

NBER WORKING PAPER SERIES

MONNET'S ERROR?

Luigi Guiso
Paola Sapienza
Luigi Zingales

Working Paper 21121
<http://www.nber.org/papers/w21121>

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
April 2015

We would like to thank Tarek Hassan, Paola Giuliano, Gerard Roland, and three anonymous referees for very useful comments and Luca Riva and Riccardo Marchingiglio for very dedicated research assistantship. Luigi Zingales gratefully acknowledges financial support from the Center for Research in Security Prices (CRSP) and the Initiative on Global Markets at the University of Chicago. The views expressed herein are those of the authors and do not necessarily reflect the views of the National Bureau of Economic Research.

NBER working papers are circulated for discussion and comment purposes. They have not been peer-reviewed or been subject to the review by the NBER Board of Directors that accompanies official NBER publications.

© 2015 by Luigi Guiso, Paola Sapienza, and Luigi Zingales. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Monnet's Error?
Luigi Guiso, Paola Sapienza, and Luigi Zingales
NBER Working Paper No. 21121
April 2015
JEL No. E42,F45

ABSTRACT

Entering a currency union without any political union European countries have taken a gamble: will the needs of the currency union force a political integration (as anticipated by Monnet) or will the tensions create a backlash, as suggested by Kaldor, Friedman and many others? We try to answer this question by analyzing the cross sectional and time series variation in pro-European sentiments in the EU 15 countries. The 1992 Maastricht Treaty seems to have reduced the pro-Europe sentiment as does the 2010 Eurozone crisis. Yet, in spite of the worst recession in recent history, the Europeans still support the common currency. Europe seems trapped: there is no desire to go backward, no interest in going forward, but it is economically unsustainable to stay still.

Luigi Guiso
Axa Professor of Household Finance
Einaudi Institute for Economics and Finance
Via Sallustiana 62 - 00187
Rome, Italy
luigi.guiso@eief.it

Luigi Zingales
Booth School of Business
The University of Chicago
5807 S. Woodlawn Avenue
Chicago, IL 60637
and NBER
luigi.zingales@ChicagoBooth.edu

Paola Sapienza
Kellogg School of Management
Northwestern University
2001 Sheridan Road
Evanston, IL 60208
and CEPR
and also NBER
paola-sapienza@northwestern.edu

L'Europe se fera dans les crises et elle sera la somme des solutions apportées à ces crises.

[Europe will be forged in crises, and will be the sum of the solutions adopted for those crises.]

Monnet, J. (1976) *Mémoires* (Paris: Fayard).

From Kaldor (1971) to Friedman (1999) most economists predicted that a currency union was not sustainable without a political union. In spite of this consensus, in 1992 the Maastricht Treaty was signed and in 1999 the euro was introduced. These choices were not made out of ignorance about the necessary conditions for a currency union to work, but out of a strong conviction that integration will force further integration. In the words of Romano Prodi, one of the euro founding fathers, "I am sure the euro will oblige us to introduce a new set of economic policy instruments. It is politically impossible to propose that now. But some day there will be a crisis and new instruments will be created."

The integration "chain reaction" predicted by Monnet can take place for two reasons. Integration can create the political consensus for further integration, where crises provide the catalyst to transform political consensus into action. Alternatively, the chain reaction can be the result of a "scorched earth" strategy. By burning bridges behind, integration might be able to force further integration simply because there are no alternatives. This further integration can occur in spite of growing political opposition, not because of a rising political support. Even under this alternative crises can be a catalyst, but not to transform a political consensus into action, but to force unpopular choices down the throat of reluctant voters.

So far history seems to have vindicated Monnet's theory. Before the 2010 European Sovereign Crisis nobody would have anticipated a common supervision of the European banking sector any time soon. Since November 2014 this has become a reality. Yet, was this move triggered by a rising consensus toward more integration or was it forced down the throat of reluctant voters? Answering this question is crucial to the future of the euro and of Europe in general. If integration increases the demand for further integration, political integration is just a question of when, not if. By contrast, if integration forces further integration against voters' will, the integration process is more at risk. As all chain reactions, there is the risk of a meltdown.

In this paper we address the question of whether integration fosters demand for further integration. By using Eurobarometer's surveys we put together the longest possible time series of questions regarding Europeans' perceptions of the past and future benefits of European membership, support for the common currency as well as the level of trust in European institutions in the 15 European countries that joined Europe up to 1995 (France, Germany, Italy, Belgium, Netherlands, Luxembourg, UK, Ireland, Denmark, Greece, Spain, Portugal, Austria, Finland, and Sweden).

To begin with there is a very different *level* of pro-European sentiment (Europhilia), across EU members. Initially, Southern European countries were much more pro-Europe than Northern European ones. This difference appears related to the quality of institutions of each country vis-à-vis Germany. The worse the relative quality of domestic institutions, the higher the demand for Europe was.

When we look at the temporal patterns of Europhilia, we find that between 1973 and 1991 Europeans' views about the current benefits of European membership improved considerably. This increase seems consistent with the positive feedback loop implicit in Monnet's chain reaction theory: the experience of a common governance leads to an increased demand for more common governance.

This positive feedback loop, however, seems to break down with the 1992 Maastricht treaty. There is a drop in support for European membership and by looking at individual data this drop is highly correlated with a reduced support for the single market and for further political integration. This step seems to have created a permanent backlash.

While the question on past benefits of European membership exhibit a similar behavior, the attitudes towards the common currency and the trust towards the EU and the ECB show very different patterns. The support for the Euro seems to be remarkably stable, in spite of the Eurozone crisis, while trust in European institutions plummeted, even more so than the trust toward national institutions.

By using the surveys before and after the watershed moments, we build pseudo-panels (Deaton, 1985) to probe deeper into the causes of the consensus drop. The deterioration in the support for Europe in 1992 appears directly linked to a worsening in opinion regarding the benefits of a single European market, a single currency, and further political integration. This effect is similar across all countries, with the exception of

Denmark, for which is worse.

When we look at the effect of the Eurozone crisis, the most important determinant of discontent toward Europe seems to be the level of unemployment. The interest rate spread of a country public debt vis-à-vis the German Bund also has also a negative impact on support for EU membership. This effect, however, disappear if we allow a separate time trend for Southern European countries. We confirm this evidence by creating a pseudo-panel with the two surveys before and after the crisis and using individual perceptions of the economic conditions, rather than macro level variables.

Because the single currency forces also a single monetary policy, disappointment with Europe may arise because common policy decisions may be suboptimal from a domestic point of view. To estimate how much of the disenchantment towards Europe is correlated with the suboptimality of a common monetary policy, we compute the difference between the country optimal Taylor rule and the ECB policy rule for each country. We find that these deviations are highly predictive of the drop in support for Europe and in the trust towards the ECB. Yet, paradoxically, they are not predictive of the drop in support for the common currency. Europeans seem to believe in the common currency, not in the way it is managed.

Most Europeans are unhappy with the direction that the European Union has right now, but they still consider it a useful institution to deal with crises. In spite of the worst recession in recent history, the Europeans still believe in the common currency. Yet, they show no appetite to delegate more power to the EU.

Since the survival of the Euro is dependent upon further transfers of national powers to the EU, then the European Project seems to be stuck: Europeans do not want to go forward, they do not want to go backward, but they cannot stay still.

The rest of the paper proceeds as follows. In the next section we summarize the main lines of debate around the European integration process. Section 2 describes the main data used in our analysis; Section 3 discusses the sentiments of the Europeans towards the European project at the time it was started or the country joined it; Section 4 shows evidence of the temporal evolution of the sentiments towards Europe and how they correlate with macro-economic variables. Section 5 uses a pseudo-panel approach to shed light on the effect of three critical moments on the European project (The Maastricht

Treaty, the 2004 Enlargement and the 2010 Eurozone crisis) on European sentiments. Section 6 speculates on the future of Europe and Section 7 discusses some policy alternatives. Section 8 concludes.

1. Theories of the European Integration Process

The process of European Integration has been greatly influenced by the functionalist view, as interpreted and advanced by Jean Monnet, one of the EU founding fathers. The functionalist view postulates that European integration is mostly pushed by élites and interest groups that transcend national boundaries (Haas (1958, 1964). It is called "functionalism" (sometimes neo functionalism) because it aims at transferring specific "functions" to supranational institutions (for an excellent overview on the topic, see Spolaore, 2013).

The functionalist approach finds its first institutional implementation in the European Coal and Steel Community Treaty. The treaty established five main institutions, which constituted the foundation of the institutional framework of the European Community (Laffan and Mazey, 2006). These institutions, which do not respond directly to voters, are deputized to push further the integration process.

The institutional counterpart to this strategy is the so called *methode communautaire* (Community Method), which granted to the European Commission (composed of appointed members) a central role in formulating proposals. The appointment method naturally led to a Commission populated by pro-Europe members, who always pushed for further integration.

A corollary of this approach is that the Commission must not be highly politicized, but must represent all mainstream parties in Europe. In so doing this method favored the formation of an élite of pro-Europe bureaucrats, with little or no political accountability. It is what Marquand (1979) calls Europe's "democratic deficit".

As discussed in Spolaore (2013), functionalists believe that moving some policy functions to the supranational level creates pressure for more integration through both positive and negative feedback loops. The positive feedback occurs as politicians and voters observe the benefits of integrating some functions and will want to integrate more. The negative feedback occurs when partial integration leads to institutional and economic

inconsistencies that will push further integration by forcing the introduction of the complementary reforms needed. Needless to say, for the negative feedback mechanism to push further integration that fixes the institutional inconsistencies, it must be true that dismantling the initial integration is costly – that is institutional and economic integration comes with irreversibility, so that pushing forward may be less costly than pulling back. According to Eichengreen (2006) and Pierson (1996) technocrats typically start from narrow areas of expertise (e.g. coal, steel) where they have an informational advantage and voters and national politicians are not able to predict or anticipate the contradictions generated by these partial integrations, nor are interested in opposing them because they affect a limited number of voters.

A leading example of this “burning the ships” strategy is the euro. In the words of the former German Chancellor Helmut Schmidt “This is the great strength of the euro, that nobody can leave it without damaging his own country and his own economy in a severe way.”¹

As explained by Monnet’s collaborator George Ball (1994): “Monnet recognized that the very irrationality of this scheme might provide the pressure to achieve exactly what he wanted – the triggering of a chain reaction. The awkwardness and complexity resulting from the singling out of coal and steel would drive member governments to accept the idea of pooling other production as well.”

At least some European founding fathers seem to have conceived the mechanism knowing that these inconsistencies would lead to crises. These crises were seen as opportunities to force further integration which voters would have not favored otherwise.

Therefore, in order for the functionalist approach to work, an initial integration step should lead to more demand for integration later, either through the positive or the negative feedback loop (or both). Most importantly, the functionalist approach implicitly assumes that there is no risk of a backlash, pushing the integration project backward. Padoa-Schioppa, one of the founding father of the euro, once said that the Economic and Monetary Union (EMU) has the same name of an ostrich-like Australian bird. “Neither,”

¹ In an interview with David Marsh in 2007 cited in David Marsh “The Euro: The Politics of the New Global Currency” Yale University Press; 2009, p. 255.

he said, “can go backwards.”²

Yet, there is a contradiction implicit in this approach. On the one hand, this strategy makes sense only if further integration is not desired today. If voters were in favor of further integration from the start, the functionalist approach would be redundant. On the other hand, if voters were against further integration and fully anticipated the feedback effects, they will oppose even the first move. Thus, to work the functionalist approach requires a certain degree of voters’ deception, which adds to the perception of a democratic deficit.

In this paper we analyze the public opinion regarding the European project through the lenses of Monnet’s conjecture. First, we analyze the functioning of the positive feedback loop. In particular, we study whether the pro European sentiment evolves as a function of the time spent in the Union. We also analyze the evolution of a country xenophobic attitude as a function of the number of immigrants coming from Europe and from outside of Europe. It is possible that mistrust toward other nations and citizens prevents comprehensive integration, at the start, but as citizens learn to trust other immigrants and get to know them, the public opinions may shift. According to this hypothesis, as Europe becomes more integrated, especially with the abolition of the internal border of control and several European initiatives, such as the Erasmus program, European citizens learn to trust more their counterparts. This positive feedback could, in turn, change positively the sentiment toward further integration.

Second, we analyze the negative feedback loop at three critical junctures of the European project: i) the signing of the Maastricht treaty; ii) the 2004 EU enlargement to Eastern Europe; iii) the Great Recession and the associated 2010 Eurozone crisis.

2. The Data

2.1 The Eurobarometer Surveys

The Eurobarometer surveys are the product of a unique program of cross national and cross temporal social science research. The effort began in the early 1970s, when the European Economic Community (EEC)’s Commission sponsored simultaneous surveys

² Lorenzo Totaro, Brian Swint and Flavia Krause-Jackson, “Padoa-Schioppa, Euro Architect, Founding Member of ECB Board, Dies at 70, Bloomberg.com Dec 19, 2010.

in the EEC to measure public awareness of, and attitudes towards, the Common Market and the European Community institutions. In 1974, the EEC Commission launched the Eurobarometer series, designed to provide a regular monitoring of the social and political attitudes in the nine member-nations: France, Germany, Great Britain, Italy, the Netherlands, Belgium, Denmark, Ireland, and Luxembourg.

These Eurobarometer surveys are carried out in the spring and fall of each year. In addition to regular readings of support for European integration, each survey explores some special topics. Beginning with Barometer 7 in the spring of 1977, the surveys measure also the support for the European Parliament.

The geographic scope of Eurobarometer surveys has gone hand in hand with the Community's enlargement process: it has included Greece since fall 1980, Portugal and Spain since fall 1985, the former German Democratic Republic (East Germany) since 1990, Finland since the spring of 1993, and Sweden and Austria since the fall of 1994. Since the 2004 eastern enlargement of the Union, the survey has included the Republic of Cyprus, the Czech Republic, the Baltic States, Malta, Poland, Slovakia and Slovenia. In spring 2007 Romania and Bulgaria have also been included.

For the sake of consistency, we excluded citizens from countries not yet in the European Union at the time of the survey³ as well as respondents below the age of 18. Among all the Eurobarometer waves, we select those in which questions about the attitudes towards membership, the euro, and the European Central Bank are asked. The exact wording of these questions is reported below

QUESTION	WORDING
MEMBERSHIP	<i>Generally speaking, do you think that (OUR COUNTRY)'s membership of the European Union is. (Good, Neither good nor bad, Bad)? We compute the share of respondents who answer Good.</i> ⁴
BENEFIT	<i>Taking everything into consideration, would you say that (OUR COUNTRY) has on balance benefited or not from being a member of the European Union (Benefited, Not benefited)? We compute the share of respondents who answer</i>

³ So that, for instance, Finns are included since spring 1995 as opposed to spring 1993.

⁴ In earlier datasets the coding of the third option "Neither good nor bad" is inconsistent. Even after reviewing the codebooks we were unable to reach a desired level of confidence in our results. For this reason we limited ourselves to the dichotomist choice.

	Benefited.
EURO	<i>Please tell me for each proposal, whether you are for it or against it. [...] There has to be one single currency, the euro, replacing the (NATIONAL CURRENCY) and all other national currencies of the member states of the European Union.</i>
	(For, Against). We compute the share of respondents who answer “For”...
TRUST EU	<i>For each of the following institutions, please tell me if you tend to trust it or tend not to trust it? [...] The European Union. (Tend to trust, Tend not to trust). WE compute the share of respondents who answer “Tend to trust”..</i>
TRUST ECB	<i>For each of [the following European institutions], please tell me if you tend to trust it or tend not to trust it? [...] The European Central Bank (Tend to trust, Tend not to trust). We compute the share of respondents who answer “Tend to trust”..</i>

The MEMBERSHIP variable is a measure of the view of the current and future benefits of belonging to the EU. By contrast, the variable BENEFIT represents an assessment about the past benefits, while we interpret TRUST EU as an assessment of how the European project is managed. Similarly, the EURO variable assesses the beliefs in the necessity of a common currency, while we interpret the TRUST ECB variable as a judgment on the way the common currency is managed. In this way we are able to distinguish between opinions about the *validity* of the European unification project and opinions about the *performance* of the current European institutions. As we will see, this distinction will turn out to be empirically important.

The summary statistics of these variables are contained in Table 1. Panel A reports the individual data, while Panels B and C report averages by country. For a detailed description of these variables see Table A1 in Appendix.

2.2 Demographic variables

The Eurobarometer surveys contain information on the date of birth of respondents. By using this date, we cluster people in five cohorts: the War II generation (born before 1945), the post War II generation (between 1946 and 1957), the baby boom generation (between 1958 and 1967), the Erasmus generation (so called because they benefited from European fellowship program to study abroad between 1968 and 1979), and the millennial generation (born after 1979).

The Eurobarometer surveys contain also data on years of education and occupation recoded in 10 categories.⁵

2.3 Macroeconomic Variables

The exact description of the macroeconomic variables we use is contained in Table A.1 in the Appendix. For the unemployment rate (unemployed persons as a share of the total active population) we use the Annual Macro–Economic Database of the European Commission; for inflation, the OECD Consumer Price Indices. As ECB policy rate we use the Marginal Lending Facility Rate (MLR), i.e. the interest rate at which mayor financial institutions obtain overnight liquidity from national central banks in the Eurosystem, against eligible assets. We obtain the pre-Euro national central bank policy rate from the IMF International Financial Statistics (discount rate, line 60).

The gross contributions to – and receipts from – the E.U. budget is from Kauppi and Widgren (2004) for the period 1976-2001 and from Financial Programming and Budget - Revenue and Expenditures file for 2001-2012.

2.4 Attitudinal and Cultural Variables

We derive some indicators of cultural and attitudinal differences across countries from the European Social Studies surveys. As indicators of racism we use the answer to the following question “On this list are various groups of people. Could you please mention any that you would not like to have as neighbors?” One measure (called “no neighbors: race”) equals to one if the respondent mentions “People of a different race” as a possible answer. The other measure (called “no neighbors: immigrants”) equals to one if the respondent mentions “People of a different country” as a possible answer.

As a measure of pride we use the question “How proud are you to be a ... (country) citizen.” We compute the share of respondents who declare themselves Very Proud on a 4pt scale (1 = Very Proud, 2 = Quite Proud, 3 = Not very proud, 4 = Not at all proud).

The genetic distance is the bilateral genetic distances between countries computed by Cavalli Sforza (2000) and used by Guiso et al. (2009) and Spolaore and Wacziarg

⁵ 1. Farmer, Fisherman (Skipper); 2. Professional - Lawyer, Accountant, Etc; 3. Business - Owner Of Shop, Craftsman, Proprietor; 4. Manual Worker; 5. White Collar - Office Worker; 6. Executive, Top Management, Director; 7. Retired; 8. Housewife, Not Otherwise Employed; 9. Student, Military Service; 10. Unemployed, D.K., N.A.

(2009).

3. Sentiment toward the European Union

Before analyzing the evolution of sentiments toward Europe it is important to study whether citizens of different countries have a different baseline attitude vis-à-vis the European project. As the Union was formed, did the initial level of support differ across countries? Why?

Table 2 shows the sentiments toward the European project the first time this question was asked (which changes from question to question and from country to country). The oldest question is whether EU membership is a good thing for the country, which was asked since 1973. For the core countries (France, Belgium, The Netherlands, Germany, and Italy), thus, the question is asked several years after they joined the EU, something we need to keep in mind in the interpretation.

The first column reports the fraction of people, by country, who answer “Good” to the question “Generally speaking, do you think that (OUR COUNTRY)’s membership of the European Union is (Good, Neither good nor bad, Bad)?” The data show a large difference of opinions across geographical areas. Among the core countries there is an overwhelming majority in support, with Italy being the most favorable (80%) and France being the least favorable (69%). By contrast, for later entrants the picture is mixed. United Kingdom (36%) and Denmark (46%) joined with only a minority supporting the EU. So did Greece (42%), Sweden (40%), and Austria (42%). Instead, Portugal (72%) and Spain (78%) enjoyed a large majority of supporters for the project at the time of entry.

The remarkable difference in support between early and later entrant (73% vs 52%) may reflect a selection effect (the more enthusiastic joined first) or an acquired taste effect (consistent with the positive feedback effect predicted by the functionalist approach).⁶

The other answers show a similar pattern. Yet, there are some differences. The

⁶ A formal test that the difference in sentiments at entry is lower for later entrants does not reject the null for “Membership is good” and for “Membership benefits” (p-values 0.007 and 0.057, respectively); there is no evidence that it differs for trust but not for trust in the EU, presumably because this question is asked much later than the other two when some disillusion with the EU project has already affected the opinions of the early members as we document in Section 4.

fraction of respondents who in 1984 agreed that their country benefited from being a member of the European Union is the majority in France (55%), Belgium (52%), the Netherlands (69%), Luxembourg (72%) and Ireland (61%), while is less than half in Germany (41%), Denmark (44%), Greece (47%) and the UK (34%). The difference may reflect the fact that this question focuses on the past (have you benefited), rather than the present/future (is membership good today).⁷

On average, citizens of the core countries seem to trust the European Union less than they think it is beneficial. The fraction of respondents who trust it are the majority only in Italy (63%) and Luxembourg (76%). Among the late entrants, Southern countries have a more positive view, while Northern ones do not trust the European Union.

