[5]

In the literature, the primary theoretical explanation of this measure of citizens' support for European integrations is the "utilititarian" theory: citizens evaluate the integration process in terms of costs and benefits arising from the process of european integration. These costs and benefits may in turn depend on the socioeconomic characteristics of citizens. Gabel (1988a; 1988b) was the first arguing that public support for European integration can be explained by the social-economic position of individuals.[6] As it will be shown next, also our analysis

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[4] See Laconte (2010)

[5] Serricchio et al. (2013)

[6] More precisely he suggested that persons with more economic, cultural and social capital have more possibility to take advantage of the free market's labour, service and capital. Therefore, they are probably more likely to evaluate European integration as an opportunity. Several empirical studies in the political science literature confirm this utilitarian theory; for a survey see Eichenberg and Dalton (2007). Very recently, the *Journal of*

highlights the importance of socioeconomic determinants, confirming this long lasting theory of citizens' support for European integration.

Eurobarometer contains also more concrete questions asking citizens how they want to distribute policy responsibilities in different specific areas between the European Union and national governments. In this work, instead of focusing on the standard measure of support for European integration, we consider these latter questions. In our view, and according to other studies (Citrin and Sides, 2004; Hooghe 2003), they provide a more fine-grained measure of citizens' support for European integration. More importantly, we believe that these questions capture very well the debate that has surrounded the process of European integration, considering it an optimal solution for exploiting economies of scales and internalizing negative externalities across the national boundaries.[7] This idea is related to the vast literature on fiscal federalism spurred by the *functional rationale* that underlies the well-known Oates' theorem of decentralization (Oates, 1972) that states that centralization is desiderable if there are economies of scale and externalities that should be internalized. Recent studies in the political economy literature apply this thinking to the European Union. We refer in particular to the contribution by Alesina, Angeloni and Etro (2005) that considers in a theoretical model the trade-off between the benefits of centralization - coming from economies of scales and externalities - and the costs of harmonizing policies due to the potential increasing heterogeneity of citizens' preferences in a union growing in size as long as new members decide to take part in it. The set-up and the normative prediction of this theoretical argument are well applied in Alesina, Angeloni and Schuknecht (2005) to the actual working of the European Union. The prediction is that policies where economies of scale and/or externalities are predominant should be allocated at the European level, and Member States should be involved instead mainly in those policy areas where heterogeneity of preferences are high relative to economies of scale and externalities. Therefore - as the authors claim - natural candidates for a deeper EU intervention are policy areas such as international trade, common market, immigration, money and finance, environment and international relations (namely foreign policy, defence and foreign aid). Along the same lines, the authors also suggest that in other policy areas - such as education, research and culture, business relations (sectoral) and

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Common Market Studies (2013, vol 51) has devoted a special issue to the increasing phenomenon of Euroscepticism.

[7] See Inman and Rubinfeld (1992). Alesina and Spolaore write: "To some extent the Europe is a union of states that serves the purpose of taking advantages of economies of scales, and creating a level of government with limited prerogatives where benefits of scale are large and heterogeneity of preferences low. The principle of subsidiarity that should be the basis of European integration is consistent with this interpretation" (Alesina and Spolaore, 2003, p. 205).

citizens and social protection - economies of scale and externalities are less obvious and the strength of heterogeneity of preferences overcomes the benefits of economies of scale and internalization of externalities. Bearing in mind this theoretical framework, the authors study the actual policy involvement in the policy areas previously mentioned. It emerges that the actual allocation of EU policy is partly inconsistent with the normative criteria.[8] On the other side, using Eurobarometer survey (Spring 2001 issue), the authors show that citizens' preference match the normative criteria put forward by economic theory.[9] In other words, it seems that citizens desire European integration when "*it is functional"*, that is when European integration may be advantageous to exploit economies of scale and it may be desiderable as well in order to internalize externalities. These findings are not dissimilar from other studies (Ahrens et al., 2008; Cerniglia and Pagani, 2009).

In this paper we then choose to explore better such functional argument with the aim to understand if information (or political knowledge) strengthen it. To sum up, the *functional* argument can be expressed empirically through what we define a "functional hypothesis": citizens who are more informed are better able to understand the potential benefits deriving from a more efficient allocation of competences between the European Union and the Member States. The three policy areas we consider are: foreign policy, defence and immigration policy. Quite understandably, these policies fit very well the functional argument discussed above: economies of scale in foreign policy and defence are pretty obvious and, as regards immigration, a rationale for centralization comes from the need to internalize the negative externalities arising from free-riding behaviour by member countries.[10]

3. Data and descriptive results

The empirical analysis is based on Eurobarometer micro-data, that are an enormous source of information for investigating, monitoring and understanding the attitudes of European citizens towards various issues and policies adopted by the EU. The universe of the survey is citizens

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[8] As the authors claim: "The Eu is too involved in certain areas where economies of scale seem low and heterogeneity of preferences high and not involved enough in others, which, in principle, should have the opposite characteristics" (pag. 312).

[9] For instance they show that there exist a huge favour by citizens for EU involvement in policies related to international relations as well as money and fiscal matters and environment The authors conclude: "In summary, the evidence form the Eurobarometer shows that the preferences of European citizens regarding the allocation of functions between Europe and member countries is remarkably similar to our judgement based on the prediction of theoretical models" (p. 287).

[10] Giordani and Ruta (2010) propose also an argument in favour of centralization at the European level of immigration policy as they show, in a theoretical framework, that unilateral behaviour by Member States may lead to coordination failures.

aged 15 and over residing in the European Union. To the aim of our work, we use the 2007 Eurobarometer 67.2 "European Union Enlargement, Personal Data Privacy, the National Economy, and Scientific Research, April-May 2007", which contains individual information on 30,224 European citizens. We exclude candidate countries' citizens, selecting in this way 26,717 observations.

The 67.2 edition of the Eurobarometer has the valuable feature of containing: i) a set of questions about the willingness to pool authority and create a common policy in the areas of defence, foreign policy and immigration; ii) a set of questions that enable assessment of the degree of correct political knowledge possessed by European citizens on some key institutional features of the EU. By combining this information, we are allowed to investigate the relationship between political knowledge and attitudes towards the European Union.

TABLE 1

Beside these questions, the survey collects data on a standard set of demographic and other socio-economic background variables and on citizens' ideology, such as their left/right political position. This is also an important characteristic of the survey, given that some studies have shown that ideology plays a role in shaping individuals' attitudes towards the European project (Eichenenberg and Dalton, 1993; Hix 2008). The survey also includes a specific set of questions on political trust.

Looking at our sample (see Table 1), on average, respondents are 45 years old, and 52% are female. Almost one quarter of the sample (23%) completed education before the age of 15; 40% between 16 and 19; and 24% after the age of 20. As regards labour-market position, retired persons represent 25% of the sample, a percentage similar to that of manual workers (23%). The modal value of the political position is centre (34%), followed by left (27%) and right (20%). One fifth of respondents either refuse to answer this question or state that they do not know. The percentages of citizens who trust the national government and parliament are, respectively, 41% and 43%.

3.1 Measuring citizens' attitudes for European integration

To analyze citizens' attitudes we use Eurobarometer's questions that elicit information on citizens' opinions regarding the enhancement of EU involvement in the three policy domains. These questions are the basis for building the dependent variables of the econometric analysis. The precise wording of the questions is as follows:

"What is your opinion on each of the following statements? Please tell me for each statement, whether you are for it of against it:

1. A common foreign policy among the member states of the EU, towards other countries

2. A common defence and security policy among EU member states

In order to gain information on European citizens' opinions on immigration policy as well, we used another question, whose exact wording is:

"Do you tend to agree or tend to disagree with the following statement? The EU should have a common immigration policy towards people from outside the EU"

In our view, the above questions are concrete proposals for a stronger European integration and can yield a good picture of the degree of Europeans' support for (or opposition against) the European Union.[11]

As already said, in accordance with previous studies, we are not surprised that data show an overwhelming majority of European citizens in favour of common policy in the three areas under consideration. The highest percentage is for defence (77%) followed by immigration and foreign policy (see Table 2).