Can we explain these differences in opinion with country-specific variables? To this purpose, we extract the country fixed effects from the following O.L.S. regression run on the sample of respondents to the pooled Eurobarometer surveys in the year when a country entered the EU (or 1973 for the original six countries):

$$(1) \text{Membership}_{ijt} = \alpha + \beta X_{ijt} + \gamma D_j + \epsilon_{ijt}$$

where i stands for individual, j for country and t for the entry year. The Membership variable is a dummy variable equal to 1 if a respondent answers “Good” to the Membership question in that country year. X_{ijt} are individual demographics (gender, cohorts, education, occupation), and D_j are country fixed effects.

Figure 1 plots the country fixed-effects (relative to Germany) derived from (1). There is a very strong North-South component in these country fixed effects. The picture is similar (not reported) if, instead of the Membership variable, we use Benefit (a dummy variable =1 if a respondent thinks that his country has on balance benefited from EU), the support for the Euro, or the Trust in EU and ECB. For simplicity, we will refer to all these variables measuring the support towards the European projects as Europhilia indicators.

In Table 3 we regress these countries’ fixed effects on potential determinants of Europhilia. Each RHS variable is a proxy for a motive for supporting Europe cited in the

⁷ For the newcomers, Spain and Portugal in 1986 and Finland Sweden and Austria in 1995, the answer has not much relevance, since they have just joined the EU.

public debate. Since we only have 15 observations, we run univariate regressions with each of the variables in the rows of Table 3 as RHS variables. Each entry in the table shows the slope coefficient (and its standard error) of the regression where the LHS is the variable reported at the top of the column and the RHS is the one variable indicated at the beginning of the row. Statistically significant coefficients are marked in bold.

Though not all motives should affect each indicator of support for the European project, we are not very successful in explaining these country fixed effects. Given the number of right hand side variables, the level of statistical significance is close to what we would expect just by chance. Thus, the main objective of this table is to show which motives do not matter.

To begin with, a prevailing view – rooted in Robert Schuman 1950 proposal to Germany (and any other country in Europe willing to join) to create a community of peaceful interests - is that Europe was the response to the horrors of the two World Wars. For this reason, we use as a possible determinant of Europhilia the sum in number of deaths suffered by a country in World War I and in World War II divided by its population at the beginning of each war. We do not find any evidence to support that the European unification is a mere consequence of the destruction of the war. One could argue that the relative number of deaths might not capture well the destructions of war. However, countries that were spared the horrors of WWII, such as Spain and Portugal, exhibit a higher level of Europhilia than countries devastated by the war, such as Austria and England.

Similarly, we do not find any support for the idea that a country's average attitude towards Europe depends upon its relative GDP per capita, the ratio between Net Receipts from the EU and GDP, the openness to trade (proxying for an “Economic insurance”, “Economic Transfers”, and “Trade Opportunities” motives, respectively), the level of xenophobia, the level of patriotism, and the genetic distance of its indigenous population with the indigenous population of the rest of the European Union (a proxy for cultural barriers).⁸

By contrast, a measure of institutional quality (the difference in each country government effectiveness vis-à-vis Germany, computed in 2007) seems to be correlated

⁸ For the economic motives see, among others, Baldwin (2006) and for cultural barriers Herrera et al (2014).

with Europhilia. The government effectiveness is a World Bank's World Government Indicator Index, capturing "perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies (increasing in government capacity" (Kauffman et al (2010)). Countries with more effective governments than Germany are less Europhile. By contrast, countries with relative bad institutions seem to be happier to be part of the EU. This result suggests that citizens believe that the European institutions will have a quality that averages the quality of the member states. Joining Europe could signify that the political and economic institutions will improve in the European Union for weaker quality countries.

An alternative explanation is that institutional quality is a proxy for the years a country had democratic institutions. Thus, countries with younger democracies are more likely to favor the European project. We try to distinguish between these two hypotheses by correlating the number of years each country had a democratic government with Europhilia.⁹ The results (unreported) show that proxies for democracy are not correlated with European consensus.

We repeat the same exercise by using the variable BENEFIT, which measures the past benefit and not the future one. This question is not the most meaningful one for countries at entry, since they do not have much an experience. Not surprisingly, no variable seems to have any explanatory power.

When it comes to support for the Euro, we find that, besides the relative institutional quality, also the xenophobia indicator seems to have an effect: more xenophobic countries tend to support the euro more. This effect seems to be the result of a higher level of xenophobia among southern European countries, who support the Euro more.

In sum, attitudes towards Europe do not seem to be affected either by cultural barriers or by the claimed desired to avoid a future war. We find some support for the "Institutional quality transfer."¹⁰

⁹ From 1880 to today the number of years for each country Polity IV gives a score of 6 or more.

¹⁰ These results are robust to using the sentiments in the entire sample period; that is if instead of correlating these

4. The Temporal Dynamics of Europhilia

With these different baselines in mind, we can now analyze the evolution of sentiments over time.

4.1 Aggregate Analysis

Figure 2 reports the evolution of the fraction of people with a positive sentiment about EU membership from 1973 to 2012 (the last year the information was collected) for the 15 core EU countries.¹¹ In this figure we have grouped the countries into three areas, Northern Europe (Denmark, Ireland, and United Kingdom), Finland and Sweden), Central Europe (France, Belgium, Netherlands, Austria and Germany), and Southern Europe (Greece, Italy, Portugal, and Spain). While there is some variation within each group, the geographical three-partition seems to fit the data well.

Given the continuing enlargement of the EU, we are concerned that the increase in the set might confound the temporal pattern. For this reason, we limit the sample to the earliest 15 members, imputing to a missing the entry level of the country's corresponding variable until it enters to make the series homogenous.¹² However, in Figure 2, panels B, C, and D we analyze each country separately to distinguish any compositional effect deriving from new entrants' opinions.

Figure 2A shows a steady improvement in Europhilia during the period leading to the Maastricht Treaty (1992): at the peak, in the second half of 1991, the fraction of Southern Europe supporters was more than 80%, the fraction of Central European supporters was 61%, while in Northern Europe a majority of respondents (59%) believed that EU membership provided a benefit to their country.

As Figure 2 panels B-D show most of the increase in consensus is concentrated among the Eurosceptic countries located in the North and in Greece. This trend seems consistent with the positive feedback reaction of Monnet. The support for Europe rises among initially skeptical countries thanks to a positive feedback effect of membership.¹³

factors with the country fixed effect residual from (1) we correlate them with the fixed effects from a similar regression run using the data for the entire period, including time fixed effects.

¹¹ Until 1991 the European Union was called European Economic Community. From now on we are going to refer it to EU, regardless of the time period.

¹² The EU founding members were France, Germany, Italy, Belgium, Netherlands, and Luxembourg. UK, Ireland, and Denmark joined in 1973, Greece in 1981, Spain and Portugal in 1986, Austria, Finland and Sweden in 1995.

¹³ Obviously, because consensus is measured as a percentage of the population with favorable sentiments towards

The year 1992 is a watershed from many points of view. In February 1992 the Maastricht treaty is signed, establishing not only the path to a common currency, but also final political unification as the ultimate goal. In September 1992 the Italian Lira and the British Pound were forced off the EMS system. Finally, in January 1993 the single market becomes a reality, thanks to the adoption of 280 pieces of legislation that replace national regulation with common European laws.¹⁴ In years following these episodes, the consensus toward Europe seems to decline. It is hard to disentangle the relative importance of these three factors with aggregate data. Nevertheless, the fact that the drop in consensus is not concentrated or particularly pronounced in the two countries that were forced to exit the EMS rules out the EMS as a main factor.

One possible interpretation – consistent with Monnet’s chain reaction theory - is that the positive feedback loop generated by the initial European experience allows the pro-Europe elite to make a step forward, step that is later resented by voters, once they appreciate the consequences of this step. An alternative interpretation is that to create support for a further integration step, the European Union spent a great deal in promoting the idea. This promotion temporarily boosted consensus. Once it subsided, consensus dropped.

The post-1992 discontent is mostly concentrated among Southern European countries, the ones that were most enthusiastic to begin with. Over time the initial difference among pro-European countries and skeptics disappears and the ranking seems to flip in the last survey, where a minority (44%) in Southern Europe perceives membership as beneficial, while a majority supports the European project in Central Europe (60%) and in Northern Europe (53%). It looks as if Southern European countries initially believed in an institutional arbitrage (which would enable them to benefit from Northern European superior institutions at no cost). Over time they learned that there is no free lunch.

In Figure 3 we plot the year fixed effects of a modified version of regression (1) where we consider all the years available (t instead of being the entry year is any year from entry to 2012). These fixed effects capture the dynamic in Europhilia common to all the 15 countries after we control for demographic changes in the various countries. It

the EU, there is less scope for it to increase in a country where it is already high (say 80%) than in a country where it is low.

¹⁴ http://ec.europa.eu/internal_market/20years/singlemarket20/facts-figures/history_en.htm

clearly confirms that overall there is a general increase in Europhilia from 1981 to 1991, followed by a large drop from 1992 to 1997.

One may wonder whether the changes over time are due to the same people switching opinion or to younger generations having different opinions from older generations. Figure 4 tries to study this question. In the modified version of regression (1) we estimated the cohort effects, leaving as omitted cohort the War II generation (born before 1945). These cohort effects are plotted in Figure 4.

Interestingly, all cohorts have a similar attitude toward Europe, with the exception of the millennial generation (born after 1979). Given the structure of the data, the evolution of beliefs of this generation only affects the more recent years. People born after 1979 are significantly more pro-Europe at the beginning (1998) than all the other cohorts and they end up being significantly less favorable than all the other generations in 2012. To the extent the younger generation is predictive of future trends this is a worrisome sign for the European project. Beginning in 2003, all cohorts start to become less pro-Europe than the war generation, albeit these differences are not statistically significant.

4.2 A Panel Analysis

With these data we cannot clearly address causality. Nevertheless, in this section we study how the sentiment toward Europe correlates with macro-economic variables. In Table 4 we report the results of the following regression

$$(2) \text{Membership}_{jt} = \alpha + \beta X_{jt} + \gamma D_j + \delta D_t + \varepsilon_{jt}$$

where the symbol jt indicates the average across individuals in a given country-year of a certain variable, D_j are country fixed effects, D_t are time fixed effects, and X_{jt} are country's characteristics at time t . Thus, the LHS is the country average of the MEMBERSHIP variable in each year from 1973 to 2012.

In column (1) we control only for year fixed effects, which explain 14% of the total variation. In column (2) we control only for country fixed effects, which explain 65% of the total variation. Controlling jointly for year and country fixed effect (column (3)), we can explain 74% of the total variation.

In column 4, instead of the year fixed effects, we insert a post 1992 dummy and a post 2004 one. Both have a negative and statistically significant coefficient. This result confirms the visual impression of Figure 2. Yet, the year fixed effects have more explanatory variables than the two dummies.

In column (5) we return to the specification in column (3) that includes both country and year fixed effects and add to it two economic variables that capture country specific macroeconomic dynamic: the level of unemployment and the difference between the yield of the local sovereign and that of the German Bund. We interact the spread with a dummy=1 for the countries belonging to the Eurozone after the national currency-Euro changeover and with another dummy for the non-Eurozone countries or for these countries before the Euro. This way we capture different meanings of the spread in the two group of countries/time periods.

As expected the level of unemployment has a negative and statistically significant effect on Europhilia. A one percentage point increase in unemployment reduces MEMBERSHIP by 60 basis points (10% of the sample mean). The effect of unemployment on whether EU membership is perceived as beneficial is not different across different periods: when we interact unemployment and some specific year dummies (euro-crises years) we do not find a significant coefficient. A similar result is true for the spread. An extra percentage point in the spread reduces MEMBERSHIP in a Eurozone country after the adoption of the single currency by 78 basis points (13% of the sample mean). The spread has instead no effect on the sentiments towards membership of the non-eurozone countries (or of Eurozone countries before the Euro), presumably because it shows little variation over the sample period expect during the financial turmoil of the early 1990s.

Interestingly, when we look at the year fixed effects (not reported) the 2011 and 2012 dummies lose statistical significance if we insert these two variables relatively to the omitted years.¹⁵ Thus, the drop in Europhilia in recent years seems to be entirely explainable with economic factors.

In commenting Figure 2 we noticed that most of the post 2004 drop was concentrated in Southern European countries. For this reason in column (5) we interact

¹⁵ An F-test for the significance of the 2011 and 2012 dummies has a p value of 0.25

the post 2004 dummy with the South dummy. The post 2004 dummy becomes insignificant, suggesting that the effect is concentrated in the Southern countries. Instead, the post Maastricht dummy remains significant, and its effect is even larger. Because 1992 and 2004 are particularly relevant points in the data we will try to study them in more detail in the next session by using the micro-level data. Thus far, we have focused all our attention on MEMBERSHIP, for which we have the longest time series. The pattern for the BENEFIT variable (unreported), which is available only since 1983, is very similar. By contrast, the picture is quite different if we look at the trust toward the EU (Figure 5). While this variable is available only since 1997, it presents a much more dramatic pattern. Among Southern European countries trust towards the EU drops from 70% to 20% in six years. For the rest of Europe the drop is less pronounced, but still very large (from 62% to 37% for the Central countries and from 59% to 35% for the Northern ones). Thus, while Europeans continue to see the benefits of the EU membership, they are very unhappy of the way this membership is managed by the current institutions. This performance suggests that if the founding fathers hoped to win over the skeptics, they miscalculated that the public opinion could be turned against European institutions, rather than convinced of their necessity.

It is possible that this malcontent is entirely driven by economic conditions. In the last six years Europe has been affected by a recession that is in many cases deeper and longer than the one experienced in the 1930s. Hence, it is not surprising, that Europeans express their dissatisfaction toward existing institutions, being them national or supranational. Thus, to assess the health of the European project we should not focus too much on the trust towards the EU, but on the relationship between the trust towards the EU and the trust towards the national government. The ratio between these two variables is plotted in Figure 6.

Consistent with our previous results, on average Southern European people trust the EU more than their national governments, while Center and North Europeans do not. Interestingly, however, there is a severe drop in relative trust after 2009. Part of that drop reflects the rise in the previous two years. As the 2008 crisis hits the various economies there was an immediate loss in the trust towards local government, and only later a drop in the trust towards the EU. In 2013 the relative trust in all three geographical areas is

lower than at the beginning of our sample period (1997), but not by a lot. There are exceptions, though. In 1999 Italians trusted the EU much more than their own government. In 2013 this difference was cut in half.

In Figure 7 we look at the support toward a common currency. Interestingly, this question was asked well before the introduction of the Euro, so we can track public opinion for a long time. Surprisingly, we do not observe a pattern similar to Figure 2. While there is a decline in support among Southern countries, this decline takes place after 2002, not after 2010. The Eurozone crisis seems to affect negatively the support for the common currency in the countries *not* in the euro (UK, Denmark and Sweden), which see the support drop from 61% to 43% and in the Northern European countries in the Eurozone (a drop of 15 percentage points) that have been moderately affected by the crisis. It does not affect support among Southern European countries, which fluctuates around 60%. A very different picture emerges if we analyze the behavior of trust in the ECB. Here the drop after the Eurozone crisis is severe, especially among Southern European countries, where the trust in the ECB drops from 64% in 2008 to 24% in 2013.

Figure 8 shows a divergence in the pattern of trust toward the euro and trust toward the ECB in few selected countries, especially after the global financial crisis. While the trust toward the Euro remains strong in most of the countries, there is a significant reduction in trust toward the ECB both in strong economies (Germany) and in weak economies (PIGS). In Greece support to the Euro becomes even stronger while trust in the ECB falls by 40 percentage points. This remarkable divergence suggests that European citizens are disappointed about the management of the crisis, but maintain a relatively positive attitude toward the common currency. An alternative interpretation for being in favor of the Euro while expressing mistrusts towards the ECB is that countries anticipate the cost of exiting the single currency and, forcefully, favor the status quo. This explanation, which is consistent with the negative feedback loop theory described in Section 1, seems validated by the fact that support towards the euro dropped substantially for those countries who are not in the euro.

4.3 Xenophobia

Thus far we have only used economic variables to explain the changes in European

sentiment toward the European institutions and the European project. It is possible, however, that some cultural variables, such as attitudes towards immigration, can explain the deterioration in support for the EU.

To measure attitudes towards immigrants we rely on the European Social Study (ESS). We use two questions. The first is “Is [country] made a worse or a better place to live by people coming to live here from other countries?”, where the answers range from 0 = Worse place to live to 10 = Better place to live. The second question is “Would you say it is generally bad or good for [country]’s economy that people come to live here from other countries?”, where the answers range from 0 = Bad for the economy to 10 = Good for the economy.

Figure 9 plots the share of respondents in each country who answer 4 or less in these two questions. We use this as proxies for xenophobia. As we can see, the two responses are highly correlated, but they do not show much variation over time. The two countries where we see a pronounced increase are Greece and Ireland. Thus, it is unlikely that such slow moving variables can explain the changes in Europhilia.

In unreported regressions we try to explain the change in the MEMBERSHIP variable with our proxies for xenophobia. The coefficient on xenophobia is statistically insignificant both alone and interacted with unemployment, suggesting that it plays no significant role in the decline of support towards the European project.

Overall, we can conclude that the economic crisis tends to undermine the trust in the European institutions, but not (at least not yet) the beliefs in the benefits of Europe. On a one hand, we could say that Monnet’s chain reaction theory might have some validity. If economic crises increase the desire to reform European institutions, but do not reduce the desire for Europe, then Monnet’s chain reaction might work. We will return to this in the next section. On the other hand, (contrary to Monnet’s view) we see that the support for Europe dropped any time there was a milestone toward more European integration (such as the 1992 Maastricht Treaty and the 2004 enlargement) and this drop does not seem to disappear with time. Rather, it seems cumulative.

5. The Three Watershed Moments

The analysis so far only reports correlations based on aggregated data. One

obstacle to the use of micro-data is the fact that in every survey Eurobarometer interviews a different sample of citizens, so it is not possible to study in a panel how changes in individual economic conditions affect the perception toward the European project. Moreover, many interesting questions are not asked every period, making it impossible to dig deeper into the reason of some changes.

To circumvent these problems, we use the pseudo-panel technique (Deaton (1985)) by using surveys just before and after the three major turning points in the European project (the 1992 Maastricht treaty, the 2004 enlargement, and the 2010 Eurozone crisis).

5.1 The Maastricht Treaty

Figure 10 plots some similar or identical questions which were asked in both the March 1992 and 1993 surveys. The graph to the left shows the support for the single market. The grey bars show the share of respondents who in 1992 answered “A Good Thing” to the question “Overall, what do you think that the completion of the Single European Market in 1992 will be?” The black bars show the share of people who in 1993 answer “Advantages” to the question “Do you think that Single European Market brings more advantages or more disadvantages for (OUR COUNTRY)?”. The two questions not being identical, we mostly focused on the differential changes across group of countries, rather than on the difference itself.

The most striking fact is that in 1992, when it was approved, there was not a majority in favor of the single market. The only countries where the majority of the respondents supported the single market were the PIIGS: Italy, Portugal, Spain, Greece, and Ireland. As a consequence, only in Southern Europe (and in Ireland) a majority of respondents thought that the completion of the single market was a good thing, while in the Northern European countries citizens were split in half among those who thought the change was positive and those who did not. In the Center less than 40 percent supported the change.

One year after the implementation, respondents were asked to reflect on the change and decide whether completing the single market was advantageous to the domestic economy. The support drops dramatically in the South from 63% to 42% and in the Center from 34% to 18%, while it remains substantially stable in the North.

By contrast, in 1992 there is an overwhelming support in all the countries for further political integration. The panel on the right of Figure 10 depicts the share of respondents who in March 1992 (grey bars) and in March 1993 (black bars) answered “For” to the question “Are you for or against the formation of a European Union with a European Government responsible to the European Parliament?”.

The figure shows that this overwhelming majority deteriorates between 1992 and 1993 in all geographical areas. The differences, though, are not as dramatic as those for support of the single market. In the South support falls from 85% to 81%, in the Center from 76% to 65%, and in the North from 50% to 40%.

To try to understand whether sentiments toward the single market or the Maastricht treaty are correlated with our variable of interest (whether membership is beneficial), we rely on the micro data. Following Deaton (1985), we construct a pseudo-panel. For each of the two cross-sections, we define synthetic individuals (or, as they are often referred to in literature, *cohorts*, not to be confounded with our generational cohorts used before) identified by a set of demographic characteristics.¹⁶ We finally use these units as if they were true individuals on a panel data set.

We define cohorts using five characteristics: besides age, we use gender, nationality, education, and job. Variables are recoded in a way that ensures approximately equal unconditional probability of belonging to a certain cohort (Verbeek and Nijman, 1992). Data are then collapsed averaging values across cohorts for each time period (Deaton, 1985) and the corresponding synthetic individuals in the two dataset are matched to finally set up the pseudo panel. To verify that our pseudo-panel well reflects the original data we compare the aggregate behavior of our key variables of interest and check that they exhibit similar trends. The model we estimate is of the generic form:

$$(3) \Delta \bar{y}_{ij} = \alpha_{ij} + \beta \Delta \bar{x}_{ij} + \gamma_j + u_{ij}$$

where $\Delta \bar{y}_{ij}$ is the change in sentiments for the synthetic individual i leaving in country

¹⁶ Sometimes in literature the term “cohort” is used to specifically define year-of-birth groups. In this case we employ the term in a broader sense (Verbeek, 2008), as groups of individuals sharing some common characteristics among which we include year-of-birth cohorts.

$j, \Delta \bar{x}_{ij}$ is the change in the individual specific opinions (such as the support for the Single Market described in Figure 10) and γ_j a country fixed effect. Note that since this is a regression in first differences, the country fixed effect γ_j captures differences in time trend across countries.

Table 5 presents the results of a regression where the dependent variable is the difference in our MEMBERSHIP over the period 1992-93. The explanatory variables reflect the change of opinion in support for the economic integration (Single Market), in support for political integration (Single Government), and in support for monetary integration (Single currency). All the variables indicating change in support for the advancement of the euro project have a positive and statistically significant coefficient, suggesting that the deterioration in Europhilia during this period is linked to a worsening in opinions regarding the benefits of a single European market, a single currency, and further political integration. Interestingly, no country fixed effect, besides Denmark, is significantly different from Germany.

The large drop MEMBERSHIP observed in Figure 2 does not seem to be a simple time effect, but it is directly correlated with the fall in support for further integration. What we are unable to explain with the available data is the cause of this drop, which is generalized across all members. It is reasonable to conjecture that is related to the gap between the perception of the European project that is portrayed at the official level and the reality perceived by the citizens. In light of Eichengreen (2006), European technocrats choose to push agendas where the asymmetry of information between them and the voters is large, so to avoid political opposition at the time of implementation. Our estimates suggest that consensus is higher before the change when voters are less informed. However, when the change takes place and voters learn about the consequences, support may drop. Obviously, both the drop in sentiments towards the benefit of membership and in support towards further economic and political integration can reflect a deterioration in expectations about the economic consequences of the Treaty before it was implemented and right after. Unfortunately, we cannot test here this possibility. Differently from what is done in the subsequent waves, Eurobarometer did not collect these expectations in 1992 and 1993. This hypothesis can however be tested for the other two watershed episodes,

the 2004 enlargement and the 2009 Eurozone crisis to which we turn.

5.2 Enlargement of the European Union: 2004

We follow a similar approach to try to explain the variation in Europhilia around the 2004 Eastern European enlargement, using a 2002 and a 2005 survey. In the left panel of Figure 11 we report the fraction of people who answered “For” to the question “What is your opinion of further enlargement of the EU to include other countries in future years”. In 2002 the majority of the respondents in each sub-area supported the enlargement. Once again, the majority of the support comes from the Southern countries, despite those countries are more likely to lose European subsidies in favor of new poorer entrants. The Northern countries come second in their support for enlargement, the Central European last, but still with a close to 60% majority.

In 2005, respondents were asked the same question. Note that while the question is the same, the meaning is different. In 2002 the candidates for further enlargement were the Eastern European countries that became members in 2004, while in 2005 the candidates for further enlargements are Turkey and the former Yugoslavian republics that are not members yet. Thus, once again, we should focus on the differential change across groups of countries, rather than on the change itself. Consensus for further enlargement drops across the board, but it drops more in Central and Northern European countries than in the South.

In the right panel we plot the fraction of people who states that they were in favor of a European Union with a single currency: the Euro. Here the question is not only the same, but can also be interpreted in the same way. Thus, we can also look at the absolute change. The evidence shows a strong support for the single currency in all the geographical areas and a reduction in support only in the South, mostly driven by Greece and Spain.

To better understand these shifts in opinions as well as the drop in sentiments about membership documented in Figure 2, we use a pseudo-panel to correlate the change in MEMBERSHIP and in the variables presented in Figure 11 with changes in individual expectations about their personal economic situation and the future of the national economy at large before and after the Enlargement that are available in these waves of

Eurobarometer. We use a specification similar to (3), including country fixed effects. The results are presented in Table 6. When the LHS is the change in MEMBERSHIP individuals who have a more upbeat view of the future of the economy as a whole, favor membership in the union. Changes in expectations about their personal financial or job situation do not alter their view about membership. Hence, in revising downwards their assessments of the merits of being a member of the union right after the enlargement, individuals seem to be guided by a reassessment of the impact of the scale of the European Union on the national economy overall. These expectations become gloomier, and drive downwards consensus towards the European project. A similar picture emerges when the left-hand side variable is the change in support for the Euro (second column) or for further enlargement (third column). In the case of the Euro, even the change in perception about future national employment situation comes in positive and significant. Interestingly, unlike in the previous pseudo-panels, many country fixed effects are statistically significant suggesting that the changes in Europhilia around 2004 have more to do with country-specific factors than with individual specific-ones. In particular, the regression where the dependent variable is the change in support for the single currency exhibits significantly negative country fixed effects for all the Southern European countries. Thus, it looks like the South of Europe started to fall out of love with the euro much before the Eurozone crisis.

5.3 The Eurozone crisis

Figure 2 shows a drop in the perception of membership's advantages after 2008. To investigate further this sentiment shift around the Euro crisis we use individual data to construct a pseudo panel for the period of 2009-13, like we have done for the previous turning points.

Table 7 presents the results of the regressions. Unfortunately, the MEMBERSHIP question was not asked in the last period, thus we could not use it. The LHS variables are respectively the changes in support for the Euro (first column), the change in trust towards the EU (second column), the change in trust toward the ECB (third column), and the change in the difference between percentage of people supporting the Euro and percentage of people trusting the ECB. The change in economic expectations are both about personal job and financial situation and about the national economic situation.

Overall, Table 7 confirms the result obtained on a longer panel with aggregate country data (Table 4): revisions in expectations about economic conditions are highly predictive of euro-sentiments. Changes in the perception of the Euro, Trust in the EU, and Trust in the ECB are correlated with the change in expectations on future personal job situation, household financial situation, as well as changes in perception of the national employment situation. Contrary to the enlargement, during the Euro-crisis both deteriorated expectation about personal and national finances contribute to the Europeans disenchantment with the European project.

By using aggregate country data – as we did in Table 4 – it is hard to rule out that the observed correlations are driven by country-level omitted variables. Pseudo-panel regressions allow us to measure changes in expected economic conditions at the individual level; finding that they predict peoples consensus towards the European institutions, adds some credibility to the idea that economic crisis and economic disappointment may drain consensus , calling for less rather than more Europe.

5.3 *The Effect of the ECB policy*

Table 7 shows that the economic variables do not eliminate independent country-level fixed effects. In particular, in explaining the changes in trust toward the ECB the country fixed effects are economically and statistical significant. They show that the loss in trust towards the ECB has not been homogenous. To what extent the ECB policy has reduced Europhilia or, worse, has fed Europhobia?

To answer this question we need to determine first how the ECB policy fitted the needs of each country. Figure 12 plots the optimal policy rate (in percentage points) and the actual ECB policy rate for each country. The optimal policy rate i^* is based on a Taylor’s (1993) rule defined as

$$(4) \quad i_{it}^* = r_i^* + \pi_{it} + 0.5(\pi_{it} - \pi_{it}^*) - (u_{it} - u_i^*)$$

where π_{it} is the inflation rate for country i at time t , measured as the change in the non-food, non-energy consumer price index; u_{it} is the seasonally adjusted unemployment rate for each country published by Eurostat, u_i^* is the Non-Accelerating Wage Rate of

Unemployment. In this formula, for each country, we set $r^* = \pi^* = 2$.¹⁷

It emerges quite clearly that there are two set of countries: the so called PIGS (Portugal, Ireland, Greece, and Spain), for which the ECB policy rate is quite distant from the optimal national rate, and the rest, for which the ECB policy rate approximates well the optimal national rate.

In Figure 13.A we correlate the 2008-2012 drop in MEMBERSHIP with the mean absolute deviation of the monetary policy rate from the country Taylor rule. There is a clear negative relation, which is statistically significant. The PIGS, which were most penalized by the ECB policy, are the ones where Europhilia drops the most. The same relationship is present for most of the other variables. For example, in Figure 13.B the relationship between loss of trust in the ECB and mean absolute deviation of the monetary policy rate from the country Taylor rule is almost a perfect straight line. Thus, European citizens recognize when the European policy hurts them and respond accordingly.

The Taylor rule does not simply reflect unemployment but also inflation and inflation dispersion was far from negligible over the period of the analysis. If we force the country Taylor rule to depend only on inflation and plot the average absolute deviations of this Taylor rule from the ECB policy rate against the change in trust towards the ECB we find a very similar pattern to the one shown in Figure 13 (not reported). This result rules out the possibility that the correlations in Figure 13 reflect just the movements in national unemployment rates.

Interestingly, the negative correlations between the distance from the Taylor rule and sentiments is not due to the fact that the countries that did worse during the crisis were also farther way from the ECB policy rule. In fact, we have run regressions of the

¹⁷ There are two issues in using this methodology as a measure of the distance between the ECB policy and the monetary policy that best reflects the national conditions of the economy. The first is how good is the Taylor rule as a description of the monetary policy in Europe; the second, how well it can approximate internal optimal policy. Gerlach and Schnabel (2000) find that the Taylor rule does quite well when applied to the EMU countries and cannot reject that the sensitivity of interest rates to inflation are 1.5 and 0.5 respectively, the same as in the US. Clarida, Ghali and Gertkler (1998) show that it also characterizes well the Bundesbank monetary policy before the Euro. Interestingly, they argue (and show evidence in support) that the Bundesbank rule can provide a reasonable basis to characterize the domestic monetary policy of France, Italy and the UK in the absence of the constraints on the monetary policy of these countries before the Euro due to the fixed exchange rate regime. They use a similar methodology to ours to estimate the interest rate gap as a measure of the economic stress that each country incurred by operating in the ERM (the pre-euro fixed exchange rate agreement). Some country specific estimates, suggest that a simple Taylor rule with US-type parameters may be a reasonable characterization of national monetary policy before the Euro. For instance, Dalle Nogare and Vassalli (2002) find that a Taylor rule with a reaction to inflation of 1.5 and to output of 0.3 characterizes well Bank of Italy policy before the Euro.

change in Trust in the ECB and Membership is good on the distance from the Taylor rule and on the percentage change in GDP between 2011 and the year before the crisis and find that the distance from the Taylor rule is still significant even controlling from the loss in output suffered by the country during the crisis.

Most surprisingly, the only variable that does not seem to be correlated with the mean absolute deviation of the monetary policy rate from the country Taylor rule is the support for the common currency (this is true controlling or not for the output loss during the crisis). As we can see in Figure 13.C, if anything the relation is positive, albeit not statistically significant.

To understand this paradox we need to realize that even before the introduction of a common currency National Central Banks were not completely free to set their rates. The EMS system was imposing some limits on the ability of each country to deviate from a common interest rate (e.g. Clarida et al (1998). To see how much the introduction of a common currency has worsened the monetary policy flexibility of each country we compute the mean absolute deviation of the national monetary policy rate from the country Taylor rule in the pre euro era (1991-1999).

Figure 14 plots each country's mean absolute deviation of the actual monetary policy rate from the country Taylor rule in the euro era against the same value in the pre-euro era. The most remarkable fact is that basically every country is below the 45 degree line, implying that for no country the ECB monetary policy deviated from the country-specific Taylor rule more than what their pre-euro monetary policies deviated from optimal country-specific Taylor rules. The three countries that seemed to have gained in flexibility are Greece, France, and Finland.

This result helps explain why European citizens blame the ECB, but not the common currency. The common currency per se is not the culprit (at least vis-à-vis the pre-existing situation). Yet, the ECB policy could have been more sensitive to the PIGS country needs.¹⁸ Hence, the growing distrust towards the ECB.

At the same time, citizens seem to draw a distinction between the ECB – the

¹⁸ Notice that the ECB policy was not constrained by a zero lower bound. The latter was hit only in the second half of 2014 (when the rate was set at 0.05%). Over the period covered by our data, the ECB rate has always been above the zero lower bound. Until early 2012 it was 1% and in early 2011 and it was even increased to 1.6%. Notice also that even at the zero lower bound people may still have room to think that the ECB is not “doing enough”, as it can rely on quantitative easing. The latter has only been started in March 2015.

manager of monetary policy under the single currency – and the single currency itself, blaming the former, not the latter, as suggested by the patterns of correlation in Figures 13B and 13C.

6. Quo Vadis Europe?

The Eurobarometer being a European institution avoids asking questions that might lead to very clear anti-European answers. Probably for this reason, it is not easy to find questions that allow us to gauge where Europeans want Europe to go.

One indirect way we can glance at this issue is a question asked in 2009 and 2013. European citizens are asked which institution they think is most capable to take action against the recent economic crisis. The possible answers are the domestic government, the United States, the European Union, the International Monetary Fund, and the G20 group. Once again, while the question is exactly the same in 2009 and 2013, the context is different. In 2009 the crisis was entirely due to a U.S. problem, while by 2013 the Eurozone crisis had exploded.

Figure 15 plots the answer for the EU 15 divided by geographical areas. Each bar represents the share of respondents who mentioned the corresponding institution as the most capable. In 2009 the EU is indicated as the most capable (or the second most capable) institution to tackle the crisis in all groups. The Northern European countries trust more the local government, the Center European one the G20.

Surprisingly, the results are not very different in 2013. The Southern European countries have lost a bit of confidence toward the EU, but the Center and North European have gained a bit more confidence. This evidence is particularly remarkable in face of the fact that between 2010 and 2013 the European Unions did not show a great degree of coordination and ability to act. Yet, in the world everything is relative. May be we can say about the EU what Winston Churchill said about democracy: the worst institution, until you consider all the existing alternatives.

Another question in Eurobarometer that can help us gauge the overall attitude towards Europe is the opinion about the direction of one's own country and that of the EU. More specifically, both in 2009 and in 2013 Eurobarometer asks "At the present time, would you say that, in general, things are going in the right direction or in the

wrong direction, in our Country/In the EU?” The possible answers are: Wrong Direction, Neither Right Nor Wrong and Right Direction. The bar graphs in Figure 16 show the percentage of people who respond “Wrong Direction” both for “our country” (left panel) and for “the European Union” (right panel).

Not surprisingly, the percentage of people who think the EU is going in the wrong direction increased dramatically between 2009 and 2013, in all three groups, particularly so in Southern Europe. More people think that the EU is going in the wrong direction than in the right one.

Yet, it is interesting to contrast the opinion about the direction of the country and that of the EU. In Southern Europe more people think the country is going in the wrong direction than the EU is. This is not true for the Center and the North. To some extent, thus, there is a negative “halo” effect. People unsatisfied with their economic situation blame all institutions. It is hard, thus, to take this result as evidence of anti European sentiments.

A partial alternative to Eurobarometer is provided by the Pew Research Center. A May 2014 survey conducted by this center shows that in all the seven countries surveyed there is a majority of citizens against devolving further power to Europe. This majority is 76% in the UK and barely 50% in Germany, but always a majority is. The fraction of citizens opposing more power to the EU is perfectly negatively correlated with the degree of Europhilia of a country. Yet, in all countries, other than Italy, there is a strong majority to retain the euro. Thus, Europeans do not seem to want to move forward but they do not want to move back either.

7. Policy Implications

The European integration process seems to have weakened the political support for further integration. One possible reason is that the early integration steps have exploited the biggest gains from integration. As the integration moved further, it started to touch areas where the benefits were not so large, generating an increased opposition. This dissension has been exacerbated by the crisis. All institutions (national and international) exhibit weaker support during the crisis. In this respect, the mistrust towards European institutions is not unique. In spite of this growing opposition to Europe, there seems to be

very little desire to go back. The “scorched earth” version of the chain reaction seems to have worked, at least in the sense of increasing the cost of any step backward.

The major risk in this moment is an exacerbation of nationalist tensions. Ten years ago would have been unthinkable for a German to refer to a Greek as “lazy” or for a Greek to refer to a German as “Nazi”. Unfortunately, today is commonplace in the media, playing on stereotypes that are false (the Greeks work more hours per week than the Germans and there are proportionally more Nazis in Greece than in Germany).

We know from the literature on African development (Michalopoulos and Papaioannou, 2013) that ethnolinguistic fractionalization is a major source of tension in the political process, which is exacerbated at the time of crises. Europe has a high degree of ethnolinguistic fractionalization and the level of trust between different population is often very low (see Guiso et al, 2009). This fractionalization is exacerbated by a segmented media market. The German media caters to Germans, the Greek media to Greeks and so on. As a result, they tend to exacerbate the nationalist sentiments.

Many European nations (Like Germany, France, and Italy) found themselves in a similar situation at unification. To overcome the internal fractionalization they forced an homogenization through schooling and (when it became available) national TV. Yet, European nations cannot seem to be able to agree even on the symbol to put on the euro notes (the buildings are imaginary), how can they agree on a common set of history books?

The most successful step in this direction was the Erasmus program of university fellowship. Unfortunately, only a small minority goes to university and even less take advantage of this opportunity. An idea would be to extend it high school, providing the opportunity of students to spend a semester or a year in a high school of a different European country. This would eliminate the false stereotypes and facilitate a cultural integration.

Our analysis also suggests that the risks of the Monnet’s strategy might exceed its benefits. While so far successful in advancing the European agenda, Monnet’s chain reaction carries the risk of a meltdown, which possible tragic consequences. To avoid this meltdown there is a need of a more serious political discussion about the cost and benefits of unification. If the European project needs to regain consensus it must be perceived as a

choice, not as a forced outcome.

8. Conclusions

While EU membership has strong support in most of the EU-15, this support dropped every time the European project made a step forward and never recovered. Rightly or wrongly, the Eurozone crisis has contributed to further erode this support, albeit the drop appears more related to the terrible economic conditions and, thus, it is potentially reversible. Today a majority of Europeans think that the EU is going in the wrong direction. They do not want it to go further, but overall they do not want it to go backward either, with all the countries (except Italy) having a pro Euro majority.

One possible interpretation of these results is that Europeans like the idea of Europe but dislike the *way* this idea has been implemented. Another possible interpretation is that the attempt to jump start the chain reaction has left the Continent stuck in a political impasse: in spite of the unpleasant current conditions, there is no desire to move forward, while there is too much fear to move backward. This interpretation is consistent with the fact that support for the euro has plummeted in EU countries not belonging to the Eurozone, which do not face this irreversibility problem. Thus, one could infer that if it were not for fear of the unknown, even Eurozone countries might be less supportive of the common currency.

On the one hand, Monnet's chain reaction theory seems to have worked. In spite of limited support in some countries, European integration has moved forward and become *almost* irreversible. On the other hand, the strategy has worked so far at the cost of jeopardizing future sustainability. The key word is *almost*. Europe and the euro are not irreversible; they are simply very costly to revert. As long as the political dissent is not large enough, Monnet's chain reaction theory delivered the desired outcome, albeit in a very non-democratic way. The risk of a dramatic reversal, however, is real. The European project could probably survive a United Kingdom's exit, but it would not survive the exit of a country from the euro, especially if that exit is not so costly as everybody anticipates. The risk is that a collapse of the euro might bring also the collapse of many European institutions, like the free movement of capital, people and goods. In other words, as all chain reactions, also Monnet's one has a hidden cost: the risk of a meltdown.

References

- Baldwin, Richard, (2006), "The Euro Trade Effects", Working Paper Series 594, European Central Bank.
- Ball, George W. (1994), "Forward" to François Duchêne, Jean Monnet. "The First Statesman of Interdependence", New York: Norton.
- Cavalli-Sforza, Luca L. (2000), "Genes, People, and Languages", Berkeley: University of California Press.
- Clarida, Richard, Jordi Galí and Mark Gertler (1998): "Monetary policy rules in practice: Some international evidence". *European Economic Review*, 42, pp. 1033–67.
- Deaton, Angus. (1985) "Panel data from time series of cross-sections." *Journal of econometrics* 30.1, 109-126.
- Eichengreen, Barry (2006), "European Integration," in Barry R. Weingast and Donald A. Wittman (eds.), *Oxford Handbook of Political Economy*, Oxford: Oxford University Press.
- Guiso, Luigi, Paola Sapienza, and Luigi Zingales (2009), "Cultural Biases in Economic Exchange?," *Quarterly Journal of Economics*, August 2009, Vol. 124, No. 3: 1095-1131.
- Haas, Ernst B. (1958). "The Uniting of Europe; Political, Social, and Economic Forces", 1950–1957. Stanford: Stanford University Press.
- Gerlach, Stefan and Gert Schnabel (2000), "The Taylor rule and interest rates in the EMU area", *Economics Letters* 67, pp. 165-171.
- Haas, Ernst B. (1964). *Beyond the Nation-State: Functionalism and International Organization*. Stanford: Stanford University Press.
- Herrera, Helios, Luigi Guiso and Massimo Morelli (2014) "Cultural Differences and Institutional Integration", Eief Working Paper
- Kaufmann, Daniel and Kraay, Aart and Mastruzzi, Massimo (2010), "The Worldwide Governance Indicators: Methodology and Analytical Issues", World Bank Policy Research Working Paper No. 5430.
- Kauppi, Heikki, and Mika Widgrén. (2004): "What determines EU decision making? Needs, power or both?" *Economic Policy* 19.39, 221-266.
- Laffan Brigid and Sonia Mazey, (2006), "European integration: the European Union. Reaching an equilibrium?" in Richardson J. (ed.), "European Union. Power and policy-making" 3rd edition, Abingdon, Routledge, p. 31-54
- Marquand, Jean, (1979) "Parliament for Europe", Jonathan Cape, 1979

Michalopoulos, S. and Elias Papaioannou , 2013, The Long-Run Effects of the Scramble of Africa , September 2013. NBER WP 17620.

Monnet, Jean (1976) “Mémoires”, Paris: Fayard.

Napel, Stefan and Mika Widgrén, (2006), "The Inter-Institutional Distribution of Power of EU Codecision," *Social Choice and Welfare*, Springer, vol. 27(1), August: 129-154.

Padoa-Schioppa, Tommaso (2004), “The Euro and Its Central Bank. Getting United After the Union”, Cambridge (MA): MIT Press.

Pierson, Paul (1996), “The Path to European Integration: a Historical Institutional Analysis,” *Comparative Political Studies*, 29: 123-63.