At this stage, the obvious step in the analysis is to understand which factors shape such strong citizens' support for European integration and, in particular, to analyse the role of political knowledge in order to test for the "functional hypothesis".

3.2 Measuring political knowledge

As said, the 67.2 Eurobarometer survey contains a set of questions about citizens' objective knowledge about how the EU works. We refer to this knowledge as political knowledge. This is a very important feature of the survey because no solid conclusion could be drawn on the relationship between knowledge and attitudes using subjective (self-declared) knowledge, since this latter can not be verified. The question in the survey used to infer the citizens' level of political knowledge is:

"For each of the following statements about the European Union could you please tell me whether you think it is true or false?

1. The EU currently consists of fifteen member states

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[11] The Eurobarometer surveys generally contain a question asking whether, for a wide array of political areas, the respondent thinks that decisions should be made by his/her own government or made jointly within the European Union. Although this question ask opinions regarding a large number of domains, we preferred to use the questions described in the text for two reasons. First, because they clearly ask for preferences for "a common policy" while the other question simply ask whether the respondent think that the policies should be made jointly within the European Union or not, which not unambiguously means a common policy; second, because the question asks preferences simultaneously with regard to 18 policy areas and hence it is likely that the answers are provided less accurately.

2. The members of the European Parliament are directly elected by the citizens of the EU

3. Every six months, a different member State becomes the President of the Council of the European Union".

Obviously, these questions investigate citizens' information about only three aspects of the functioning of EU institutions. However, we believe that they are a good proxy of citizens' political knowledge because they regard crucial and basic elements of European institutions. Among the three questions, the highest percentage of correct answers regards the number of member states, which is correctly known by more than 60% of respondents, while less than half of the sample (45%) knows that the members of the European Parliament are directly elected by the citizens of the EU, and just over half (52%) knows that the President of the Council of the European Union changes every six months.[12]

3.3 Political knowledge and support for integration

In this section we present a first sketch of citizens' opinions for greater European integration and about the relationship between these latter and political knowledge. Overall, a very large majority of respondents (more than 70% in all three policy areas) are in favour of a common policy (see Table 2). As said, these data come in accordance with previous studies (Alesina, Angeloni and Schuknecht, 2005; Ahrens et al., 2008 and Cerniglia and Pagani, 2009) and they suggest that citizens correctly perceive that greater involvement by the European Union could make the management of these policies more efficient. Defence shows the highest percentage of support (77%), probably because in this policy area the benefits arising from economies of scale are much more easily understood by citizens.

TABLE 2

On average, male have a more favourable attitude towards greater EU integration. Better educated people have a more positive stance as compared to less educated citizens; the level of consensus is highest among high-skilled workers (professionals and general management) while it is at the lowest level for house persons, followed by retired individuals, unemployed and manual workers. This evidence is consistent with the utilitarian approach above

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[12] One may think that the high percentage of correct answers regarding the number of Member States is due to the answers provided by New Member States' citizens that had just entered EU in 2007 (in 2004 except Romania and Bulgaria that entered in 2007). However, the shares of citizens answering correctly this question for new members' and old members' citizens are very similar, equal respectively to 61.8% and 60.8%.

mentioned: high-skilled workers are more likely to gain from EU integration, for instance because it allows them to increase their job opportunities and, more in general, to make the most of their human capital. By contrast, low-skilled and unemployed workers are likely to fear the increased competition on the labour market that EU integration may bring.[13] Oldest citizens (aged 65 and over) are less favourable to a European common policy as compared to citizens of younger ages. Citizens who trust national institutions exhibit a high level of agreement. Regarding ideology, individuals without a declared political position show the lowest consensus for EU with respect to all other citizens. Surprisingly, at least at descriptive level the left-right position of citizens does not seem related to preferences for centralization in any of the policy areas. Finally, it is noteworthy that citizens of new member states are on average better disposed towards a common EU policy compared to EU15 citizens with regard to all the policy areas considered. In a nutshell, we see that the transfer of power to the EU is not viewed by all citizens as equally desirable.

As a first preliminary evidence of the link between political knowledge and consensus towards EU integration, we show the consensus level for a common policy separately for the three topics and for varying levels of knowledge (see the last lines of Table 2). The Table shows that as political knowledge increases, so does the average consensus for more EU power in all three the considered policy areas. For the whole sample, the average consensus grows from 53% to 80% moving from zero to three correct answers in the case of foreign policy, from 63% to 84% in the case of defence and from 58% to 84% in the case of immigration. Very interestingly, knowledge plays a role especially for those respondents on average less well disposed towards Europe. As an example, for the least educated, moving from zero to three EU institutions known is related to an increase in support for EU management of the three policies equal, respectively, to 82% (foreign policy), 57% (defence) and 77% (immigration).

To sum up, data show substantial consensus among citizens on a common policy in regard to foreign affairs, defence and immigration. Moreover, descriptive evidence suggests both that higher levels of political knowledge are associated with more support for the EU and that there exists a certain degree of heterogeneity across citizens as far as this relationship is concerned.

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[13] This result is in line with the utilitarian model of public support for EU integration (see Hix, 2008; Gabel and Palmer, 1995 and Gabel, 1998a).

4. Empirical strategy

In this section we describe the empirical approach and discuss some methodological issues. We model the probability to support a greater involvement of EU in policy i, $Pr(S_i)$ as a function of a vector X of demographic and other socio-economic background variables (age, squared age, gender, education, marital status, occupation and home ownership as a proxy for income), on country fixed-effects C, on two variables for trust T (whether the respondents trust the national parliament and the national government) and on political ideology variables I (a set of dummies for left/right political positions). Controlling for ideological position is important because it allows distinguishing the effect of citizens' efficiency evaluations about the optimal allocation of competencies between the European Union and the member states from the role of their political opinions in shaping their attitudes.

Finally, political knowledge, which is our variable of interest, is included among regressors. As already said, we consider knowledge about some EU institutions. We built one single variable (EU info) by summing the number of right answers to the questions regarding the functioning of the three EU institutions described in the previous section, so that the variable EU info ranges between zero (no correct answer) and three (all correct answers). In order to facilitate interpretation of results, we dichotomise this variable and thus enter it in the estimation equation as a dummy variable ($D_{EU\ info}$) taking the value of one in the case of high knowledge (two or three correct answers) and zero in the case of low knowledge (zero or one correct answers).[14] Hence, to model attitudes towards the EU we assume that the probability of being in favour of the i-th policy is captured by the following regression equation:

$$Pr(S_i) = \alpha + \beta_1 C + \beta_2 X + \beta_3 I + \beta_4 T + \beta_5 (D_{EU\ info}) + \varepsilon \qquad (1)$$

Equation (1) is fitted by three standard probit models where the dependent variables are dummy variables taking the value of one when individuals are in favour of, respectively, a common foreign policy, a common defence and security policy and a common immigration policy. Averaging answers on the three policy areas, we observe that 9.8% of respondents do not have an opinion (the answer is "don't know"). In our analysis, these individuals are

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[14] We replicated estimates including dummy variables for each number of correct answers instead of the dichotomised variable but results were qualitatively unchanged.

merged with the "disagree" category, so that the dependent variables take the value of zero if respondents either disagree or do not have an opinion.[15]

A very important point to take into account is that the estimation of standard regression models assuming that political knowledge is strictly exogenous to opinions on EU leads to biased results if, rather than knowledge having an exogenous causal effect on EU support, knowledge and EU support are jointly determined by underlying factors unobserved in the data. Stated differently, if we want to identify a causal relationship and not a simple correlation between political knowledge and attitudes towards the EU, we must consider that the former variable is likely to be endogenous to attitudes. Endogeneity may arise if there are unobserved factors (like a generic preference for EU) that affect both positive attitudes towards European policies and the extent to which people get informed about the working of EU institutions and, hence, citizens' knowledge simply identifies those respondents who are in favour of European integration.