Spolaore, Enrico (2013) “What is European Integration Really About? A Political Guide for Economists”, *Journal of Economic Perspectives*, Summer: 125-144.

Spolaore, Enrico, and Romain Wacziarg, (2009) “The Diffusion of Development,” *Quarterly Journal of Economics*, 124, 469–529.

Taylor, John B. (1993). "Discretion versus Policy Rules in Practice". *Carnegie-Rochester Conference Series on Public Policy* 39: 195–214.

Verbeek, Marno, (2008) "Pseudo-panels and repeated cross-sections." *The Econometrics of Panel Data*. Springer Berlin Heidelberg, 369-383.

Verbeek, Marno, and Theo Nijman. (1992) "Can cohort data be treated as genuine panel data?" *Empirical Economics* 17.1, 9-23.

Figure 1. Differences across countries in sentiments toward membership in European Union

Country fixed effects derived from an OLS regression using individual level data and regressing sentiments towards E.U. membership the first time the respondents of each country are surveyed on individual demographics. Sentiments toward EU membership are derived from the question “*Generally speaking, do you think that (OUR COUNTRY)’s membership of the European Union is ...?*” Answers were on a 3 point scale (“*Good*”, “*Neither good, nor bad*,” “*Bad*”). We coded the question as a dummy variable equal to one if the respondent answered “*Good*.” *Individual demographics*: gender, cohort (omitted cohort: born before 1945), education, occupation (omitted job: farmer/fisherman), country fixed effect (omitted country: Germany) and year fixed effect (omitted years: 1973 for the top quadrants, 2002 for the bottom quadrants). *Sample period* : 1973-1995. For all variable definition see Appendix.

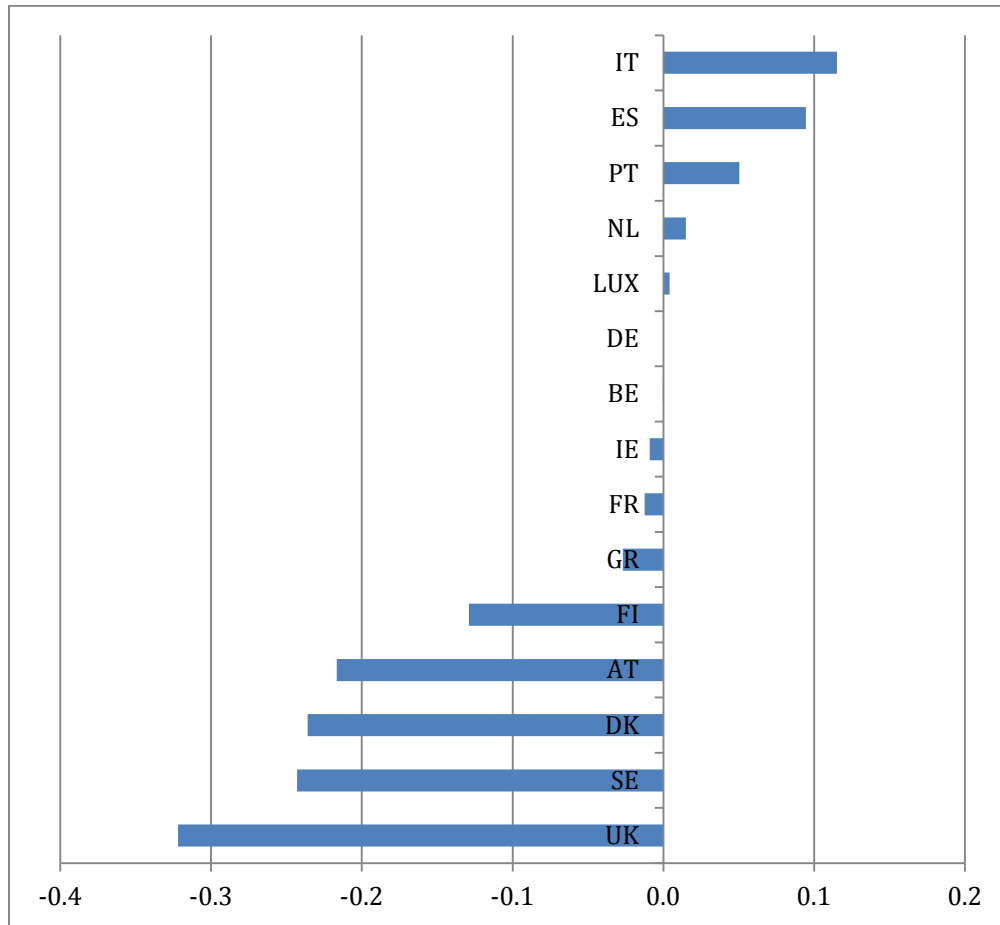
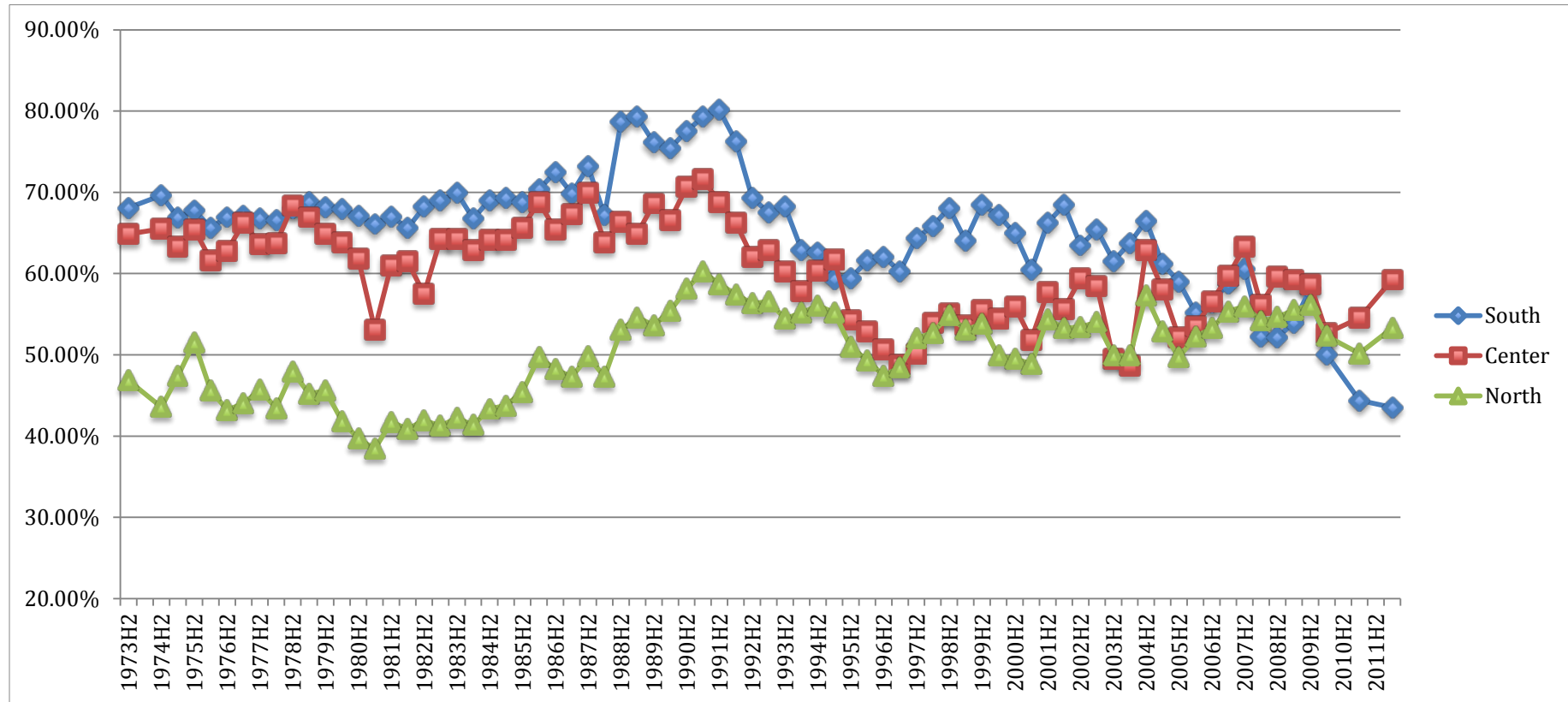


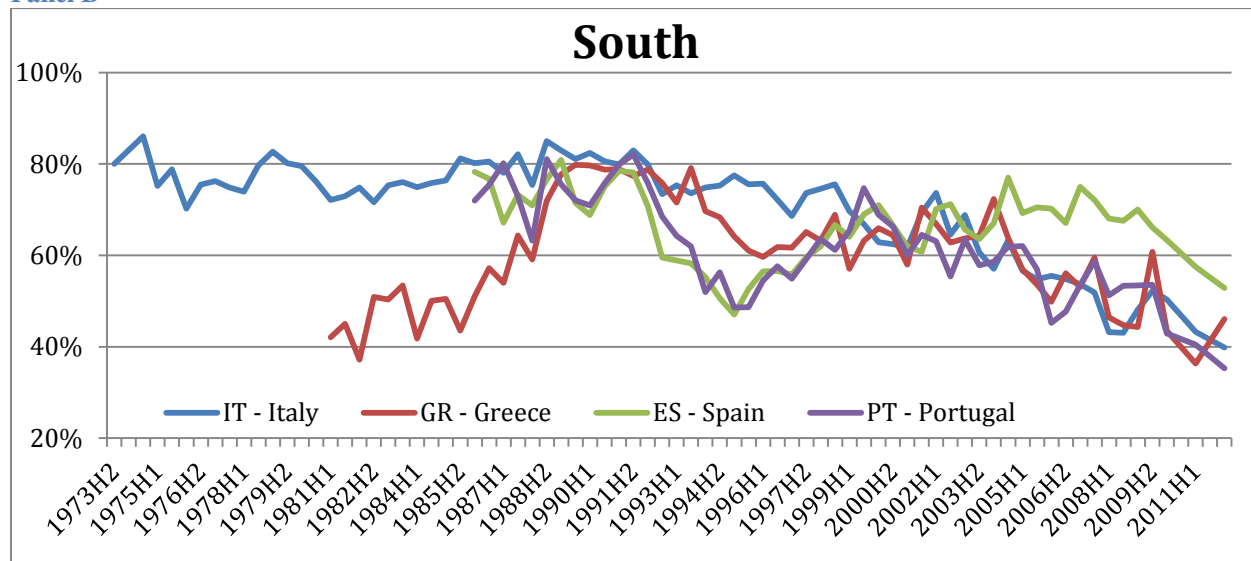
Figure 2. Evolution of positive sentiments about membership in European Union (E.U. 15)

Share of respondents who answer *Good* to the question “Generally speaking, do you think that (OUR COUNTRY)’s membership of the European Union is ...?” Answers were on a 3 point scale (*Good, Neither good nor bad, Bad*). In Panel A the data are arranged by geographic subdivisions in E.U. 15. *North*: Denmark, Sweden, Finland, United Kingdom, Ireland. *Centre*: Austria, Germany, France, Belgium, The Netherlands, Luxembourg. *South*: Italy, Greece, Spain, Portugal. In Panel A, to deal with potential compositional effect due to new accessions to the E.U. we have assigned to each country its entry-year membership score in each year before entry (applies to Greece, Spain, Portugal, Finland, Sweden, Austria). Each country weighs according to its specific sample size (sample at entry-year for post-1973 entrants). In Panel B, C and D the data for each individual country is shown with no backfilling. *Source*: Eurobarometer surveys from 1973:H2 to 2012:H1.

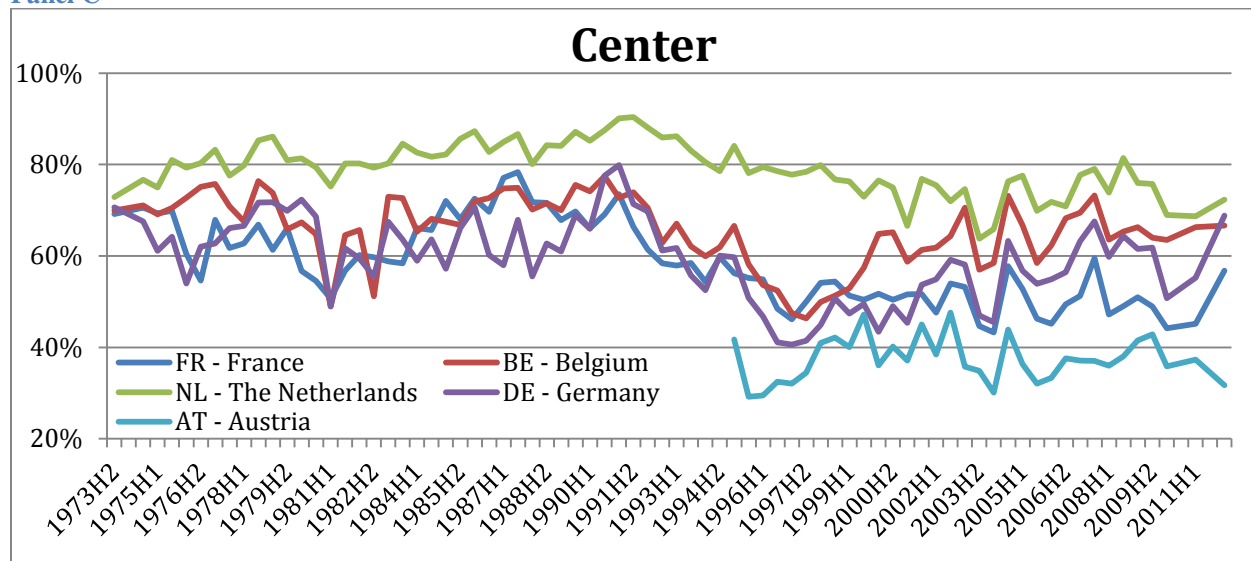
Panel A



Panel B



Panel C



Panel D

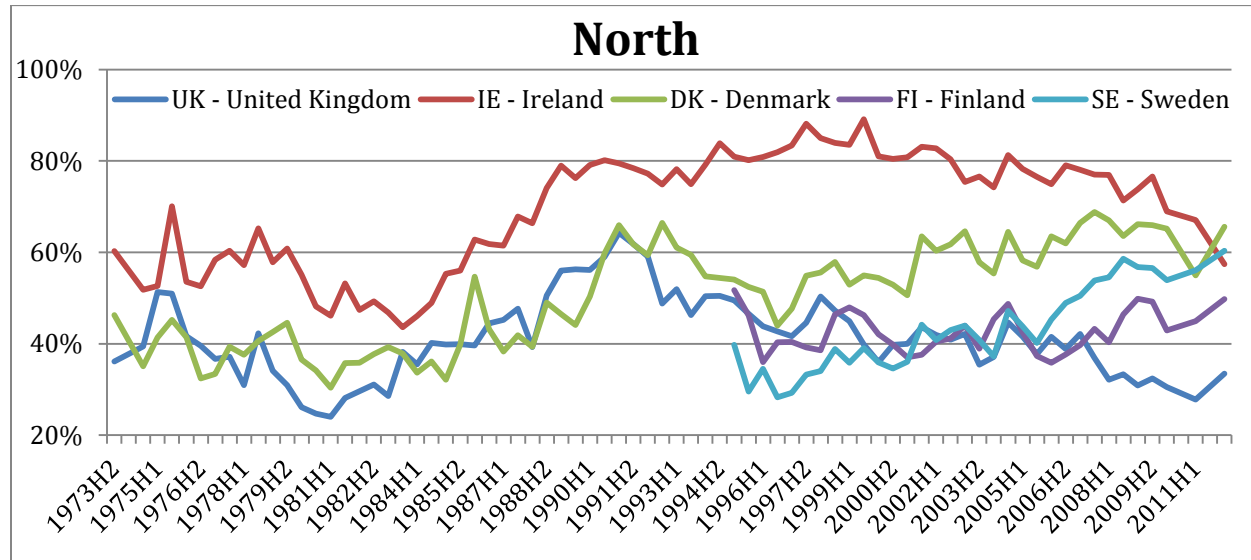


Figure 3. Differences across time in positive sentiments toward membership in European Union

Year fixed effects derived from an OLS regression using individual level data and regressing sentiments towards E.U. membership on individual demographics. Sentiments toward EU membership are derived from the question “*Generally speaking, do you think that (OUR COUNTRY)'s membership of the European Union is ...?*” Answers were on a 3 point scale (“*Good*”, “*Neither good, nor bad*,” “*Bad*”). We coded the question as a dummy variable equal to one if the respondent answered “*Good*.” *Individual demographics*: gender, cohort (omitted cohort: born before 1945), education, occupation (omitted job: farmer/fisherman), country fixed effect (omitted country: Germany) and year fixed effect (omitted years: 1973 for the top quadrants, 2002 for the bottom quadrants). *Sample period* : 1973-2012. For all variable definition see Appendix.

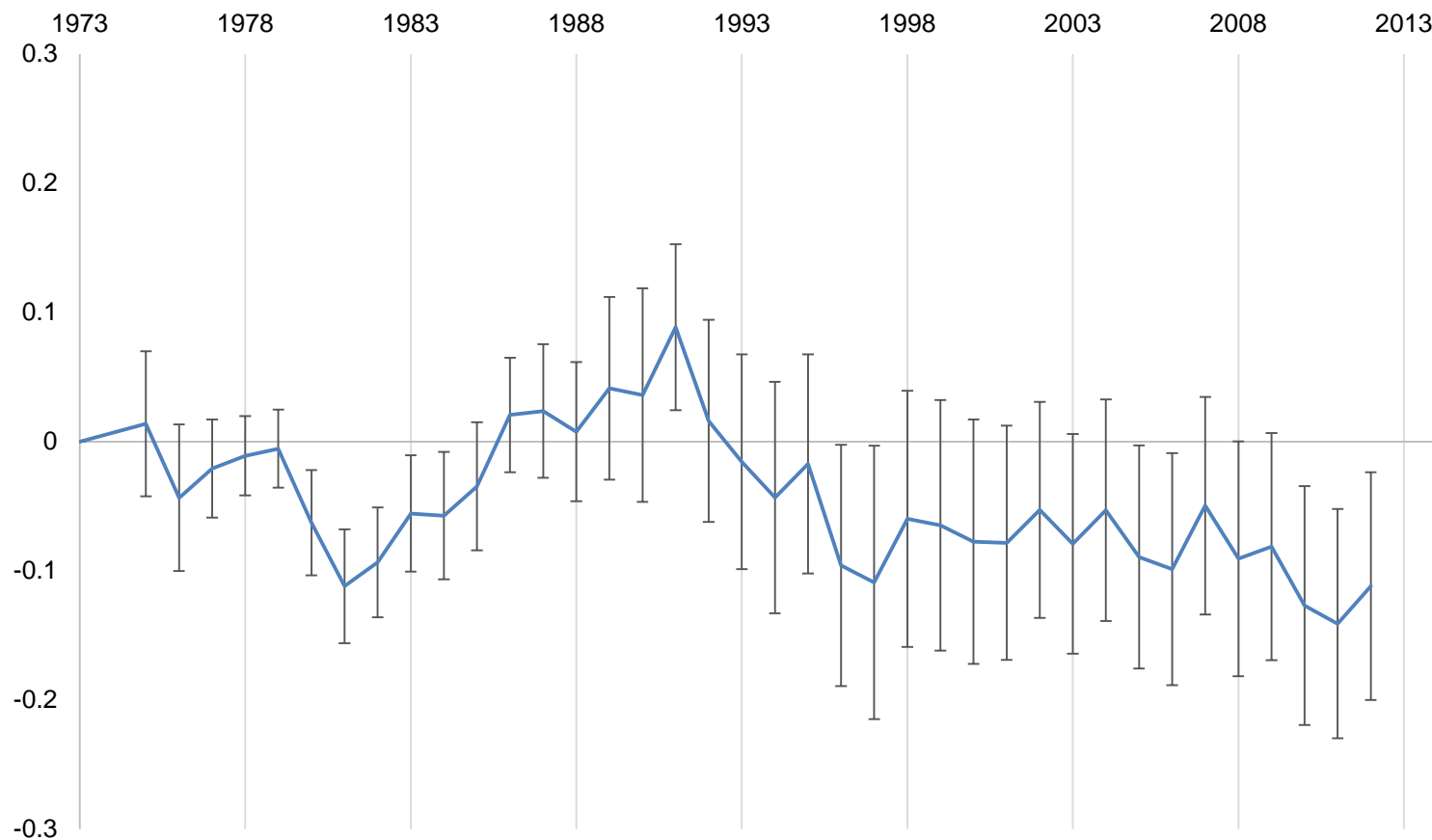


Figure 4. Cohorts' positive sentiments toward membership in European Union

Each series represent the coefficients of the cohort dummies in an OLS regression by year of individual sentiments towards the E.U. membership (*Membership is good*) on individual demographics: gender, cohort (omitted cohort: born before 1945), education, occupation (omitted job: farmer/fisherman) and country fixed effect (omitted country: Germany). For variable definition see Appendix. The sample varies according to accessions to the E.U. over time, stopping at E.U. 15: E.U. 9 (FR, BE, NL, IT, DE, LUX, DK, UK, IE) from 1973 to 1981; Greece joins in 1981; Spain and Portugal in 1986; Finland, Sweden and Austria in 1995. Cohorts also stem over time as respondents are selected from citizens of 18 years of age and above. Error bars represent the 95% level confidence interval. *Sample period*: 1973-2012.

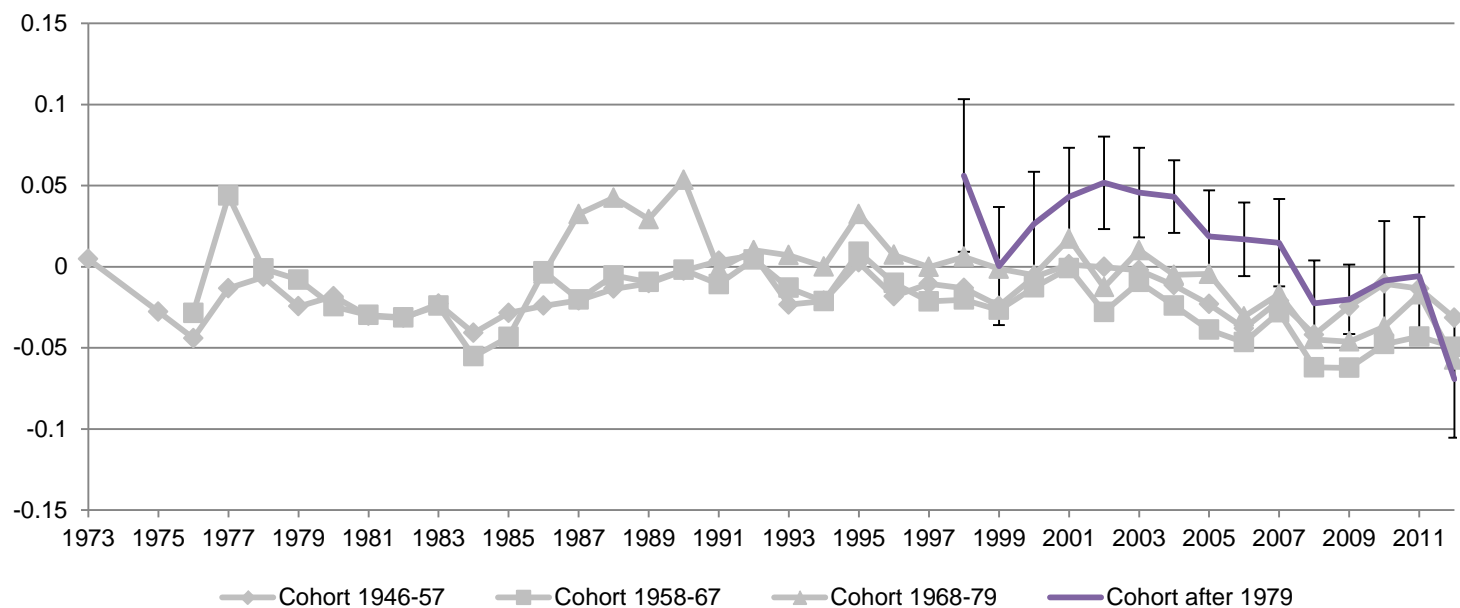


Figure 5. Evolution of trust toward the European Union (E.U. 15)

Share of respondents who answer *Trust/Tend to trust* on a binary scale (*Tend to trust, Tend not to trust*) to the question: “I would like to ask you a question about how much trust you have in certain institutions. For each of the following institutions, please tell me if you tend to trust it or tend not to trust it....The European Union” The data are arranged by geographic subdivisions in E.U. 15. *North*: Denmark, Sweden, Finland, United Kingdom, Ireland. *Centre*: Austria, Germany, France, Belgium, The Netherlands, Luxembourg. *South*: Italy, Greece, Spain, Portugal.. *Source*: Eurobarometer surveys 1997-2013. Question asked in all countries in the sample from Eurobarometer 48 (1997Q4) to Eurobarometer 79.3 (2013Q2). Not asked in any wave during 1998, 1999H2, 2000, 2002H2, 2010H2.

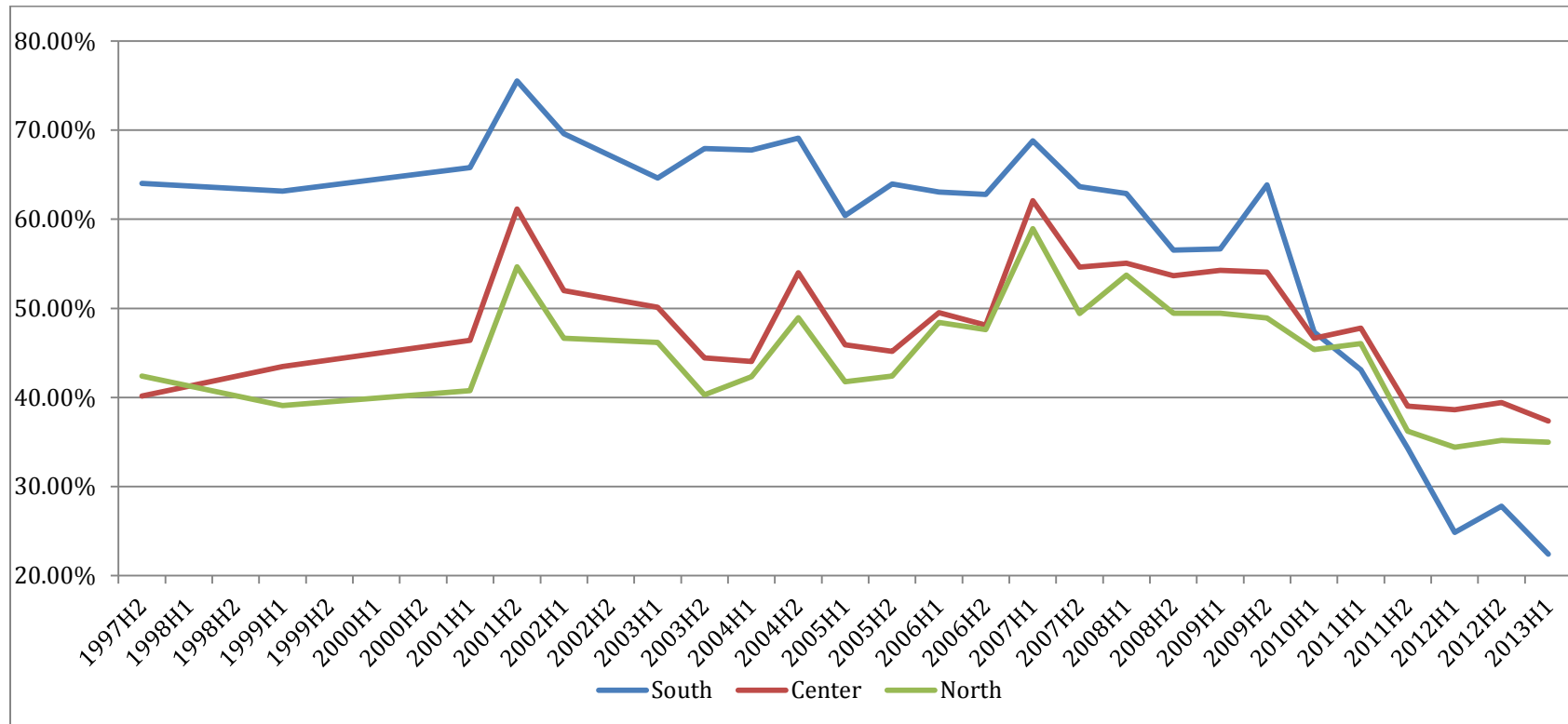


Figure 6. Evolution of the ratio of trust toward the European Union and national government (E.U. 15)

The graph depicts the time series of the ratio between the share of people that answer *Trust/Tend to trust* on a binary scale (*Tend to trust, Tend not to trust*) to the question: “I would like to ask you a question about how much trust you have in certain institutions. For each of the following institutions, please tell me if you tend to trust it or tend not to trust it....The European Union” and the share of people that answer *Trust/Tend to trust* to the question “I would like to ask you a question about how much trust you have in certain institutions. For each of the following institutions, please tell me if you tend to trust it or tend not to trust it.... The (NATIONALITY) Government” The data are arranged by geographic subdivisions in E.U. 15. *North*: Denmark, Sweden, Finland, United Kingdom, Ireland. *Centre*: Austria, Germany, France, Belgium, The Netherlands, Luxembourg. *South*: Italy, Greece, Spain, Portugal.. *Source*: Eurobarometer surveys 1997-2013. Question asked in all countries in the sample from Eurobarometer 48 (1997Q4) to Eurobarometer 79.3 (2013Q2). Not asked in any wave during 1998, 1999H2, 2000, 2002H2, 2010H2.

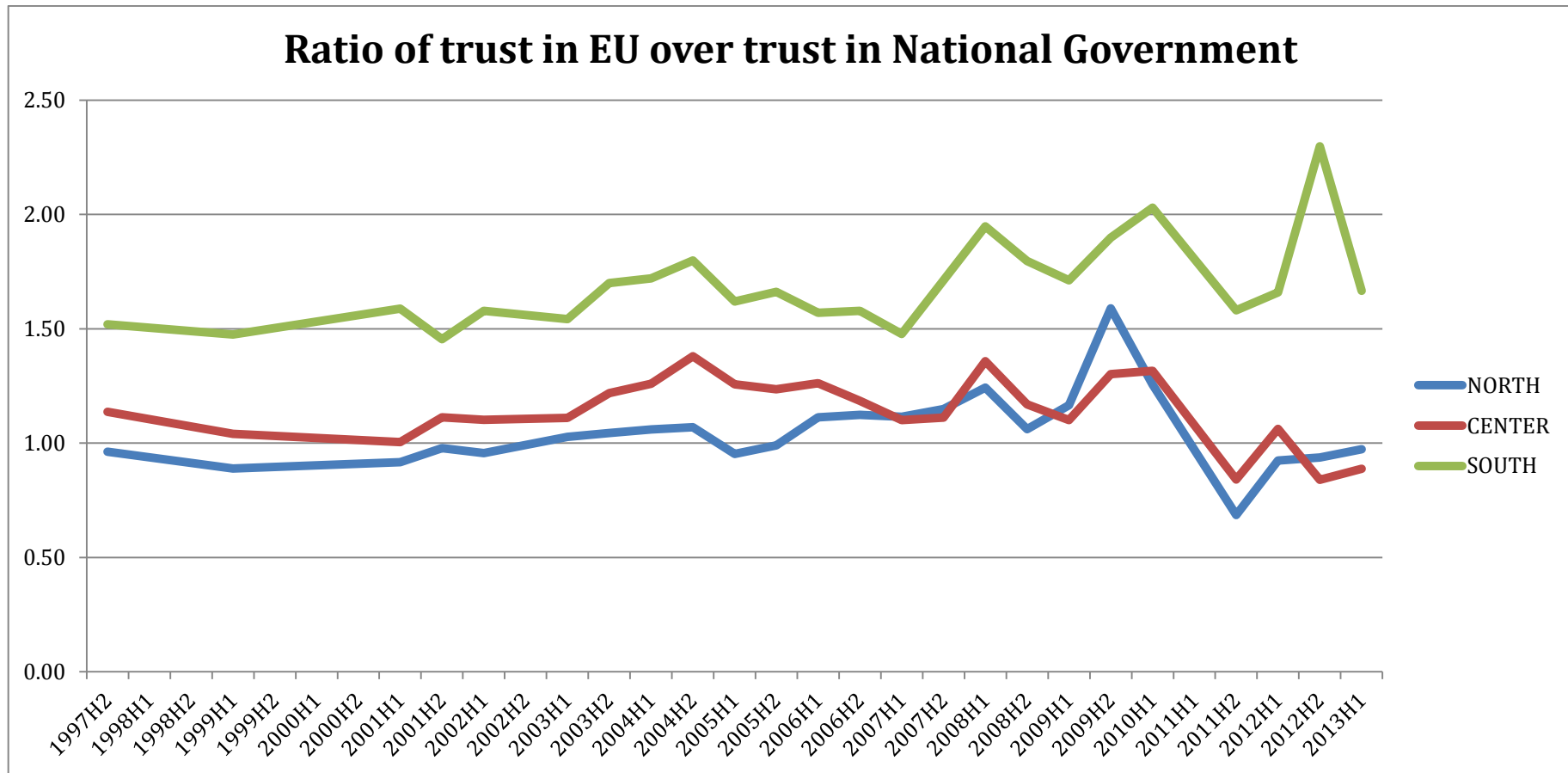


Figure 7. Evolution of support towards the single currency (E.U. 15)

Share of respondents who answer *For* on a binary scale (*For*, *Against*) to the question: “What is your opinion on each of the following statements ? Please tell me for each proposal, whether you are for it or against it...There has to be one single currency, the euro, replacing the (NATIONAL CURRENCY) and all other national currencies of the member states of the European Union.” The data are arranged by geographic subdivisions in E.U. 15. *North*: Denmark, Sweden, Finland, United Kingdom, Ireland. *North in Eurozone*: Ireland, Finland. *Centre*: Austria, Germany, France, Belgium, The Netherlands, Luxembourg. *South*: Italy, Greece, Spain, Portugal. *Source*: Question asked in all countries in the sample from the European Community Study of 1970 (1970Q1) to Eurobarometer 79.3 (2013Q2). Opinions polled before 1991 (4 waves) have been discarded. Each country weighs according to its specific sample.

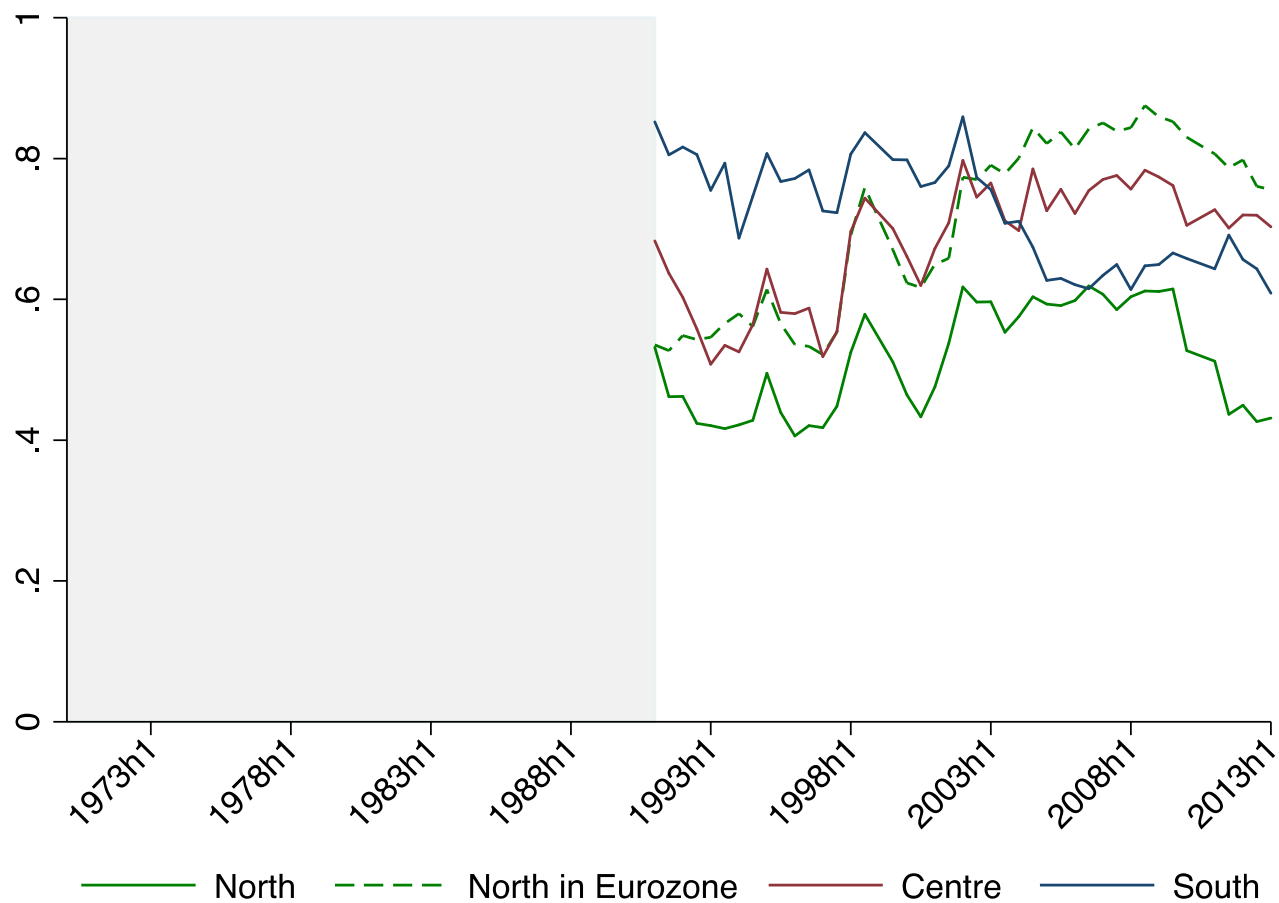


Figure 8. Divergence of trust on Euro and trust towards E.C.B. in selected countries

Share of respondents who favor the European single currency (blue line): respondents who answer *For* on a binary scale (*For*, *Against*) to the question: “What is your opinion on each of the following statements? Please tell me for each proposal, whether you are for it or against it...There has to be one single currency, the euro, replacing the (NATIONAL CURRENCY) and all other national currencies of the member states of the European Union.” And share of respondents who trust the European Central Bank (red line): respondents who answer *Trust/Tend to trust* on a binary scale (*Tend to trust*, *Tend not to trust*) to the question: “And, for each of [the following European bodies], please tell me if you tend to trust it or tend not to trust it?...The European Central Bank”. Black line marks the onset of the Global Financial Crisis (2008:H2). Data at half-yearly frequency. Period: 1999:H1-2013:H1.

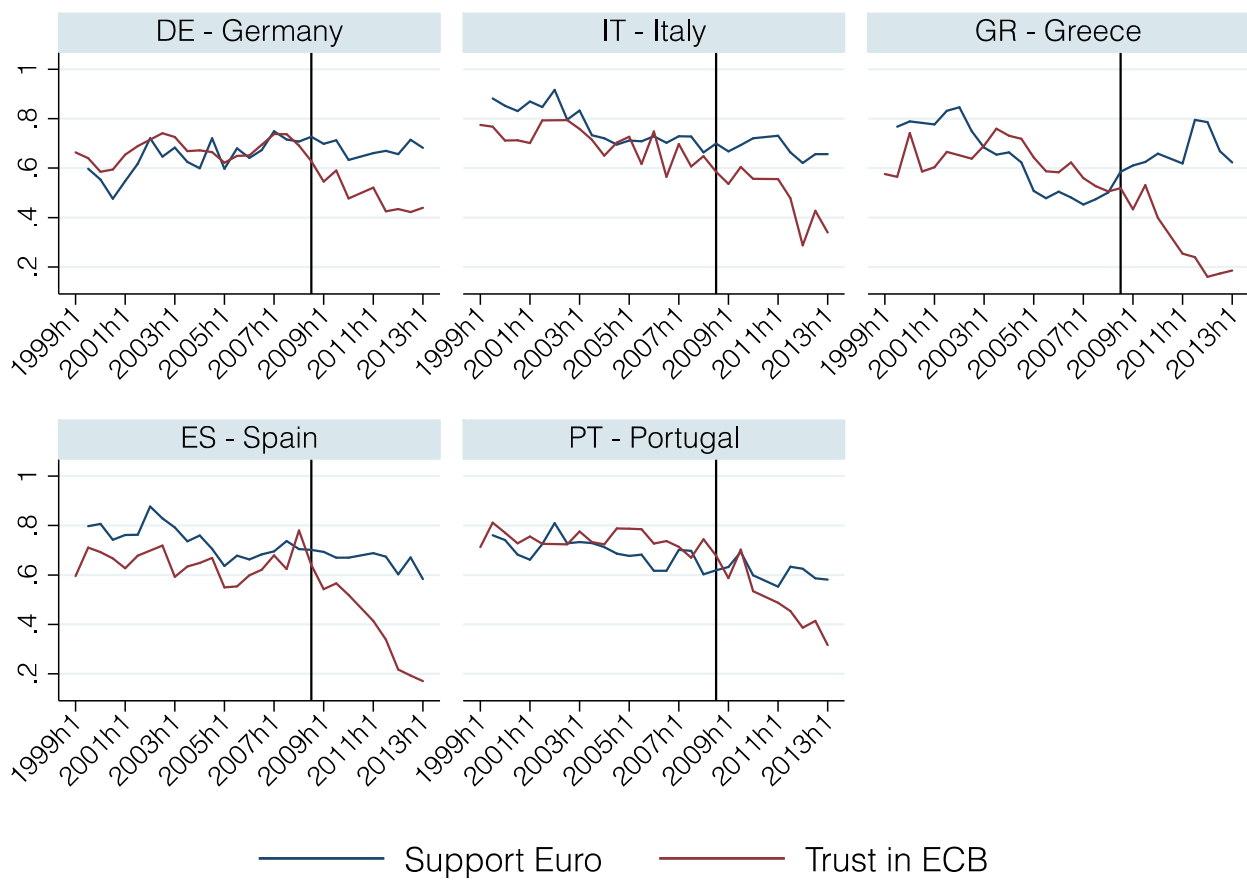


Figure 9. Evolution of xenophobia over time

The blue line represents the time series of the average value of a variable coded from 0 to 10 (0 = *Worse place to live*, ..., 10 = *Better place to live*) corresponding to the answer to the following question: “*Is [country] made a worse or a better place to live by people coming to live here from other countries?*”. The red line represents a variable coded like the previous one (scale: 0 = *Bad for the economy*, ..., 10 = *Good for the economy*) for the following question: “*Would you say it is generally bad or good for [country]’s economy that people come to live here from other countries?*”. Source: European Social Study (E.S.S.) Round 1 (2002/03) to Round 6 (2012/13), variables *imwbcent* (blue) and *imbgeco* (red). Frequency: bi-annual. Sample: E.U. 15. Sample period: 2002-2012.