We deal with endogeneity in two ways. First, we exploit a set of questions present in the 67.2 Eurobarometer survey that allow us to get information regarding the level of citizens' attachment to the EU. These questions are: i) Whether the EU conjures up a positive image; ii) Whether the respondent feels very attached to the EU; and iii) Whether s/he trusts the EU. We built a single variable by considering simultaneously the three questions. This variable, which ranges between 0 (minimum degree of Europeanism) and 3 (maximum degree of Europeanism), should proxy the unobservable generic positive attitude for EU (let us call it `genuine Europeanism'). If the source of endogeneity is genuine Europeanism, which determines simultaneously preferences and knowledge, this variable should catch the variation in attitudes produced by genuine Europeanism and thus contribute to isolate the causal effect of knowledge on citizens' attitudes.

Second, we use an IV approach and we reach identification using a maximum-likelihood seemingly unrelated two-equation probit model with exclusion restrictions. In order to do so, we have to find valid instruments for political knowledge, that is variables correlated to knowledge but uncorrelated to the error term of the policy opinions equations. The Eurobarometer dataset provides two instrumental variables suitable for this aim. First, we use as instrument citizens' actual knowledge of the main economic indicators of their country. More specifically, the 67.2 Eurobarometer survey contains a set of questions about the growth

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[15] We also estimated multinomial logit models with a three-values (agree, do not agree, don't know) dependent variable. However, the results are unchanged. Multinomial logit estimation results are available from the authors upon request.

rate, the inflation rate and the unemployment rate in the respondent's country. The exact wording of each question is:

1. What was the official growth rate of the economy (measured in terms of Gross Domestic Product) in (OUR COUNTRY) in 2006? I can tell you that this figure is between -1% and 15%.

2. What was the official inflation rate, the rate of which consumer prices increased or decreased, in (OUR COUNTRY) in 2006? I can tell you that the exact figure is between -1% and 20%.

3. What was the official unemployment rate, the percentage of active people who do not have a job, in (OUR COUNTRY) in 2006? I can tell you that the exact figure is between -1% and 20%.

We have compared the answers provided by respondents to the actual figures for these economic variables and computed the errors. We built a variable by summing the number of answers characterized by low errors, where an error is considered low when it ranges between 0 and 2 percentage points, and dichotomised this variable so that it takes the value of one when 2 or 3 answers to the previous questions are provided with a low error. This variable should catch the propensity to be informed, and thus it should be correlated with political knowledge but not with opinions about the desirability of a common policy in the three areas we consider.

The second instrument is a dummy variable built using a Eurobarometer question where respondents are asked to say whether or not they agree that it is necessary to know economic figures like the growth rate, inflation rate and unemployment rate. The dummy variable takes the value of one when the respondent totally agree or tend to agree, and zero otherwise (tend to disagree or totally disagree). Also this variable should control for the inclination to get informed, and, as such, it should be correlated with the level of political knowledge about the EU but not with citizens' policy opinions.

Our estimation strategy consist of estimating 3 two-equation latent dependent-variable models: The estimated models are bivariate probit by which we estimate simultaneously an equation for citizens' attitudes with one endogenous dummy (political knowledge) and one reduced form equation for the endogenous political knowledge dummy. The exclusion restrictions are based on the IV described above.

5. Results

In this section, first of all we will verify whether the positive relationship between political knowledge and attitudes towards EU integration remains after controlling for citizens' observable characteristics and assuming the exogeneity of political knowledge. Second, we will cope with the potential endogeneity of knowledge. Finally, we will comment also on the other estimation results.

5.1 The role of political knowledge

The upper panel of Table 3 presents probit results when political knowledge is taken as exogenous to attitudes. The Table displays only the coefficients of *EU info* while complete estimates are shown in the Appendix (see Table A1). In order to facilitate interpretation of the results we report marginal effects.

TABLE 3

Considering our variable of interest, estimation results widely confirm the positive relationship between political knowledge and citizens' agreement on the assignment of more power to the EU that emerged from descriptive analysis (see Table 1). More specifically, moving from low to high EU knowledge is related to an 11.2% increase in the probability of being in favour of more EU powers in the field of foreign policy and to a 10.8% increase in the field of immigration. The lowest coefficient is instead found for defence (+8.1%).

The lower panel of Table 3 shows estimates when "genuine Europeanism" is controlled for (see section 3).[16] This variable should control for the unobservable preference for EU, which is likely to determine simultaneously approval of EU integration and the extent to which citizens inform themselves about the workings of the EU institutions.

First of all, results in the Table clearly confirm the positive relationship between political knowledge and preferences for centralization, also after controlling for one of the main potential source of endogeneity. Second, our hypothesis that when citizens are keener on the European project, they are more likely both to inform themselves and to be in favour of EU integration is confirmed, as evidenced by the decrease in the coefficients for political knowledge with respect to the specification not controlling for genuine Europeanism shown in the upper panel of Table 3. The highest reduction in the marginal effect of knowledge is

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[16] Also in this case we show only coefficients of *EU info* while full estimates are in Table A2 in the Appendix.

found for defence (-18.6%), suggesting that in this case Europeanism plays a greater role than in the case of the other two policies, especially immigration, for which we find a reduction in the marginal effect of just 8.6%.

On the whole, these results confirm that estimation of attitudes neglecting that knowledge is jointly determined with Europeanism leads to upward biased results. This means that, at least to some extent, a generic positive attitude towards the EU simultaneously determines knowledge and attitudes towards European integration.

Finally, in order to better tackle the issue of endogenous knowledge, Table 4 shows the results obtained using IV techniques with exclusion restrictions. As a robustness check, we replicate estimates using the two different instruments described before.

To facilitate the interpretation of empirical results, in this case too the table contains marginal effects computed after bivariate probit estimation.[17]

TABLE 4

Also the IV approach results confirm an important role for political knowledge and they show that a greater amount of political knowledge has a marked positive effect on positive attitudes towards EU integration. The computed marginal effects do not change greatly when estimated with different instruments: they are 8.6%, 6.1% and 9.2% respectively for foreign policy, defence and immigration policy when using IV1 and 8.2%, 5.4% and 8.4% when using IV2. It is also to be noticed that there is a slight decrease in the marginal effects of knowledge with respect to previous estimates; this finding confirms that estimating the effect of knowledge on opinions neglecting endogeneity leads to upward biased results.

5.2 Other factors affecting citizens' preferences

Previous empirical studies have shown that citizens of different countries on average have dissimilar preferences regarding EU integration.[18] For instance, Voessing (2005) shows unambiguously that nationality is the most relevant factor influencing individuals' attitudes towards the EU. Our findings confirm the importance of the country effect. The Nordic country group has the lowest support for EU integration, followed by UK; for these countries

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[17] More specifically, marginal effects are computed as the difference between the marginal probability of being in favour of centralisation given a high level of political knowledge less the marginal probability of being in favour of centralisation given a low level of political knowledge. We show only the coefficients of political knowledge, while we report full estimates in Tables A3 and A4 in the Appendix.