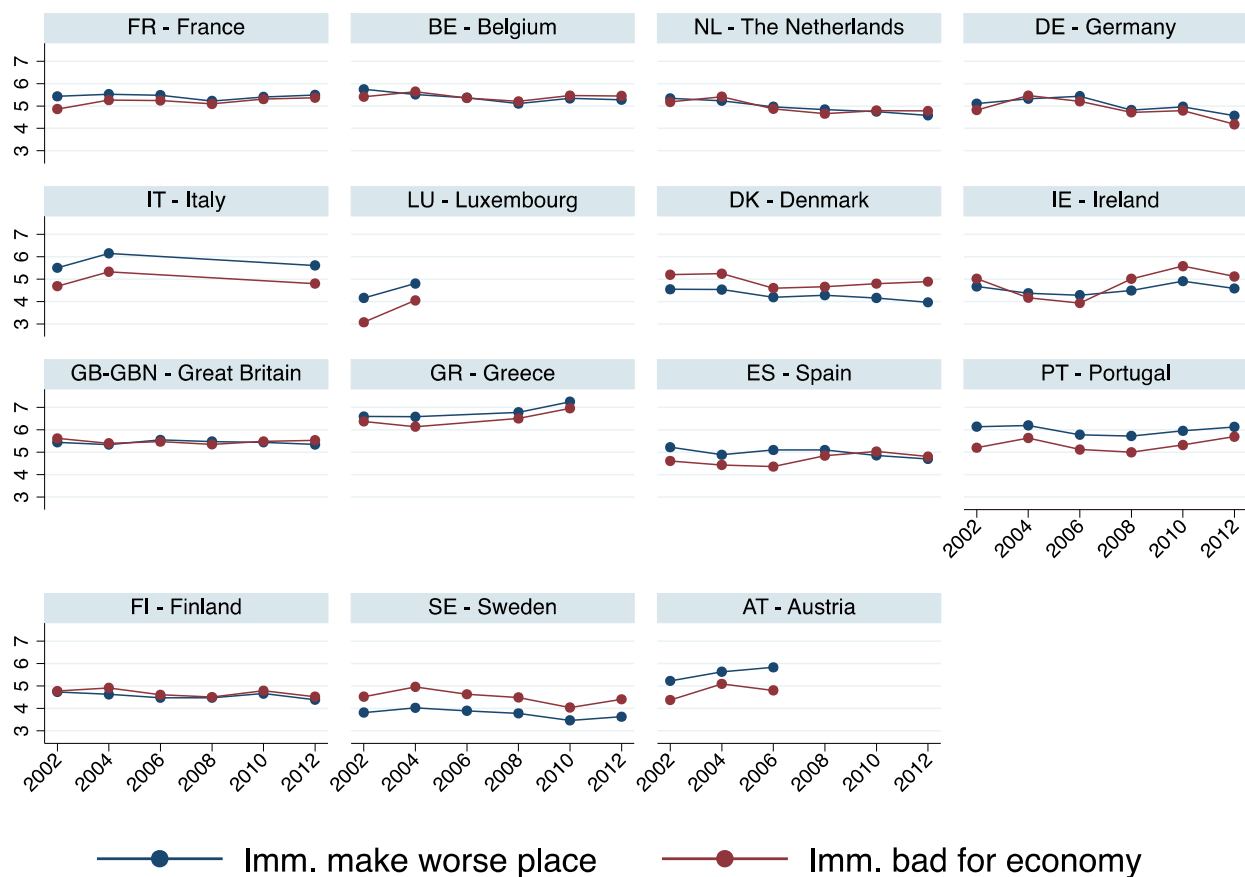


Figure 10. Change in Support for a single European market and for more European political integration, before and after Maastricht – EU 12

The two bar graphs depict the average sentiments by region in March 1992 and March 1993. The bar graph on the left depicts the share of respondents who answered *A Good Thing* to the question “Overall, what do you think that the completion of the Single European Market in 1992 will be?” in 1992 and *Advantages* to the question “Do you think that Single European Market brings more advantages or more disadvantages for (OUR COUNTRY)?” in 1993. The bar graph on the right depicts the share of respondents who answered *For* to the question “Are you for or against the formation of a European Union with a European Government responsible for the European Parliament?” Sources: EB37.0 and EB39.0. Sample: EU 12

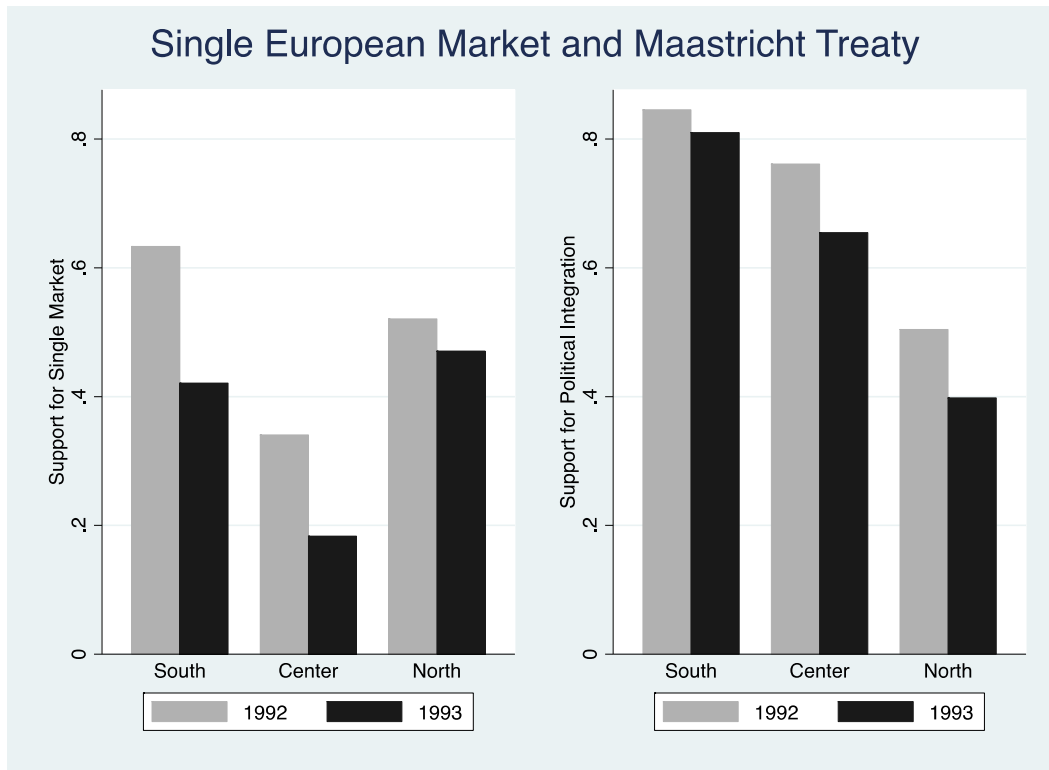


Figure 11. Change in support for further enlargements of the EU and for a single currency, before and after the 2004 Eastern European enlargement. – EU 15

The two bar graphs depict average sentiments by region in 2002 and 2005. The two graphs depict the share of respondents who answered *For* to the question “*What is your opinion on each of the following statements? Please tell me for each statement, whether you are for it or against it*”. In the case of the graph on the left the statement is *Further enlargement of the EU to include other countries in future years*. While in the case of the right graph, the statement is *A European Monetary Union with a single currency: the Euro*. Sources: EB58.1 and EB63.4. Sample: EU 15

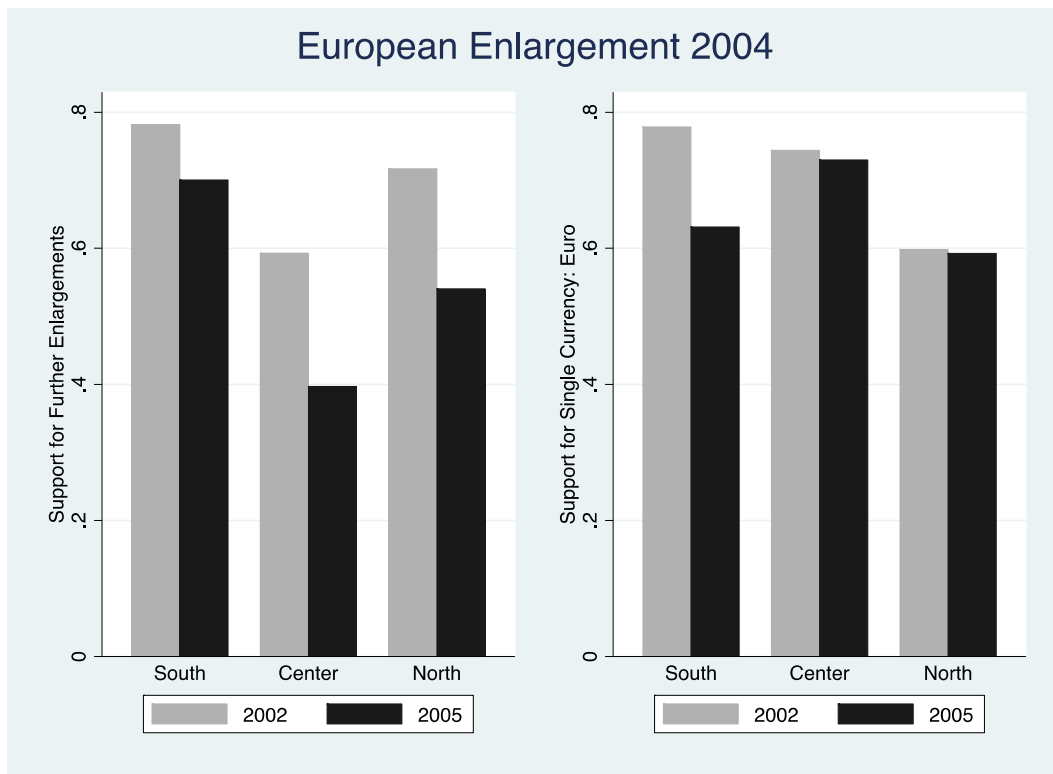


Figure 12. Distance of national Taylor rule from ECB rate (post 1999)

E.C.B. Marginal Lending Facility Rate (red line) and optimal monetary policy target rates as dictated by a country-specific generalized Taylor rule (blue line). The Taylor rule optimal rate (i_t^*) is defined – for each country – as follows: $i_t^* = r^* + \pi_t + 0.5(\pi_t - \pi^*) - (u_t - u_t^*)$, where π_t is the inflation rate measured as the change in the non-food, non-energy consumer price index; u_t is the seasonally adjusted unemployment rate published by Eurostat (une_rt_q); u_t^* is the Non-Accelerating Wage Rate of Unemployment and $r^* = \pi^* = 2$. Variables are at quarterly frequency except N.A.W.R.U. (annual). For variable definitions see Appendix. All rates have been rescaled in percentage points. *Sample period: 1999:Q1-2013:Q4*

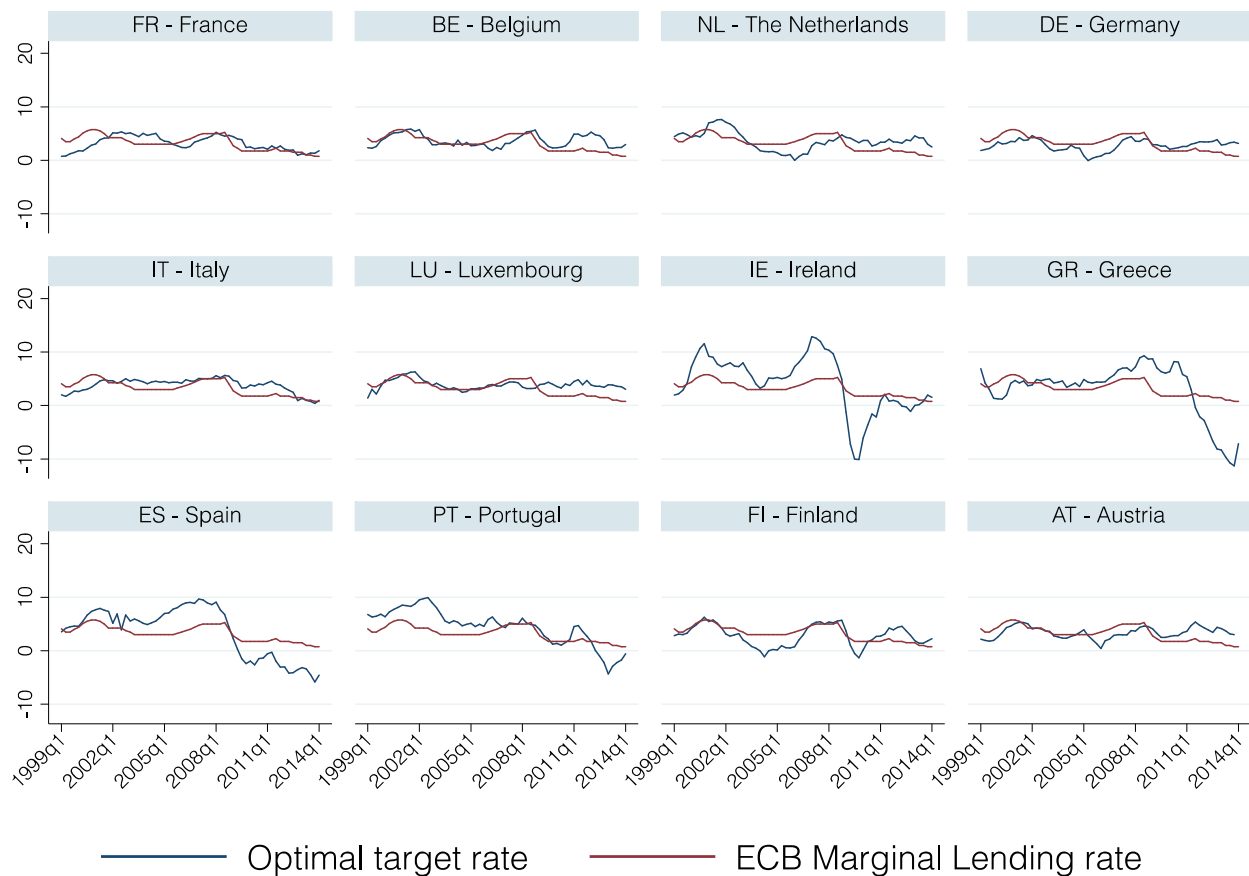
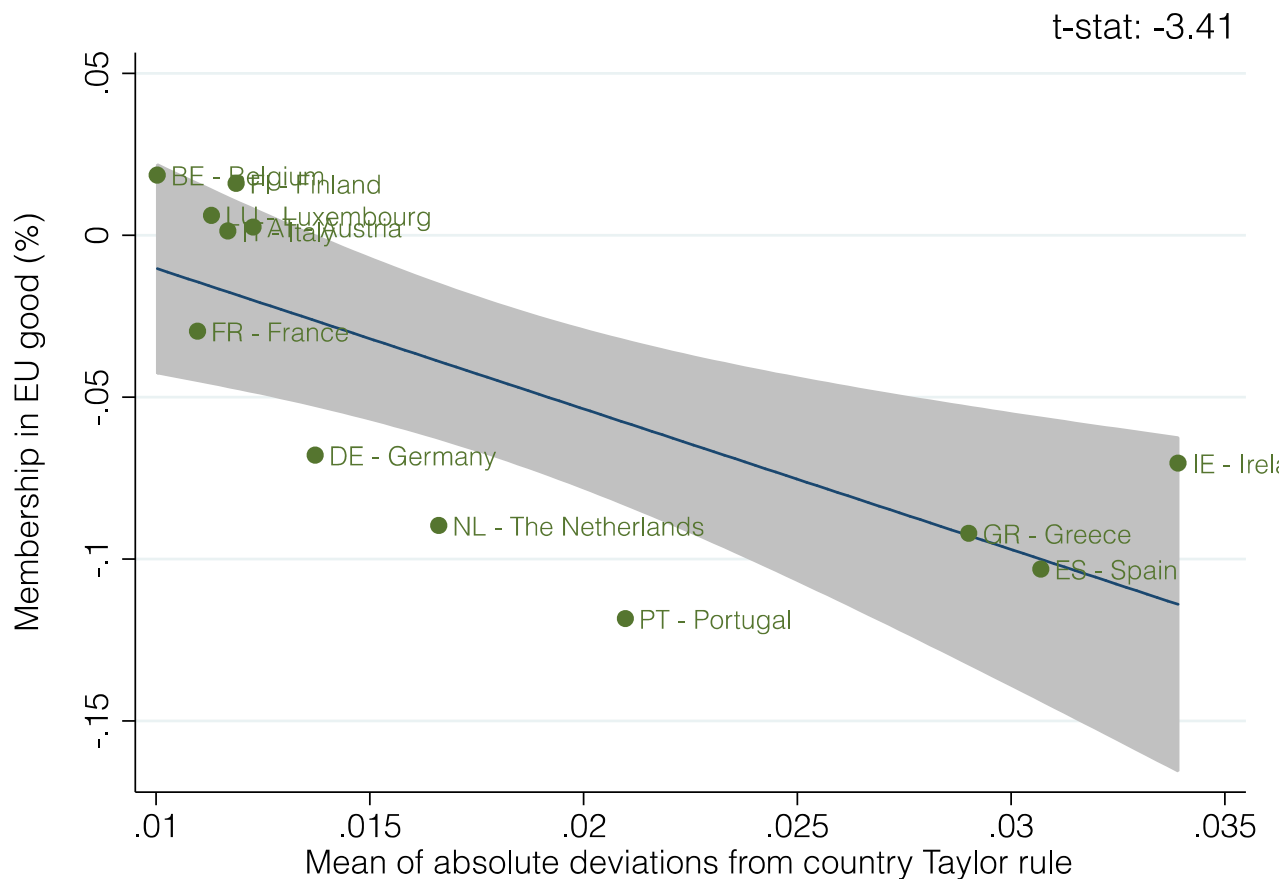


Figure 13. Change in Europhilia (2008-2011) and deviation of ECB policy rate from country Taylor rule (post 1999)

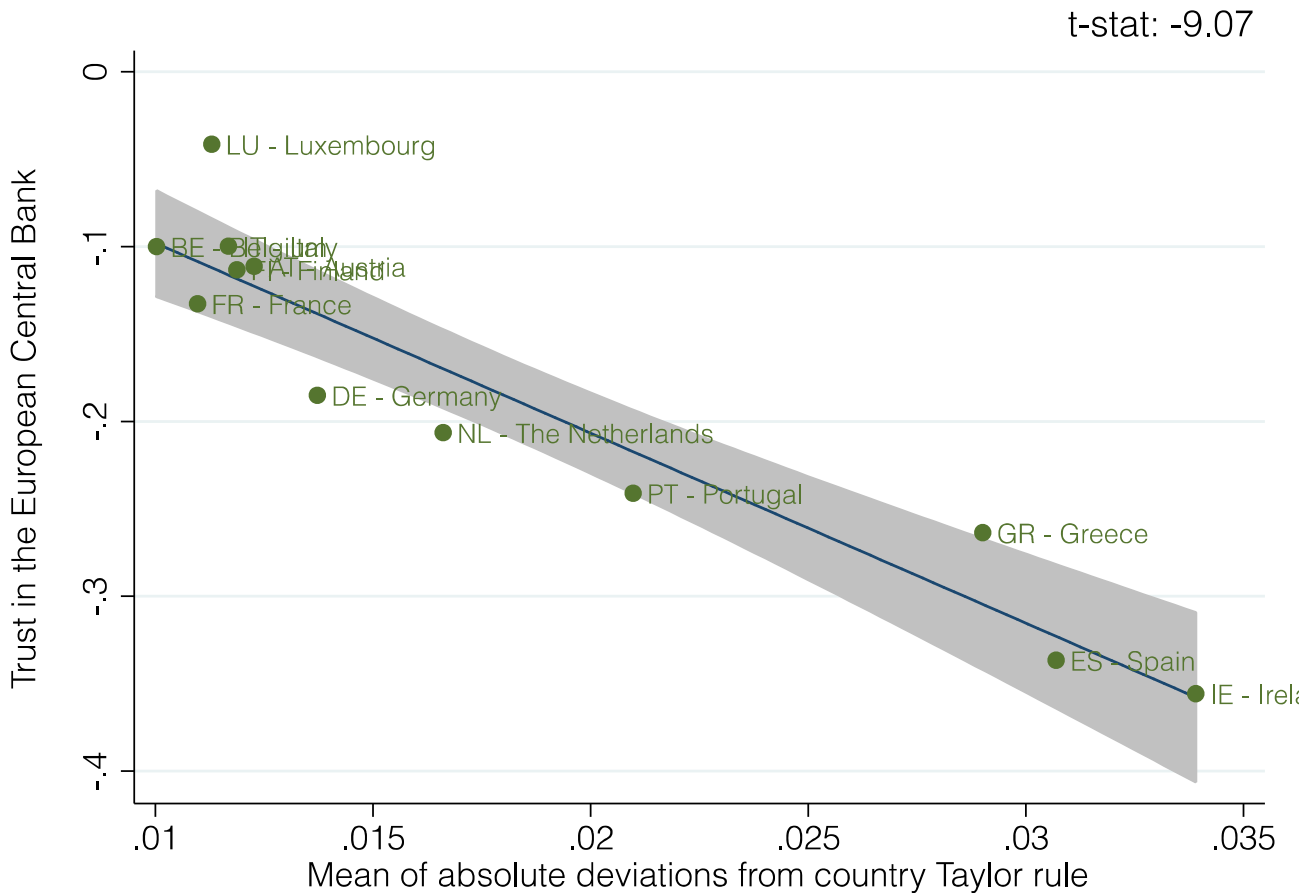
Panel A. Positive sentiments about EU membership and ECB monetary policy

Change (between 2008 and 2011) in the share of respondents who state that membership in the E.U. is a good thing for their country against the mean absolute difference by country between the ECB during the same period. Marginal Lending Facility rate and the optimal monetary policy target rate as dictated by a country-specific generalized Taylor rule. The average country-specific deviation is computed across the period 1999-2013. The Taylor rule optimal rate (i_t^*) is defined – for each country – as follows: $i_t^* = r^* + \pi_t + 0.5(\pi_t - \pi^*) - (u_t - u_t^*)$, where π_t is the inflation rate measured as the change in the non-food, non-energy consumer price index; u_t is the seasonally adjusted unemployment rate published by Eurostat; u_t^* is the Non-Accelerating Wage Rate of Unemployment and $r^* = \pi^* = 2$. Variables are at quarterly frequency except N.A.W.R.U. (annual). For variable definitions see Appendix. Sample: E.U. 15 countries in the Eurozone. The shaded grey area represents the 95% level confidence interval for the fitted values (blue line) obtained in an O.L.S. univariate regression with constant. t-statistics reported in the upper right corner.



Panel B Trust in ECB and ECB monetary policy

Change (between 2008 and 2011) in the share of respondents who trust the European Central Bank against the mean absolute difference (during the same period) by country between the ECB Marginal Lending Facility rate and the optimal monetary policy target rate as dictated by a country-specific generalized Taylor rule. The average country-specific deviation is computed across the period 1999-2013. The Taylor rule optimal rate (i_t^*) is defined – for each country – as follows: $i_t^* = r^* + \pi_t + 0.5(\pi_t - \pi^*) - (u_t - u_t^*)$, where π_t is the inflation rate measured as the change in the non-food, non-energy consumer price index; u_t is the seasonally adjusted unemployment rate published by Eurostat (une_rt_q); u_t^* is the Non-Accelerating Wage Rate of Unemployment and $r^* = \pi^* = 2$. Variables are at quarterly frequency except N.A.W.R.U. (annual). For variable definitions see Appendix. Sample: E.U. 15 countries in the Eurozone. The shaded grey area represents the 95% level confidence interval for the fitted values (blue line) obtained in an O.L.S. univariate regression with constant. t-statistics reported in the upper right corner.



Panel C. Sentiments toward euro and ECB monetary policy

Change (between 2008 and 2011) in the share of respondents who favor the European single currency against the mean absolute difference by country (over the same period) between the ECB Marginal Lending Facility rate and the optimal monetary policy target rate as dictated by a country-specific generalized Taylor rule. The average country-specific deviation is computed across the period 1999-2013. The Taylor rule optimal rate (i_t^*) is defined – for each country – as follows: $i_t^* = r^* + \pi_t + 0.5(\pi_t - \pi^*) - (u_t - u_t^*)$, where π_t is the inflation rate measured as the change in the non-food, non-energy consumer price index; u_t is the seasonally adjusted unemployment rate published by Eurostat (une_rt_q); u_t^* is the Non-Accelerating Wage Rate of Unemployment and $r^* = \pi^* = 2$. Variables are at quarterly frequency except N.A.W.R.U. (annual). For variable definitions see Appendix. Sample: E.U. 15 countries in the Eurozone. The shaded grey area represents the 95% level confidence interval for the fitted values (blue line) obtained in an O.L.S. univariate regression with constant. t-statistics reported in the upper right corner.

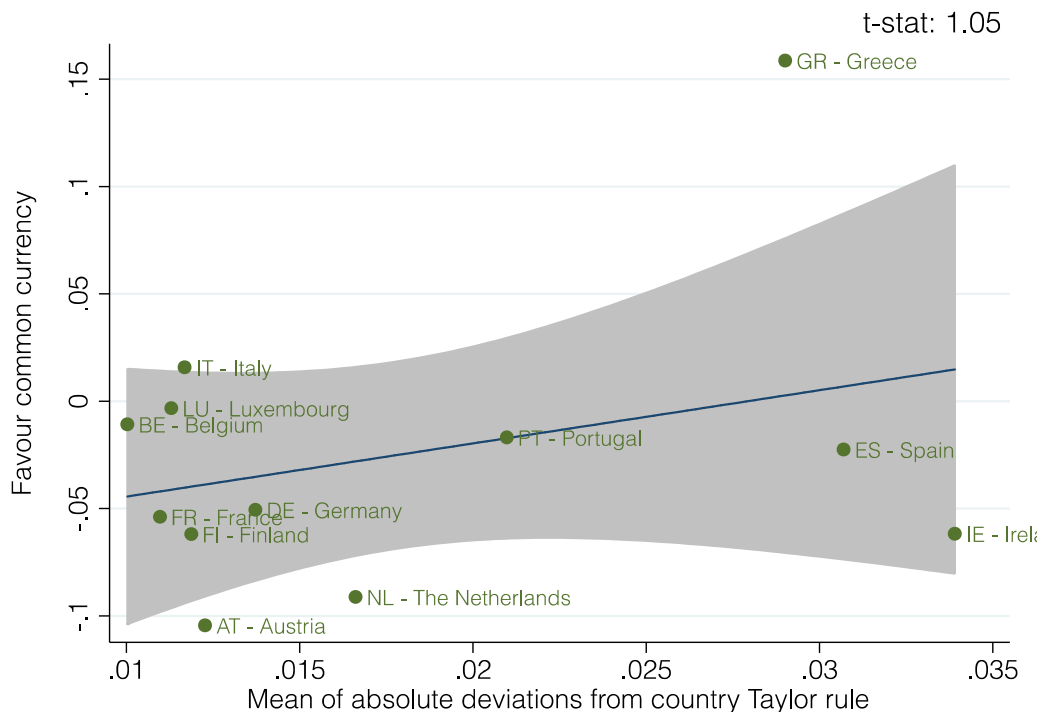


Figure 14. National monetary policies (pre 1999) and E.C.B. monetary policy (post 1999)

Mean absolute difference by country between the National Central Bank discount rate and the optimal monetary policy target rate as dictated by a country-specific generalized Taylor rule in the periods 1991-1999 and 1999-2013. For the latter period, the policy rate is the E.C.B. Marginal Lending Facility rate. The Taylor rule optimal rate (i_t^*) is defined – for each country – as follows: $i_t^* = r^* + \pi_t + 0.5(\pi_t - \pi^*) - (u_t - u_t^*)$, where π_t is the inflation rate measured as the change in the non-food, non-energy consumer price index; u_t is the seasonally adjusted unemployment rate published by Eurostat; Due to lack of data, Greece reports the annual unemployment rate from AMECO for the period 1991:Q1-1998:Q2; u_t^* is the Non-Accelerating Wage Rate of Unemployment and $r^* = \pi^* = 2$. Variables are at quarterly frequency except N.A.W.R.U. and the N.C.B.'s discount rate (annual). For variable definitions see Appendix. All rates have been rescaled in percentage points. 45° reference line represented in red. *Sample*: E.U. 15 countries in the Eurozone. For Luxembourg the discount rate is the same as Belgium by virtue of the BLEU currency union. For France the red line represents the repo rate, as historical discount rates are not available.

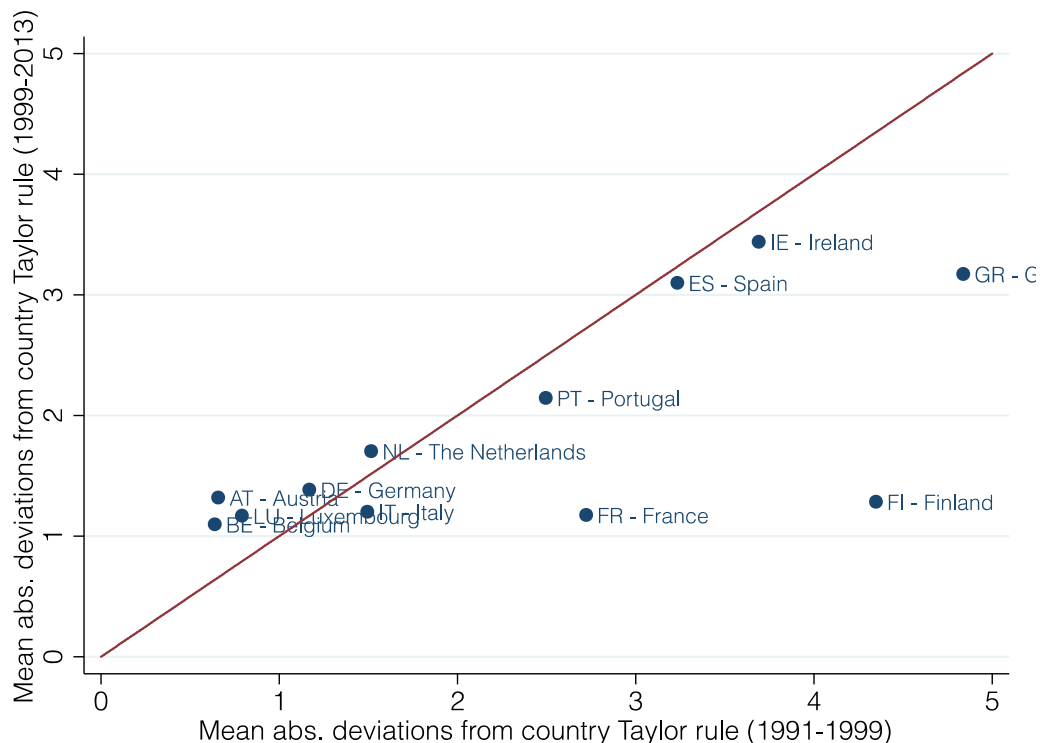


Figure 15. Most Capable actor to take action against recent economic crisis (2009 and 2013) EU 15

The bar graph below plots the share of respondents who mentioned the corresponding institution when they answered to the question: *“In your opinion, which of the following is best able to take effective actions against the effects of the financial and economic crisis?”*.

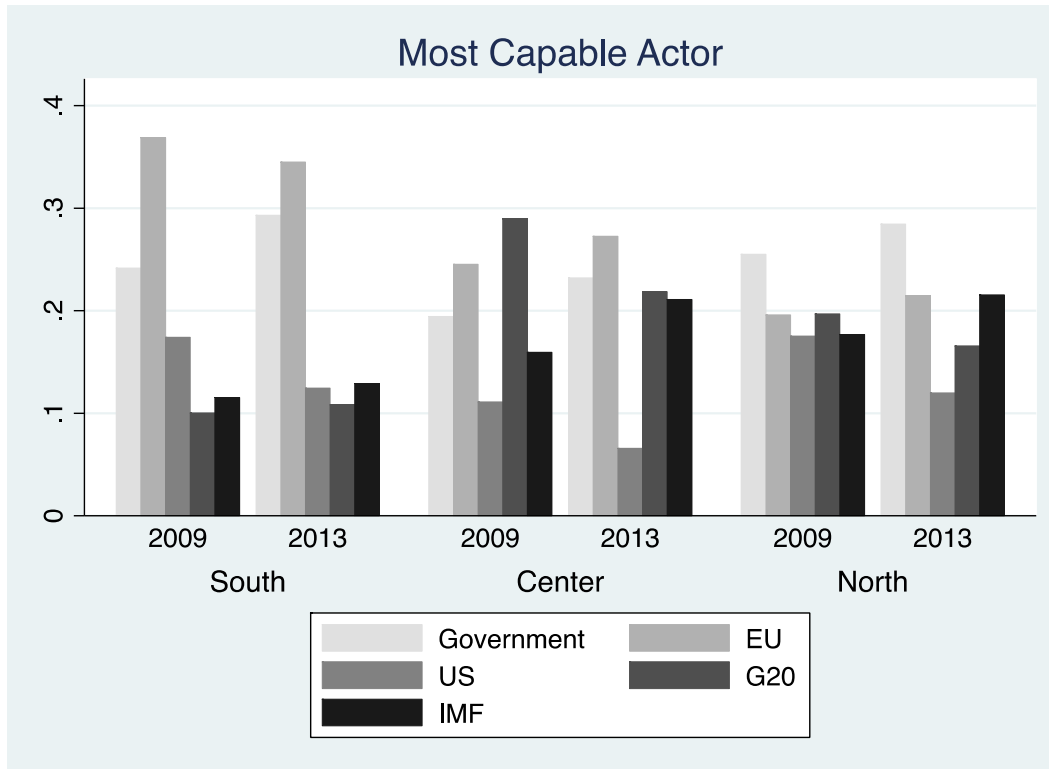


Figure 16. Change in perception of general direction before and after Eurocrisis. – EU 15

The two bar graphs depict sentiments by region in 2009 and 2013. The bar graph on the left depicts the share of respondents answering *Wrong Direction* to the question “At the present time, would you say that, in general, things are going in the right direction or in the wrong direction, in our Country?” The bar graph on the right depicts the share of respondents answering *Wrong Direction* to the question “At the present time, would you say that, in general, things are going in the right direction or in the wrong direction, in the European Union?” Sources: EB72.4 and EB81.0. Sample: EU 15

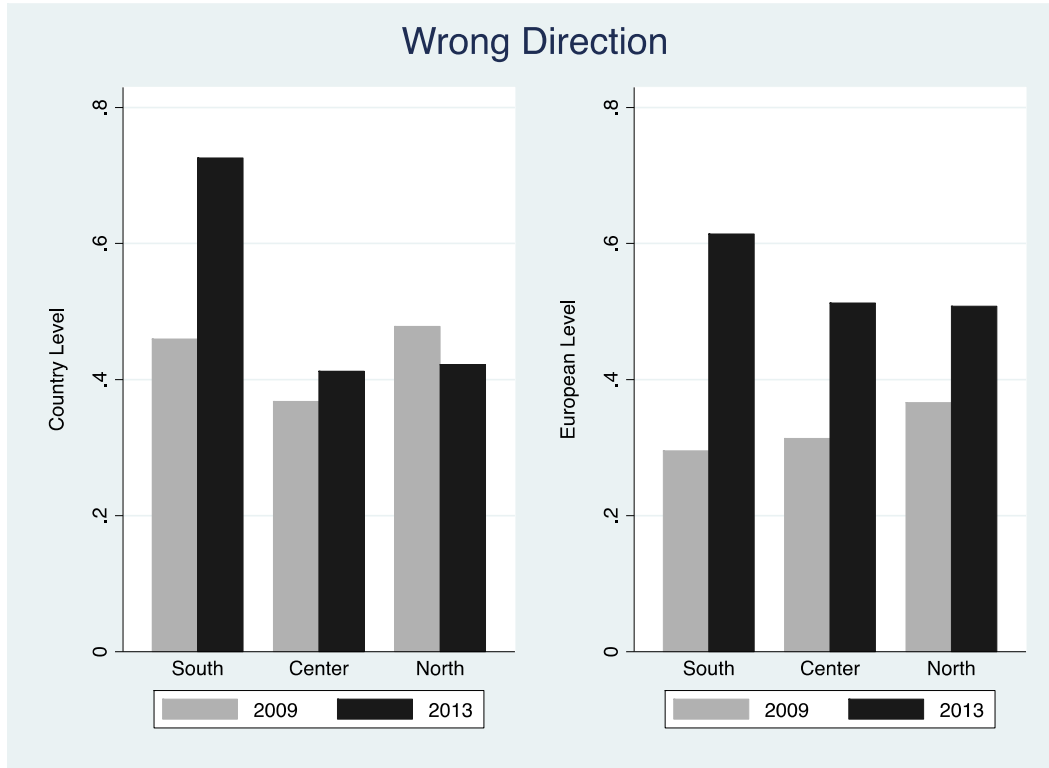


Table 1. Sample statistics**Panel A. Micro dataset sample statistics (in E.U. 15)**

	Mean	Std. Dev	Median	Min	Max	Obs
Year of birth	1951.454	19.698	1953	1874	1998	1,359,947
Cohort	2.342	1.305	2	1	5	1,359,947
Age	44.5	18.207	43	15	99	1,359,947
Years of education	11.334	2.875	11	8	16	1,342,736
Gender	0.52	0.5	1	0	1	1,377,914
Occupation	6.13	2.22	6	1	10	1,358,496
Membership is good	0.6	0.49	1	0	1	1,179,098
Country benefitted	0.657	0.475	1	0	1	826,173
For Euro	0.643	0.479	1	0	1	755,180
Trust in the European Union	0.504	0.5	1	0	1	358,269
Trust in the European Central Bank	0.626	0.484	1	0	1	346,474
Left-right self-placement	5.287	2.056	5	1	10	1,047,588

Panel B. Macro panel dataset sample statistics

Variable	Mean	Std. Dev	Median	Min	Max	Obs
Membership is good (country-year share)	0.609	0.151	0.626	0.254	0.902	500
Country benefitted (country-year share)	0.662	0.156	0.693	0.194	0.968	383
For Euro (country-year share of <i>for</i>)	0.660	0.172	0.700	0.158	0.936	369
Trust in the European Union (country-year share)	0.501	0.135	0.496	0.179	0.767	225
Trust in the European Central Bank (country-year share)	0.628	0.149	0.652	0.165	0.885	225
Unemployment rate	0.076	0.040	0.072	0	0.270	520
Nominal G.D.P. in bn EUR/ECU	494.876	604.504	222.065	1.778	2804.168	520
Gross contributions to E.U. budget in EUR mln	4742.683	5587.023	2282	12	26213.801	473
Gross receipts from the E.U. budget in EUR mln	4185.700	3816.310	2634	6	16355	473
Net receipts from E.U. over nominal G.D.P.	0.006	0.015	-0.001	-0.009	0.065	473
10y government harmonised bond yield spread with German Bund	0.016	0.027	0.004	-0.012	0.21	415
Dummy = “2004 onwards” (Eastern accession)	0.288	0.453	0	0	1	520
Dummy = “Country in Eurozone”	0.277	0.448	0	0	1	520

Panel C. Cross section sample statistics

Variable	Mean	Std. Dev	Median	Min	Max	Obs
WGI: government effectiveness	1.478	0.574	1.61	0.21	2.36	15
WGI: government control of corruption	1.599	0.72	1.72	0.25	2.53	15
Deaths in WWII over population in 1939	0.026	0.037	0.01	0	0.114	15
Net receipts from E.U. over nominal G.D.P. in first year after accession	0.001	0.006	0	-0.005	0.02	15
Export over nominal G.D.P. at accession	0.296	0.165	0.25	0.114	0.642	15
Percentage difference with average G.D.P. per capita of the EEC/E.U. at accession	2.823	35.802	4.427	-53.723	94.638	15
Exports towards the E.U. over nominal G.D.P. at accession	0.178	0.138	0.124	0.049	0.424	11
Relative genetic distance with other EEC/E.U. countries at entry	99.752	239.503	25.172	17.673	955.026	15
Average share of people against neighbours of a different race (3 earliest waves available)	0.098	0.029	0.091	0.05	0.154	15
Average share of people against foreign workers neighbours (3 earliest waves available)	0.113	0.04	0.11	0.053	0.187	15
Average share of people who are proud of their country (3 earliest waves available)	0.424	0.152	0.396	0.2	0.724	15

Table 2. Sentiments toward Europe at the first survey

The table depicts average sentiments by country in the first year in which questions are asked in that specific country and included in the survey series. The corresponding wordings of each variable are the ones described in details in the Appendix.

	Membership is Good		Membership Benefits		Trust in European Union	
FRA	69.2%	(1973)	55.2%	(1984)	47.6%	(1997)
BEL	69.9%	(1973)	52.0%	(1984)	33.2%	(1997)
NED	72.9%	(1973)	69.2%	(1984)	42.8%	(1997)
GER	70.6%	(1973)	40.7%	(1984)	36.9%	(1997)
ITA	80.0%	(1973)	60.4%	(1984)	63.1%	(1997)
LUX	72.5%	(1973)	72.9%	(1984)	56.3%	(1997)
DEN	46.3%	(1973)	44.3%	(1984)	40.9%	(1997)
IRE	60.3%	(1973)	61.0%	(1984)	76.5%	(1997)
UK	36.1%	(1973)	34.2%	(1984)	36.0%	(1997)
GRE	42.1%	(1981)	46.9%	(1984)	63.7%	(1997)
SPA	78.3%	(1986)	11.9%	(1986)	64.2%	(1997)
POR	72.0%	(1986)	53.9%	(1986)	65.2%	(1997)
FIN	51.8%	(1995)	47.4%	(1995)	39.2%	(1997)
SWE	39.8%	(1995)	30.4%	(1995)	24.0%	(1997)
AUS	41.7%	(1995)	56.4%	(1995)	43.4%	(1997)
		First recording year		First recording year		First recording year

Table 3. Cross country determinants of Europhilia

This table correlates country fixed effects in sentiments towards the E.U. and its institutions with country-specific characteristics. Fixed effects have been obtained from an OLS regressions of each of the L.H.S variables reported in bold on individual demographics, according to Model (1) specification in the text. *Individual demographics*: gender, cohort (omitted cohort: born before 1945), education, occupation (omitted job: farmer/fisherman), country fixed effect (omitted country: Germany). Contrary to previous specifications, the sample has not been restricted to Eurozone members in (3) and (5). Each coefficient has been computed in a univariate O.L.S. regression of one R.H.S. at a time and a constant (not reported). Government effectiveness and ability to control corruption have been taken in difference with their respective values for Germany in 2007. Relative G.D.P. per capita at entry is reported as percentage deviation from the E.U. median in the year of entry. For countries who entered the E.U. before 1976, the entry year has been artificially set to 1976 for lack of older data on contributions and receipts to the E.U. budget. For all variable definitions see Appendix. Significant coefficients are highlighted in bold. Standard errors in parentheses. * denotes significance at 10% level; ** significant at 5%; *** significant at 1%. *Unit of observation*: country. Sample: E.U. 15.