[18] See Cerniglia and Pagani, (2009).

the highest disagreement is found for foreign policy and the lowest for immigration policy. Citizens from new member states and from the Mediterranean group of countries (with the exception of Portugal) are generally more in favour of greater EU involvement, as well as citizens from Germany and Belgium.

Females are on average slightly less in favour of common policies than men, and in the case of both foreign policy and immigration, consensus is increasing and concave in age. The results for education confirm the descriptive evidence by indicating high education as a factor enhancing support for Europe: respondents with the lowest education level are less likely to be in favour of more EU involvement in each policy compared to citizens with the highest education level, with a stronger effect in the case of foreign policy (-12.8%). The difference in support between citizens with intermediate-level education and highly-educated citizens ranges between 2.5% in the case of immigration and 3.7% in the case of defence.

As regards labour-market position, econometric analysis only partially confirms the descriptive results showing that high-skilled workers are more in favour of EU integration: individuals out of the labour force are less likely to demand more common policy in the areas of foreign policy and defence, while manual workers and unemployed are less supportive of integration only in the fields of, respectively, foreign policy and defence. Home ownership, which is entered as a proxy for income, has no effect on Europeans' preferences.

Centrist citizens have a more positive attitude than both rightist citizens and leftist citizens towards greater EU power in the area of immigration. This result comes in line with those studies (for instance Hooghe et al. 2002) showing that a centrist ideology predisposes to pro-Europeanism and as a party's distance from the centre of the political spectrum grows, so does its likelihood of being Eurosceptic. The lowest consensus level for all three policies is instead found for citizens without a declared political position. Trust in one's country's political institutions is related to a more favourable attitude towards common policies for all the three areas analysed.

When controlling for genuine Europeanism some coefficients change (see Table A2). For example, the negative marginal effects previously found for Nordic countries and for UK decrease in size, suggesting that part of the lower consensus for EU in these countries is related to a lower level of Europeanism. Also the coefficients of the education dummy variables decrease and, in the case of intermediate education, they become insignificant for foreign policy and immigration. This result confirms that more educated citizens are on average more EU-enthusiastic, probably because they are likely to gain more from the process of EU integration. Finally, as expected the variable for genuine Europeanism has a very large

and significant coefficient, especially in the case of foreign policy, and less so in that of immigration, suggesting that more EU-enthusiastic citizens are more in favour of EU integration.[19]

6. A falsification test for the functional hypothesis

So far, we have tested citizens' attitudes regarding the vertical allocation of competences only considering some part of this allocation. More specifically, we have focused only on three policy areas which strongly exhibit international spill-over effect, and therefore are more efficiently provided at the supranational level. As said, the desire for centralization is quite strong among European citizens in these areas, and political knowledge plays a role in determining these preferences.

We intend to be more convincing about our findings focussing also on policy areas where centralization is not justified anymore given the absence of economies of scale and/or the relevant heterogeneity in preferences. We should then consider public goods whose demand is based mainly on heterogeneous preferences across countries and citizens. This is certainly the case, for instance, of policies regarding the education system. Ahrens et a. (2008) document that in this policy field a clear majority in favour of centralization does not prevail since it is characterized by high heterogeneity among countries and across citizens. So, if considering this policy area we find that: a) the majority of people is not in favour of centralization and b) more knowledgeable people display more favourable attitudes towards national competence, in a sense we should be able to provide a falsiable result on preferences for centralization.

Considering a question in the Eurobarometer asking citizens whether for education policies they think that decisions should be made by their own national government or made jointly within the European Union, we find that the majority of citizens is in favour of a national competence (65.6%), confirming that citizens seem to understand quite well the functional argument.[20]

In order to analyse the role of information and to provide an additional test for the functional hypothesis, we re-estimate the previous models considering preferences for the allocation of competences regarding education system, where undoubtedly heterogeneity of preferences is

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[19] These results are in line with those studies arguing that support for integration is also a function of cognitive mobilization and political values (see Gabel, 1998a).

[20] A caveat should be made because the question eliciting opinions regarding the allocation of education competencies asks whether the respondent thinks that decisions should be made by his/her own government or jointly within the European Union and it does not ask instead whether the respondent is in favour of a "common policy" towards education. See footnote 11.

high and economies of scale are low. We did this analysis, and the following Table 5 show estimation results.[21]

TABLE 5

Our findings are very encouraging and they confirm the functional hypothesis. In our preferred models controlling for endogeneity by means of instrumental variables, the information coefficient turn out to be either non significant or negative and significant, suggesting that more informed citizens are less likely to be in favour of centralization as far as education is concerned, and pointing out that when heterogeneity of preferences is high citizens correctly informed are against centralization, in accordance with the functional hypothesis.

7. Conclusions

The findings of this paper show unambiguously that most competent people are more likely to favour European integration. Specifically, we found that Europeans' attitudes regarding the vertical allocation of competences in the European Union are significantly shaped by the political knowledge that they possess about the correct functioning of some European institutions and that, according to the functional argument, they are more (less) in favour of common EU policies when economies of scale are high (low) and heterogeneity of preferences is low (high). These results hold also when considering the potential endogeneity of political knowledge with respect to attitudes and when controlling for ideology that, at first glance, may be thought as the main determinant of policy opinions regarding EU integration. Our findings point out as well that estimation of attitudes neglecting that knowledge is jointly determined with genuine Europeanism leads to biased results, suggesting that a positive attitude towards the EU simultaneously determines knowledge and policy opinions.

These are results of great importance for two main reasons. In contemporary economic literature, information aspects in shaping policy preferences are receiving increasing attention for explaining policy choices (see Boeri and Tabellini, 2012; Clark and Hellwing, 2012 and the references therein). In this regard, our findings suggest that well-informed citizens are better able to assess the consequences of alternative policy proposals and to understand which

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[21] In the Table we show only the coefficients of political knowledge. Full estimation results are available from the authors upon request.

of them are in their best interest. In other words the "functional hypothesis" we tested seems to work quite well.

Secondly, the findings have a crucial policy relevance in the present context of increasing Euroscepticism. Public support for the EU can be very effectively influenced by rendering citizens better informed about the workings of the EU institutions. Our results then confirm both the conventional wisdom of part of the European Commission and predictions of the early theoretical literature on European integration (Gabel, 1998a and 1998b) that raising awareness about the EU can help creating greater commitment to European integration among European citizens.

APPENDIX

TABLES A1, A2, A3, A4

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Table 1. Sample characteristics

Variable	Mean	Std. Dev.
Demographics		
Female	0.52	0.50
Age	45.7	18.5
Married	0.60	0.49
Age at completed education		
<=15	0.23	0.42
15-19	0.40	0.49
>=20	0.24	0.43
Still studying	0.10	0.31
Other	0.02	0.15
Occupation		
House person	0.09	0.28
Student	0.10	0.31
Unemployed	0.06	0.24
Retired	0.25	0.43
Manual worker	0.23	0.42
Low-skilled white-collar	0.11	0.31
High-skilled whithe-collar	0.12	0.32
Businessman	0.05	0.21
Ideology		
Left	0.27	0.44
Right	0.20	0.40
Centre	0.34	0.47
Refusal/don't know	0.20	0.40
Trust		
National Government	0.41	0.49
National Parliament	0.43	0.49
Nr observations	26,082	

Table 2. Support for EU integration and political knowledge

	Average consensus[a]			% change in support[b]		
	Foreign policy	*Defence*	*Immigration*	*Foreign policy*	*Defence*	*Immigration*
Whole sample	0.71	0.77	0.75			
Demographics						
Male	0.74	0.80	0.78	0.46	0.30	0.43
Female	0.68	0.75	0.73	0.55	0.38	0.54
Age 15-24	0.72	0.81	0.74	0.52	0.33	0.47
Age 25-34	0.71	0.79	0.76	0.47	0.31	0.39
Age 35-44	0.73	0.79	0.77	0.44	0.25	0.38
Age 45-54	0.71	0.79	0.77	0.37	0.28	0.43
Age 55-64	0.71	0.77	0.77	0.55	0.37	0.56
Age 65+	0.66	0.72	0.72	0.82	0.61	0.81
Age at completed education						
<=15	0.62	0.69	0.68	0.82	0.57	0.77
16-19	0.73	0.79	0.77	0.37	0.24	0.38
>=20	0.75	0.82	0.80	0.26	0.14	0.22
Labour market position						
house person	0.66	0.69	0.71	0.84	0.64	0.86
retired	0.68	0.74	0.73	0.68	0.48	0.67
unemployed	0.68	0.74	0.72	0.41	0.30	0.56
manual worker	0.70	0.78	0.75	0.41	0.26	0.44
student	0.73	0.82	0.74	0.51	0.25	0.40
low-skilled white-collar	0.74	0.81	0.80	0.27	0.14	0.23
businessman	0.75	0.82	0.79	0.47	0.25	0.22
high-skilled white-collar	0.78	0.83	0.81	0.29	0.19	0.19
Ideology						
Left	0.72	0.77	0.76	0.39	0.28	0.35
Right	0.73	0.81	0.77	0.50	0.35	0.46
Centre	0.73	0.79	0.78	0.38	0.24	0.32
Refusal/don't know	0.64	0.71	0.67	0.80	0.54	0.87
Trust						
National Government	0.76	0.82	0.80	0.47	0.34	0.46
National Parliament	0.75	0.81	0.80	0.45	0.33	0.45
Country						
EU15	0.68	0.74	0.75	0.54	0.37	0.40
New Member States	0.74	0.83	0.76	0.57	0.41	0.65
EU info (nr correct answers)						
0	0.53	0.63	0.58	-	-	-
1	0.69	0.77	0.73	-	-	-
2	0.76	0.82	0.81	-	-	-
3	0.80	0.84	0.84	-	-	-

a: % of EU citizens stating they are for a common EU policy

b: % change in support moving from 0 to 3 EU institutions known

Table 3. Marginal effect of information

	Foreign policy		Defence		Immigration	
	coeff	robust std err	coeff	robust std err	coeff	robust std err
Exogenous political knowledge						
EU info	0.112 ***	0.009	0.081 ***	0.009	0.108 ***	0.009
Observations	26082		26082		26082	
Prob > chi2	0.000		0.000		0.000	
Pseudo R2	0.098		0.092		0.063	
Control for Europeanism						
EU info	0.095 ***	0.009	0.066 ***	0.009	0.096 ***	0.009
Observations	26,082		26,082		26,082	
Prob > chi2	0.000		0.000		0.000	
Pseudo R2	0.129		0.124		0.078	

*significant at 10%, **significant at 5%, ***significant at 1%.

Table 4. Marginal effect of information - IV estimation

	IV 1[a]		IV 2[b]	
Foreign policy	0.086	***	0.082	***
Defence	0.061	***	0.054	***
Immigration	0.092	***	0.084	***

***significant at 1%.

a. IV: 1 if the individual knows 2 or 3 economic indicators with a low error

b. IV: 1 if the individual agrees that it is necessary to know economic figures like the growth rate,

inflation rate and unemployment rate

Table 5. Marginal effect of information (education system)

	Without europeanism	Control for europeanism	IV 1[a]	IV2[b]
Preference for EU common policy	0.0175 *	0.0033	0.0032	-0.0001 **

**significant at 5%, *significant at 10%

a. IV: 1 if the individual knows 2 or 3 economic indicators with a low error

b. IV: 1 if the individual agrees that it is necessary to know economic figures like the growth rate,

inflation rate and unemployment rate

Table A1. Marginal effects on the probability of consensus fo more EU integration - Exogenous political knowledge

Variable	Foreign policy coeff	robust std err	Defence coeff	robust std err	Immigration coeff	robust std err
Country-groups (ref. Italy)						
Belgium	-0.046 *	0.024	0.062 ***	0.019	0.048 **	0.020
Denmark	-0.340 ***	0.027	-0.180 ***	0.025	-0.154 ***	0.025
Germany	0.048 **	0.022	0.064 ***	0.019	0.054 ***	0.020
Greece	0.005	0.023	0.030	0.019	0.072 ***	0.019
Spain	0.020	0.023	0.010	0.020	0.029	0.021
Finland	-0.281 ***	0.026	-0.246 ***	0.025	-0.210 ***	0.025
France	-0.099 ***	0.023	0.016	0.020	-0.011	0.021
Ireland	-0.125 ***	0.024	-0.205 ***	0.023	-0.076 ***	0.022
Luxemburg	-0.122 ***	0.029	-0.004	0.024	-0.077 ***	0.028
Netherlands	-0.226 ***	0.026	-0.062 ***	0.022	-0.023	0.022
Austria	-0.144 ***	0.025	-0.149 ***	0.023	-0.081 ***	0.023
Portugal	-0.123 ***	0.024	-0.062 ***	0.021	-0.097 ***	0.022
Sweden	-0.381 ***	0.027	-0.275 ***	0.025	-0.134 ***	0.025
UK	-0.263 ***	0.024	-0.216 ***	0.022	-0.074 ***	0.021
Cyprus	-0.018	0.029	0.103 ***	0.023	0.072 ***	0.025
Czech Republic	-0.106 ***	0.024	0.085 ***	0.018	0.077 ***	0.020
Estonia	-0.091 ***	0.024	0.057 ***	0.019	-0.074 ***	0.022
Hungary	0.014	0.022	0.024	0.019	0.036 *	0.020
Latvia	-0.008	0.022	0.092 ***	0.017	0.006	0.020
Lithuania	0.028	0.022	0.074 ***	0.018	0.032	0.020
Malta	-0.200 ***	0.031	-0.175 ***	0.028	-0.043	0.027
Poland	0.070 ***	0.022	0.086 ***	0.018	0.028	0.020
Slovakia	-0.036	0.024	0.063 ***	0.019	0.014	0.021
Slovenia	0.042 *	0.022	0.085 ***	0.018	0.054 ***	0.020
Bulgaria	-0.023	0.023	0.030	0.019	-0.042 **	0.021
Romania	-0.067 ***	0.023	0.024	0.019	-0.092 ***	0.021
Demographics						
female	-0.028 ***	0.009	-0.019 **	0.008	-0.031 ***	0.009
married	0.025 **	0.010	0.021 **	0.009	0.012	0.009
age	0.004 **	0.001	0.001	0.001	0.005 ***	0.001
squared age	-0.000 **	0.000	-0.000	0.000	-0.000 ***	0.000
Age at completed education (ref. >=20)						
<=15	-0.128 ***	0.016	-0.084 ***	0.015	-0.078 ***	0.015
16-19	-0.029 **	0.012	-0.037 ***	0.011	-0.025 **	0.011
Labour market position(ref. High-skilled white-collar)						
unemployed	-0.027	0.024	-0.041 *	0.022	-0.013	0.022
manual worker	-0.033 *	0.018	-0.003	0.016	-0.002	0.016
low-skilled white-collar	-0.017	0.020	-0.020	0.018	-0.001	0.018
businessman	-0.029	0.026	-0.004	0.024	-0.026	0.025
out of the labour force	-0.035 **	0.017	-0.034 **	0.016	-0.012	0.016
House owned	0.004	0.010	-0.005	0.010	0.015	0.010
Trust						
national government	0.047 ***	0.014	0.044 ***	0.013	0.029 **	0.013
national parliament	0.067 ***	0.014	0.043 ***	0.013	0.055 ***	0.013
Ideology (ref. Left)						
right	-0.012	0.013	0.003	0.012	0.021 *	0.012
centre	0.010	0.012	0.011	0.011	0.038 ***	0.011
refusal/don't know	-0.078 ***	0.014	-0.052 ***	0.013	-0.030 **	0.013
EU info	0.112 ***	0.009	0.081 ***	0.009	0.108 ***	0.009
Observations	26082		26082		26082	
Prob > chi2	0.000		0.000		0.000	
Pseudo R2	0.098		0.092		0.063	

*significant at 10%, **significant at 5%, ***significant at 1%.

Table A2. Marginal effect on the probability of consensus fo more EU integration - Control for europeanism

Variable	Foreign policy		Defence		Immigration	
	coeff	robust std err	coeff	robust std err	coeff	robust std err
Country-groups (ref. Italy)						
Belgium	-0.035	0.024	0.070 ***	0.019	0.055 ***	0.020
Denmark	-0.273 ***	0.027	-0.109 ***	0.024	-0.105 ***	0.024
Germany	0.073 ***	0.021	0.086 ***	0.018	0.069 ***	0.020
Greece	0.026	0.022	0.049 ***	0.018	0.084 ***	0.019
Spain	0.025	0.022	0.016	0.020	0.034	0.020
Finland	-0.196 ***	0.026	-0.157 ***	0.024	-0.150 ***	0.024
France	-0.068 ***	0.023	0.043 **	0.019	0.009	0.020
Ireland	-0.116 ***	0.024	-0.193 ***	0.023	-0.069 ***	0.022
Luxemburg	-0.094 ***	0.029	0.021	0.023	-0.057 **	0.027
Netherlands	-0.169 ***	0.025	-0.012	0.021	0.009	0.021
Austria	-0.086 ***	0.024	-0.091 ***	0.022	-0.044 **	0.022
Portugal	-0.129 ***	0.024	-0.062 ***	0.021	-0.098 ***	0.022
Sweden	-0.323 ***	0.027	-0.206 ***	0.025	-0.091 ***	0.024
UK	-0.206 ***	0.024	-0.156 ***	0.022	-0.038 *	0.021
Cyprus	0.015	0.028	0.120 ***	0.021	0.089 ***	0.024
Czech Republic	-0.099 ***	0.024	0.089 ***	0.018	0.082 ***	0.019
Estonia	-0.066 ***	0.024	0.072 ***	0.018	-0.056 **	0.022
Hungary	-0.000	0.022	0.014	0.019	0.029	0.020
Latvia	0.012	0.022	0.102 ***	0.016	0.019	0.020
Lithuania	0.022	0.022	0.069 ***	0.018	0.029	0.020
Malta	-0.223 ***	0.031	-0.190 ***	0.029	-0.050 *	0.027
Poland	0.050 **	0.022	0.071 ***	0.018	0.014	0.021
Slovakia	-0.029	0.024	0.069 ***	0.019	0.019	0.021
Slovenia	0.037 *	0.022	0.082 ***	0.018	0.052 ***	0.020
Bulgaria	-0.038 *	0.023	0.021	0.019	-0.051 **	0.021
Romania	-0.108 ***	0.023	-0.001	0.019	-0.119 ***	0.022
Demographics						
female	-0.027 ***	0.009	-0.017 **	0.008	-0.029 ***	0.009
married	0.023 **	0.010	0.019 **	0.009	0.010	0.009
age	0.004 ***	0.001	0.001	0.001	0.006 ***	0.001
squared age	-0.000 ***	0.000	-0.000	0.000	-0.000 ***	0.000
Age at completed education (ref. >=20)						
<=15	-0.102 ***	0.016	-0.059 ***	0.014	-0.061 ***	0.015
16-19	-0.015	0.012	-0.024 **	0.011	-0.016	0.011
Labour market position(ref. High-skilled white-collar)						
unemployed	-0.016	0.023	-0.032	0.022	-0.007	0.022
manual worker	-0.019	0.017	0.007	0.016	0.005	0.016
low-skilled white-collar	-0.007	0.019	-0.011	0.018	0.004	0.018
businessman	-0.022	0.025	0.001	0.023	-0.021	0.025
out of the labour force	-0.028 *	0.017	-0.028 *	0.015	-0.008	0.016
House owned	0.001	0.010	-0.008	0.010	0.012	0.010
Trust						
national government	0.009	0.014	0.008	0.013	0.004	0.013
national parliament	0.016	0.014	-0.001	0.013	0.023 *	0.014
Ideology (ref. Left)						
right	-0.017	0.013	0.001	0.012	0.019	0.012
centre	0.006	0.012	0.007	0.011	0.035 ***	0.011
refusal/don't know	-0.067 ***	0.014	-0.040 ***	0.013	-0.022 *	0.013
Europeanism	0.135 ***	0.008	0.117 ***	0.007	0.084 ***	0.007
EU info	0.095 ***	0.009	0.066 ***	0.009	0.096 ***	0.009
Observations	26,082		26,082		26,082	
Prob > chi2	0.000		0.000		0.000	
Pseudo R2	0.129		0.124		0.078	

*significant at 10%, **significant at 5%, ***significant at 1%.

Table A3. IV Bivariate probit estimates (IV: 1 if the individual knows 2 or 3 economic indicators with a low error)

	Foreign policy		Defence		Immigration	
	Consensus equation	*Knowledge equation*	*Consensus equation*	*Knowledge equation*	*Consensus equation*	*Knowledge equation*
Variable						
Country-groups (ref. Italy)						
Belgium	-0.171**	0.426***	0.265***	0.431***	0.146*	0.428***
	(0.075)	(0.065)	(0.084)	(0.066)	(0.079)	(0.066)
Denmark	-0.786***	0.385***	-0.380***	0.386***	-0.368***	0.384***
	(0.075)	(0.071)	(0.081)	(0.071)	(0.078)	(0.071)
Germany	0.183**	0.211***	0.329***	0.211***	0.201***	0.209***
	(0.076)	(0.064)	(0.080)	(0.064)	(0.076)	(0.064)
Greece	-0.076	1.044***	0.123	1.044***	0.192*	1.040***
	(0.092)	(0.068)	(0.100)	(0.068)	(0.099)	(0.068)
Spain	0.040	0.240***	0.044	0.242***	0.087	0.242***
	(0.072)	(0.065)	(0.076)	(0.065)	(0.074)	(0.065)
Finland	-0.592***	0.415***	-0.514***	0.417***	-0.488***	0.416***
	(0.073)	(0.070)	(0.077)	(0.070)	(0.074)	(0.070)
France	-0.208***	0.010	0.162**	0.013	0.021	0.012
	(0.068)	(0.065)	(0.073)	(0.065)	(0.069)	(0.065)
Ireland	-0.409***	0.548***	-0.616***	0.548***	-0.279***	0.546***
	(0.072)	(0.065)	(0.075)	(0.065)	(0.074)	(0.065)
Luxemburg	-0.366***	0.673***	0.033	0.678***	-0.256***	0.680***
	(0.089)	(0.081)	(0.098)	(0.081)	(0.094)	(0.081)
Netherlands	-0.446***	-0.169**	-0.036	-0.170**	0.044	-0.171**
	(0.072)	(0.067)	(0.076)	(0.067)	(0.073)	(0.067)
Austria	-0.378***	0.798***	-0.358***	0.794***	-0.245***	0.792***
	(0.083)	(0.069)	(0.089)	(0.069)	(0.087)	(0.069)
Portugal	-0.428***	0.408***	-0.240***	0.408***	-0.349***	0.408***
	(0.070)	(0.065)	(0.075)	(0.065)	(0.071)	(0.065)
Sweden	-0.854***	0.026	-0.621***	0.024	-0.284***	0.022
	(0.072)	(0.070)	(0.074)	(0.070)	(0.074)	(0.070)
UK	-0.545***	-0.116*	-0.488***	-0.118*	-0.105	-0.118*
	(0.069)	(0.066)	(0.070)	(0.066)	(0.068)	(0.066)
Cyprus	-0.070	0.790***	0.540***	0.790***	0.252**	0.788***
	(0.099)	(0.083)	(0.117)	(0.083)	(0.107)	(0.083)
Czech Republic	-0.293***	0.061	0.388***	0.063	0.302***	0.062
	(0.070)	(0.066)	(0.079)	(0.066)	(0.074)	(0.066)
Estonia	-0.175**	-0.073	0.313***	-0.072	-0.160**	-0.072
	(0.070)	(0.066)	(0.076)	(0.066)	(0.069)	(0.066)
Hungary	-0.023	0.182***	0.042	0.180***	0.083	0.181***
	(0.070)	(0.065)	(0.074)	(0.066)	(0.070)	(0.066)
Latvia	0.016	0.187***	0.462***	0.187***	0.049	0.187***
	(0.069)	(0.065)	(0.076)	(0.065)	(0.069)	(0.065)
Lithuania	0.045	0.198***	0.279***	0.200***	0.081	0.200***
	(0.070)	(0.065)	(0.075)	(0.065)	(0.069)	(0.065)
Malta	-0.698***	0.715***	-0.619***	0.716***	-0.241**	0.709***
	(0.089)	(0.087)	(0.095)	(0.087)	(0.095)	(0.087)
Poland	0.107	0.380***	0.268***	0.379***	0.003	0.379***
	(0.076)	(0.065)	(0.080)	(0.065)	(0.074)	(0.065)
Slovakia	-0.174**	0.499***	0.250***	0.501***	-0.003	0.500***
	(0.078)	(0.068)	(0.088)	(0.068)	(0.082)	(0.068)
Slovenia	0.040	0.462***	0.321***	0.461***	0.121	0.460***
	(0.078)	(0.066)	(0.085)	(0.066)	(0.080)	(0.066)
Bulgaria	-0.066	-0.219***	0.101	-0.215***	-0.123*	-0.217***
	(0.071)	(0.067)	(0.074)	(0.067)	(0.071)	(0.066)
Romania	-0.212***	-0.572***	0.038	-0.568***	-0.278***	-0.569***
	(0.078)	(0.068)	(0.081)	(0.068)	(0.079)	(0.068)

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table A3 (cont'd). IV Bivariate probit estimates

Variable	Foreign policy Consensus equation	Foreign policy Knowledge equation	Defence Consensus equation	Defence Knowledge equation	Immigration Consensus equation	Immigration Knowledge equation
Demographics						
female	-0.028	-0.288***	-0.038	-0.289***	-0.052	-0.287***
	(0.036)	(0.027)	(0.039)	(0.027)	(0.038)	(0.027)
married	0.065**	0.019	0.067**	0.019	0.030	0.018
	(0.031)	(0.029)	(0.033)	(0.029)	(0.031)	(0.029)
age	0.010**	0.017***	0.003	0.017***	0.016***	0.017***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
squared age	-0.000**	-0.000**	-0.000	-0.000**	-0.000***	-0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Age at completed education (ref. >=20)						
stopped education before 15	-0.217***	-0.451***	-0.170***	-0.451***	-0.129**	-0.451***
	(0.058)	(0.045)	(0.060)	(0.045)	(0.058)	(0.045)
stopped education 15-19	-0.005	-0.226***	-0.070	-0.225***	-0.021	-0.225***
	(0.039)	(0.034)	(0.043)	(0.034)	(0.041)	(0.034)
Labour market position(ref. High-skilled white-collar)						
unemployed	-0.033	-0.036	-0.105	-0.036	-0.011	-0.033
	(0.071)	(0.070)	(0.077)	(0.070)	(0.074)	(0.070)
manual worker	-0.037	-0.069	0.033	-0.070	0.033	-0.068
	(0.054)	(0.052)	(0.059)	(0.052)	(0.055)	(0.052)
low-skilled white-collar	-0.027	0.068	-0.044	0.068	0.007	0.068
	(0.060)	(0.058)	(0.065)	(0.058)	(0.062)	(0.057)
businessman	-0.060	0.013	0.008	0.009	-0.061	0.011
	(0.078)	(0.075)	(0.086)	(0.075)	(0.081)	(0.075)
out of the labour force	-0.070	-0.035	-0.094*	-0.035	-0.015	-0.035
	(0.052)	(0.050)	(0.057)	(0.050)	(0.054)	(0.050)
house owned	-0.010	0.083***	-0.035	0.084***	0.030	0.084***
	(0.033)	(0.031)	(0.036)	(0.031)	(0.034)	(0.031)
Trust						
trust national government	0.020	0.054	0.027	0.054	0.007	0.055
	(0.044)	(0.040)	(0.046)	(0.040)	(0.045)	(0.040)
trust national parliament	0.026	0.137***	-0.013	0.138***	0.059	0.138***
	(0.045)	(0.041)	(0.049)	(0.041)	(0.047)	(0.041)
Ideology (ref. Left)						
right	-0.052	0.005	0.004	0.008	0.065	0.009
	(0.041)	(0.039)	(0.044)	(0.039)	(0.042)	(0.039)
centre	0.037	-0.076**	0.034	-0.074**	0.133***	-0.073**
	(0.037)	(0.034)	(0.039)	(0.034)	(0.038)	(0.034)
refusal/don't know	-0.141***	-0.300***	-0.115**	-0.300***	-0.027	-0.298***
	(0.048)	(0.041)	(0.051)	(0.041)	(0.048)	(0.041)
Europeanism	0.385***	0.194***	0.415***	0.194***	0.253***	0.193***
	(0.030)	(0.019)	(0.030)	(0.019)	(0.028)	(0.019)
EU info	0.739***		0.441**		0.677***	
	(0.164)		(0.190)		(0.182)	
IV		0.503***		0.502***		0.505***
		(0.033)		(0.033)		(0.033)
Constant	-0.008	-0.660***	0.364**	-0.662***	-0.188	-0.659***
	(0.136)	(0.125)	(0.149)	(0.125)	(0.138)	(0.124)
Observations	26082	26082	26082	26082	26082	26082

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table A4. IV Bivariate probit estimates (IV: 1 if individual agrees that it is necessary to know the main economic figures)

	Foreign policy		Defence		Immigration	
	Consensus equation	*Knowledge equation*	*Consensus equation*	*Knowledge equation*	*Consensus equation*	*Knowledge equation*
Variable						
Country-groups (ref. Italy)						
Belgium	-0.259***	0.423***	0.081	0.433***	-0.004	0.415***
	(0.067)	(0.064)	(0.073)	(0.065)	(0.069)	(0.065)
Denmark	-0.801***	0.493***	-0.472***	0.504***	-0.443***	0.486***
	(0.070)	(0.071)	(0.071)	(0.071)	(0.070)	(0.071)
Germany	0.067	0.390***	0.155**	0.392***	0.062	0.384***
	(0.068)	(0.063)	(0.070)	(0.063)	(0.068)	(0.063)
Greece	-0.311***	1.009***	-0.229***	0.997***	-0.122	0.981***
	(0.071)	(0.067)	(0.072)	(0.068)	(0.076)	(0.068)
Spain	-0.028	0.252***	-0.046	0.258***	0.001	0.251***
	(0.067)	(0.064)	(0.068)	(0.065)	(0.067)	(0.065)
Finland	-0.630***	0.418***	-0.587***	0.420***	-0.548***	0.413***
	(0.067)	(0.069)	(0.068)	(0.069)	(0.067)	(0.069)
France	-0.206***	0.049	0.106	0.053	-0.007	0.050
	(0.064)	(0.063)	(0.066)	(0.064)	(0.064)	(0.064)
Ireland	-0.494***	0.547***	-0.711***	0.548***	-0.399***	0.534***
	(0.064)	(0.064)	(0.063)	(0.065)	(0.063)	(0.064)
Luxemburg	-0.480***	0.629***	-0.192**	0.614***	-0.403***	0.645***
	(0.077)	(0.079)	(0.080)	(0.078)	(0.082)	(0.081)
Netherlands	-0.370***	0.001	-0.004	-0.000	0.061	-0.006
	(0.068)	(0.066)	(0.069)	(0.067)	(0.067)	(0.066)
Austria	-0.540***	0.899***	-0.594***	0.878***	-0.459***	0.871***
	(0.067)	(0.068)	(0.066)	(0.068)	(0.069)	(0.068)
Portugal	-0.488***	0.405***	-0.358***	0.393***	-0.432***	0.397***
	(0.063)	(0.064)	(0.064)	(0.064)	(0.063)	(0.064)
Sweden	-0.770***	0.119*	-0.559***	0.112	-0.272***	0.103
	(0.070)	(0.070)	(0.069)	(0.071)	(0.070)	(0.071)
UK	-0.444***	-0.101	-0.368***	-0.108	-0.049	-0.112*
	(0.065)	(0.065)	(0.065)	(0.066)	(0.064)	(0.066)
Cyprus	-0.249***	0.664***	0.195**	0.644***	-0.008	0.642***
	(0.085)	(0.081)	(0.096)	(0.081)	(0.090)	(0.081)
Czech Republic	-0.277***	0.093	0.299***	0.095	0.231***	0.093
	(0.066)	(0.066)	(0.073)	(0.066)	(0.069)	(0.066)
Estonia	-0.127*	-0.085	0.300***	-0.085	-0.105	-0.086
	(0.067)	(0.066)	(0.069)	(0.065)	(0.065)	(0.065)
Hungary	-0.059	0.148**	-0.018	0.141**	0.024	0.142**
	(0.066)	(0.065)	(0.067)	(0.066)	(0.066)	(0.065)
Latvia	-0.024	0.170***	0.333***	0.154**	-0.002	0.166**
	(0.065)	(0.064)	(0.069)	(0.064)	(0.065)	(0.064)
Lithuania	-0.005	0.212***	0.174***	0.207***	0.018	0.207***
	(0.066)	(0.064)	(0.067)	(0.064)	(0.064)	(0.064)
Malta	-0.782***	0.667***	-0.757***	0.670***	-0.409***	0.640***
	(0.081)	(0.087)	(0.082)	(0.085)	(0.081)	(0.085)
Poland	0.001	0.388***	0.096	0.373***	-0.107	0.379***
	(0.069)	(0.065)	(0.070)	(0.065)	(0.067)	(0.064)
Slovakia	-0.297***	0.556***	0.020	0.555***	-0.172**	0.558***
	(0.068)	(0.066)	(0.073)	(0.067)	(0.070)	(0.067)
Slovenia	-0.096	0.557***	0.090	0.549***	-0.050	0.549***
	(0.069)	(0.064)	(0.072)	(0.065)	(0.070)	(0.065)
Bulgaria	0.023	-0.251***	0.197***	-0.234***	-0.009	-0.245***
	(0.066)	(0.066)	(0.065)	(0.066)	(0.066)	(0.066)
Romania	-0.028	-0.660***	0.254***	-0.647***	-0.051	-0.650***
	(0.069)	(0.067)	(0.068)	(0.066)	(0.069)	(0.066)

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table A4 (cont'd). IV Bivariate probit estimates

Variable	Foreign policy Consensus equation	Knowledge equation	Defence Consensus equation	Knowledge equation	Immigration Consensus equation	Knowledge equation
Demographics						
female	0.064**	-0.334***	0.090***	-0.328***	0.061**	-0.329***
	(0.029)	(0.026)	(0.030)	(0.027)	(0.030)	(0.027)
married	0.051*	0.016	0.047	0.015	0.018	0.011
	(0.029)	(0.029)	(0.031)	(0.029)	(0.029)	(0.029)
age	0.003	0.021***	-0.005	0.021***	0.007	0.021***
	(0.004)	(0.004)	(0.005)	(0.004)	(0.005)	(0.004)
squared age	-0.000	-0.000***	0.000	-0.000***	-0.000**	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Age at completed education (ref. >=20)						
stopped education before 15	-0.057	-0.494***	0.036	-0.490***	0.044	-0.495***
	(0.048)	(0.044)	(0.050)	(0.044)	(0.049)	(0.044)
stopped education 15-19	0.062*	-0.255***	0.030	-0.253***	0.058	-0.260***
	(0.035)	(0.034)	(0.038)	(0.034)	(0.036)	(0.034)
Labour market position(ref. High-skilled white-collar)						
unemployed	-0.008	-0.063	-0.059	-0.068	0.018	-0.055
	(0.067)	(0.068)	(0.072)	(0.069)	(0.068)	(0.069)
manual worker	-0.000	-0.115**	0.071	-0.117**	0.067	-0.110**
	(0.051)	(0.051)	(0.054)	(0.051)	(0.051)	(0.051)
low-skilled white-collar	-0.035	0.052	-0.054	0.053	-0.006	0.053
	(0.056)	(0.056)	(0.060)	(0.056)	(0.058)	(0.056)
businessman	-0.040	-0.031	0.022	-0.037	-0.037	-0.027
	(0.074)	(0.073)	(0.080)	(0.074)	(0.076)	(0.074)
out of the labour force	-0.041	-0.073	-0.053	-0.081*	0.013	-0.070
	(0.048)	(0.048)	(0.051)	(0.048)	(0.050)	(0.049)
house owned	-0.033	0.089***	-0.063*	0.089***	-0.003	0.090***
	(0.031)	(0.031)	(0.033)	(0.031)	(0.031)	(0.031)
Trust						
trust national government	0.005	0.048	0.006	0.047	-0.008	0.054
	(0.042)	(0.040)	(0.043)	(0.041)	(0.041)	(0.040)
trust national parliament	-0.015	0.135***	-0.062	0.138***	0.005	0.136***
	(0.042)	(0.041)	(0.043)	(0.041)	(0.043)	(0.041)
Ideology (ref. Left)						
right	-0.047	-0.005	0.004	0.005	0.056	0.001
	(0.039)	(0.038)	(0.041)	(0.039)	(0.039)	(0.039)
centre	0.055	-0.098***	0.065*	-0.089***	0.144***	-0.091***
	(0.035)	(0.034)	(0.036)	(0.034)	(0.035)	(0.034)
refusal/don't know	-0.032	-0.333***	0.032	-0.324***	0.088**	-0.327***
	(0.042)	(0.041)	(0.043)	(0.041)	(0.042)	(0.041)
Europeanism	0.286***	0.185***	0.281***	0.183***	0.156***	0.180***
	(0.027)	(0.019)	(0.028)	(0.019)	(0.025)	(0.019)
EU info	1.366***		1.353***		1.427***	
	(0.074)		(0.077)		(0.083)	
IV		0.272***		0.285***		0.279***
		(0.027)		(0.027)		(0.027)
Constant	-0.214*	-0.763***	0.021	-0.766***	-0.411***	-0.754***
	(0.122)	(0.122)	(0.127)	(0.122)	(0.120)	(0.122)
Observations	26082	26082	26082	26082	26082	26082

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1