	(1)	(2)	(3)	(4)	(5)
Fixed effect computed with L.H.S.:	Membership is good	Benefit	For Euro	Trust in EU	Trust in E.C.B.
Deaths in WWs over pop [‡]	-0.558 (0.810)	0.426 (0.873)	0.333 (0.571)	-0.215 (0.909)	-0.315 (0.623)
Gov't effectiveness vis à vis German gov't (2007)	-0.114* (0.0614)	-0.0229 (0.0735)	-0.110** (0.0376)	-0.188*** (0.0558)	-0.0398 (0.0515)
Gov't ability to control corruption	-0.0701 (0.0515)	0.00617 (0.0588)	-0.0810** (0.0314)	-0.131** (0.0487)	-0.000198 (0.0420)
Relative G.D.P. per capita at entry	-0.000494 (0.00110)	0.00142 (0.00112)	-0.00135* (0.000680)	-0.00202* (0.00109)	0.000391 (0.000838)
Net receipts from E.U. over G.D.P. at entry	0.907 (6.538)	6.889 (6.718)	-3.390 (4.486)	16.79*** (5.520)	7.261 (4.565)
Openness to trade (1988)	0.201 (0.359)	0.513 (0.307)	-0.0670 (0.272)	-0.0978 (0.380)	0.403 (0.236)
No neigh. of different race	0.812 (1.342)	0.681 (1.44)	1.604* (0.843)	1.041 (1.474)	0.314 (1.034)
No neigh. immigrant worker	-0.770 (0.979)	0.927 (1.038)	-0.175 (0.700)	-1.100 (1.063)	-0.499 (0.751)
Pride in country	-0.307 (0.248)	-0.114 (0.278)	0.182 (0.176)	0.621** (0.232)	-0.0543 (0.199)
Genetic distance at entry	-8.24e-05 (0.000164)	-0.0000769 (0.000176)	4.32e-05 (0.000115)	-9.76e-05 (0.000181)	1.77e-06 (0.000126)
Observations	15 [†]	15 [†]	15 [†]	15 [†]	15 [†]

[†] 11 observations for openness to trade in 1988

[‡] Country fixed effects computed restricting the sample to pre '45 cohort.

Table 4. Positive sentiments about membership in European Union

O.L.S. regression of the share of respondents who state that membership in the E.U. is a good thing for their country. The panel covers 1973-2012 time span and it is unbalanced since each country of EU15 is included in the panel starting from its year of entry in the EU, which coincides with the first recording year for the variable MEMBERSHIP, just as it is indicated in Table 2. Columns (1)-(3) provide reference baseline regressions: (1) year fixed effects only; (2) country fixed effects only; (3) country and year fixed effects; Year fixed effects are tested for joint significance via F-tests. Standard errors are in parentheses. *** denotes significance at 1% level. *Bund spread * Eurozone* is the interaction of a dummy equal to one for each year after the national currency-Euro changeover and the yearly average yield spread of each country's 10-years benchmark government bond against the German Bund. For all other variable definitions see Appendix. *Unit of observation*: country-year. *Sample*: E.U. 15.

	(1)	(2)	(3)	(4)	(6)
Post Maastricht (1992 onward)				-0.0203** (0.0095)	-0.0669*** (0.0104)
Eastern block EU accession (2004 onwards)				-0.0327*** (0.0104)	0.0077 (0.0093)
Unemployment					-0.603*** (0.164)
Bund Spread * Eurozone					-0.720** (0.310)
Bund Spread * Non-Eurozone					0.0578 (0.205)
Eastern block EU accession* South					-0.114*** (0.0189)
Constant	0.642*** (0.0486)	0.596*** (0.0144)	0.602*** (0.0299)	0.613*** (0.0148)	0.665*** (0.0169)
COUNTRY FE	NO	YES	YES	YES	YES
YEAR FE	YES	NO	YES	NO	NO
Observations	500	500	500	500	500
R-squared	0.143	0.650	0.738	0.666	0.715
F-test	1.975		3.848		
Prob > F	0.0006		0		
Sample	EU15	EU15	EU15	EU15	EU15
Excluded countries	Germany	Germany	Germany	Germany	Germany
Excluded years	1973		1973		

Table 5. Pseudo Panel – 1992-93

The pseudo-panel dataset includes observation from two repeated cross sections in 1992 and 1993. The L.H.S. variable is the time-difference between the synthetic individuals' averages (see model (3)) of a dummy variable equal to 1 whenever the original respondent states that membership in the E.U. is a good thing for their country. Primary RHS variables (dichotomous 2pt scale of the type *For, Against*) measure the change in support for the economic integration (Single Market), change in support for political integration (Single Government) and change in support for monetary integration (Single currency). The rest of RHS variables are country dummies with baseline Germany. For detailed variable definitions, see Appendix. *Estimation method*: OLS on two-periods Panel in F.D. with Country FE. *Unit of observation*: synthetic individual (cohort) at different points in time. *Sources*: EB37.0 and EB39.0. *Sample*: EU 12. *Sample period*: 1992-1993 (without gaps – delta(1)). *Omitted country*: Germany. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.

Pseudo-Panel (1992-1993, delta(1))	
	Δ Is Membership good?
Δ Support for a Single European Market	0.283*** (0.0213)
Δ Support for a Single European Government	0.152*** (0.0238)
Δ Support for a Single Currency	0.160*** (0.0245)
France	-0.0200 (0.0341)
Belgium	-0.00715 (0.0345)
Netherlands	0.00640 (0.0275)
Italy	0.0477 (0.0319)
Luxembourg	-0.00859 (0.0430)
Denmark	0.0812** (0.0353)
Ireland	0.0253 (0.0292)
UK	0.0342 (0.0306)
Greece	-0.0406 (0.0358)
Spain	-0.0434 (0.0359)
Portugal	-0.0101 (0.0389)
Constant	-0.0636*** (0.0196)
Observations	1,954
R-squared	0.257

Table 6. Pseudo Panel – 2002-2005

The pseudo-panel dataset includes observation from two repeated cross sections in 2002 and 2005. The LHS variables are the time-changes in the synthetic individuals' averages (see model (3)) of dichotomous variables equal to 1 whenever the original respondent states that he/she is in favor of Euro currency (1) and of further enlargements (2) of the European Union. Primary RHS variables (3pt scale variables of the type *Worse, Same and Better*) measure the change in perceptions of the future economic situation at the national, household and personal level. The rest of RHS variables are country dummies with Germany taken as baseline. For detailed variable definitions, see Appendix. *Estimation method*: OLS on two-periods Panel in F.D. with Country FE. *Unit of observation*: synthetic individual (cohort) at different points in time. *Sources*: EB58.1 and EB63.4. *Sample*: EU 15. *Sample period*: 2002-2005 (with some gaps – delta(3)). *Omitted country*: Germany. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.

Pseudo-Panel (2002-2005, delta(3))	(1)	(1)	(2)
	ΔMEMBERSHIP	ΔFor Euro	ΔFor Further Enlargement
Δ Expectations on future household's financial situation	0.0334 (0.0204)	-0.00184 (0.0208)	0.0194 (0.0219)
Δ Expectations on future national employment sit.	0.0202 (0.0173)	0.0407** (0.0163)	0.00342 (0.0176)
Δ Expectations on future national economic sit.	0.0664*** (0.0181)	0.0364** (0.0177)	0.0595*** (0.0195)
Δ Expectations on future personal job situation	0.0333 (0.0229)	-0.00560 (0.0233)	0.0351 (0.0255)
France	0.0625 (0.0436)	0.0811* (0.0415)	0.142*** (0.0427)
Belgium	0.0949** (0.0429)	0.0352 (0.0369)	0.183*** (0.0438)
Netherlands	0.0893** (0.0399)	0.0299 (0.0416)	0.0566 (0.0440)
Italy	-0.000812 (0.0399)	-0.0816** (0.0406)	0.218*** (0.0412)
Luxembourg	0.0160 (0.0415)	-0.00954 (0.0349)	0.0128 (0.0583)
Denmark	-0.0171 (0.0467)	-0.0553 (0.0442)	-0.0403 (0.0469)
Ireland	0.0343 (0.0380)	0.0540 (0.0333)	0.106** (0.0442)
UK	0.102** (0.0416)	0.00678 (0.0411)	0.203*** (0.0415)
Greece	-0.000438 (0.0420)	-0.172*** (0.0428)	0.0873** (0.0399)
Spain	0.0456 (0.0405)	-0.0855** (0.0403)	0.171*** (0.0448)
Portugal	0.116*** (0.0422)	0.0181 (0.0403)	0.242*** (0.0465)
Finland	0.0417 (0.0426)	0.0697* (0.0383)	0.104** (0.0437)
Sweden	0.0862** (0.0417)	0.0439 (0.0386)	0.0881** (0.0417)
Austria	-0.0337 (0.0402)	-0.0735** (0.0362)	0.00648 (0.0431)
Constant	-0.0817*** (0.0257)	-0.0558** (0.0248)	-0.288*** (0.0264)
Observations	2,646	2,639	2,530
R-squared	0.041	0.044	0.046

Table 7. Pseudo Panel – 2010 Euro-Crisis.

The pseudo-panel dataset includes observation from two repeated cross sections in 2009 and 2013. The LHS variables in the first 3 specifications are the time-changes in the synthetic individuals' support (see model (3)) for the Euro, Trust in EU, and Trust in ECB (variables detailed in the appendix), while the fourth specification shows as dependent variable the difference between LHS in (1) and LHS in (3). The first RHS (3pt scale variables of the type *Worse*, *Same* and *Better*) controls for the change in expectations for future personal employment situation. The second and the third (4pt scale variables of the type [*Very Bad*, *Very Good*]) control for the change in perception of current household's and national economic situation. The rest of RHS variables are country dummies with Germany taken as baseline. For detailed variable definitions, see Appendix. *Estimation method*: OLS on two-periods Panel in F.D. with Country FE. *Unit of observation*: synthetic individual (cohort) at different points in time. *Sources*: EB72.4 and EB81.0. *Sample*: EU 15. *Sample period*: 2009-2013 (with some gaps – delta(4)). *Omitted country*: Germany. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.

Pseudo-Panel (2009-2013, delta(4))	(1)	(2)	(3)	(4)
	Δ For Euro	Δ Trust in EU	Δ Trust in ECB	Δ difference between For Euro and Trust in ECB
Δ Expectations on future personal job situation	0.0399** (0.0184)	0.0947*** (0.0199)	0.0407** (0.0202)	0.000865 (0.0258)
Δ Household financial situation	0.0374*** (0.0104)	0.0419*** (0.0110)	0.0449*** (0.0117)	-0.00769 (0.0142)
Δ Perception of national employment situation	0.0510*** (0.0110)	0.0778*** (0.0117)	0.0739*** (0.0127)	-0.0198 (0.0148)
France	0.0267 (0.0482)	0.209*** (0.0505)	0.221*** (0.0507)	-0.195*** (0.0664)
Belgium	-0.0762* (0.0439)	0.199*** (0.0494)	0.136*** (0.0496)	-0.201*** (0.0602)
Netherlands	-0.0193 (0.0492)	0.126** (0.0561)	0.164*** (0.0544)	-0.181*** (0.0697)
Italy	0.0154 (0.0496)	0.0457 (0.0509)	0.136** (0.0546)	-0.144** (0.0678)
Luxembourg	-0.0140 (0.0531)	0.0991 (0.0625)	0.274*** (0.0608)	-0.243*** (0.0780)
Denmark	-0.226*** (0.0527)	0.138** (0.0562)	0.189*** (0.0566)	-0.390*** (0.0735)
Ireland	-0.118*** (0.0400)	0.129*** (0.0490)	0.0267 (0.0477)	-0.126** (0.0619)
UK	-0.129*** (0.0425)	0.286*** (0.0458)	0.196*** (0.0475)	-0.303*** (0.0642)
Greece	0.141*** (0.0521)	-0.00469 (0.0495)	0.0153 (0.0499)	0.130** (0.0654)
Spain	-0.0218 (0.0461)	-0.0708 (0.0510)	-0.0588 (0.0506)	0.0498 (0.0673)
Portugal	-0.131*** (0.0498)	-0.0861 (0.0560)	-0.0587 (0.0544)	-0.0589 (0.0684)
Finland	0.0754* (0.0430)	0.278*** (0.0534)	0.132** (0.0526)	-0.0469 (0.0686)
Sweden	-0.300*** (0.0479)	0.189*** (0.0539)	0.136** (0.0531)	-0.430*** (0.0670)
Austria	-0.0411 (0.0444)	0.231*** (0.0472)	0.128*** (0.0483)	-0.181*** (0.0608)
Constant	-0.0398 (0.0325)	-0.334*** (0.0365)	-0.294*** (0.0358)	0.249*** (0.0483)
Observations	2,615	2,559	2,462	2,412
R-squared	0.073	0.122	0.082	0.066

Table 8. Sentiments towards the Euro

Percentage of people who favors giving more decision-making power to the EU to deal with Europe's economic problems. Percentage of people % who thinks country should keep the Euro as their currency or return to their original currency (franc/mark/peseta/lira/drachma). **Source:** 2014 Spring Pew Global Attitudes Survey

	More power to EU		Euro	
	Favor	Against	Keep euro	Return to currency
Germany	47	50	72	27
France	45	55	64	36
Poland	44	41		
Spain	43	53	68	29
Italy	38	50	45	44
Greece	27	71	69	26
UK	19	76		

APPENDIX

Data description

Most of the details on the data are covered in the data section in the paper. Here we list the variable definition and additional information on how we treat the data. In the Eurobarometer surveys, prior to the German unification, Germany was only West Germany.

Table A1: Variables Definition

i. Eurosupport Variables

Membership is good

Source: Eurobarometer surveys 1973-2012.

Description: Share of respondents who answer *Good* on a 3pt scale (*Good, Neither good nor bad, Bad*). Question asked in all countries in the sample from the European Community Study of 1973 (1973Q3) to Eurobarometer 77.4 (2012Q2). Not asked in any wave during 1974H1 or 2011H2.

Example of wording: EB64.2 “*Generally speaking, do you think that (OUR COUNTRY)’s membership of the European Union is ...?*”

Country benefitted

Source: Eurobarometer surveys 1984-2011.

Description: Share of respondents who answer *Benefitted* on a binary scale (*Benefitted, Not benefitted*). Question asked in all countries in the sample from Eurobarometer 21 (1984Q2) to Eurobarometer 75.3 (2011Q2). Not asked in any wave during 2010H2.

Example of wording: EB64.2 “*Taking everything into consideration, would you say that (OUR COUNTRY) has on balance benefitted or not from being a member of the European Union?*”

For Euro

Source: Eurobarometer surveys 1991-2013

Description: Share of respondents who answer *For* on a binary scale (*For, Against*). Question asked in all countries in the sample from the European Community Study of 1970 (1970Q1) to Eurobarometer 79.3 (2013Q2). Opinions polled before 1991 (4 waves) have been discarded.

Example of wording: EB64.2: “*What is your opinion on each of the following statements? Please tell me for each proposal, whether you are for it or against it...There has to be one single currency, the Euro, replacing the (NATIONAL CURRENCY) and all other national currencies of the member states of the European Union*”

Expectations on future household’s financial situation

Source: Eurobarometer surveys 2002, 2005, 2009, 2013.

Description: The variable can assume values $x_j \in \{-1,0,1\}$ corresponding to, respectively, the answers *Worse, Same* and *Better*. Question asked in all countries in the sample considered.

Example of wording: EB58.1 “*(With respect to your household’s future financial situation) What your expectation for the next 12 months?*”

Expectations on future national employment situation

Source: Eurobarometer surveys 2002, 2005, 2009, 2013.

Description: The variable can assume values $x_j \in \{-1,0,1\}$ corresponding to, respectively, the answers *Worse, Same* and *Better*. Question asked in all countries in the sample considered.

Example of wording: EB58.1 “*(With respect to your country’s future national employment situation) What your expectation for the next 12 months?*”

Expectations on future national economic situation

Source: Eurobarometer surveys 2002, 2005, 2009, 2013.

Description: The variable can assume values $x_j \in \{-1,0,1\}$ corresponding to, respectively, the answers *Worse*, *Same* and *Better*. Question asked in all countries in the sample considered.

Example of wording: EB58.1 “(With respect to your country’s future general economic situation) What your expectation for the next 12 months?”

Expectations on future personal employment situation

Source: Eurobarometer surveys 2002, 2005, 2009, 2013.

Description: The variable can assume values $x_j \in \{-1,0,1\}$ corresponding to, respectively, the answers *Worse*, *Same* and *Better*. Question asked in all countries in the sample considered.

Example of wording: EB58.1 “(With respect to your future employment situation) What your expectation for the next 12 months?”

Households financial situation

Source: Eurobarometer 2009, 2013

Description: The variable can assume integers values from -2 to +2, corresponding to answers ranging from *Very Bad* to *Very Good*. Question asked in all countries in the sample considered.

Example of wording: EB80.1 “How would you judge the financial situation of your household?”.

Perception of National employment situation

Source: Eurobarometer 2009, 2013

Description: The variable can assume integers values from -2 to +2, corresponding to answers ranging from *Very Bad* to *Very Good*. Question asked in all countries in the sample considered.

Example of wording: EB80.1 “How would you judge the current employment situation in your country?”.

Support for a Single European Market

Source: Eurobarometer surveys 1992-1993

Description: Dichotomous variable coded on the basis of 2pt scale answers (*A Good Thing*, *A bad thing*) or (*An advantage*, *A disadvantage*). Question asked in all countries in the sample considered.

Example of wording: EB37.0: “Overall, what do you think that the completion of the Single European Market in 1992 will be?”

Support for a Single European Government

Source: Eurobarometer surveys 1992-1993

Description: Dichotomous variable coded on the basis of 2pt scale answers (*For*, *Against*). Question asked in all countries in the sample considered.

Example of wording: EB39.0 “What is your opinion on each of the following statements? Please tell me for each statement, whether you are for it or against it – The Community should have a European Government responsible for the European Parliament”.

Support for a Single European Currency

Source: Eurobarometer surveys 1992-1993

Description: Dichotomous variable coded on the basis of 2pt scale answers (*For*, *Against*). Question asked in all countries in the sample considered.

Example of wording: EB39.0 “What is your opinion on each of the following statements? Please tell me for each statement, whether you are for it or against it – There should be a European Single Currency replacing all national currencies”.

Trust in the European Union

Source: Eurobarometer surveys 1997-2013

Description: Share of respondents who answer *Trust/Tend to trust* on a binary scale (*Tend to trust*, *Tend not to trust*). Question asked in all countries in the sample from Eurobarometer 48 (1997Q4) to Eurobarometer 79.3 (2013Q2). Not asked in any wave during 1998, 1999H2, 2000, 2002H2, 2010H2.

Example of wording: EB73.4, Q.A14.4 “I would like to ask you a question about how much trust you have in certain institutions. For each of the following institutions, please tell me if you tend to trust it or tend not to trust it....The European Union”

Trust in the European Central Bank

Source: Eurobarometer surveys 1999-2012

Description: Share of respondents who answer *Trust/Tend to trust* on a binary scale (*Tend to trust, Tend not to trust*). Question asked in all countries in the sample from Eurobarometer 51 (1999Q1) to Eurobarometer 79.3 (2013Q2). Not asked in any wave during 2002H1 and 2010H2.

Example of wording: EB61, Q.23.6 “And, for each of [the following European bodies], please tell me if you tend to trust it or tend not to trust it?...The European Central Bank”

Trust in National Parliament

Source: Eurobarometer surveys 1997-2013

Description: Share of respondents who answer *Trust/Tend to trust* on a binary scale (*Tend to trust, Tend not to trust*). Question asked in all countries in the sample from Eurobarometer 48 (1997Q4) to Eurobarometer 79.3 (2013Q2). Not asked in any wave during 1998, 1999H2, 2000H1, 2002H2, 2010H2.

Example of wording: EB73.4, Q.A14.3 “I would like to ask you a question about how much trust you have in certain institutions. For each of the following institutions, please tell me if you tend to trust it or tend not to trust it....The (NATIONALITY Parliament)”

Trust in National Government

Source: Eurobarometer surveys 1997-2013

Description: Share of respondents who answer *Trust/Tend to trust* on a binary scale (*Tend to trust, Tend not to trust*). Question asked in all countries in the sample from Eurobarometer 48 (1997Q4) to Eurobarometer 79.3 (2013Q2). Not asked in any wave during 1998, 1999H2, 2000H1, 2002H2, 2010H2.

Example of wording: EB73.4, Q.A14.2 “I would like to ask you a question about how much trust you have in certain institutions. For each of the following institutions, please tell me if you tend to trust it or tend not to trust it....The (NATIONALITY Government)”

ii. Demographics

Age

Source: Eurobarometer surveys 1973-2013. European Election studies 1999, 2004, 2009.

Description: individual age of respondent in years.

Example of wording: EB28, Q.67: “Can you tell me your date of birth please?”. EB43, D.11: “How old are you?”

Year of birth

Source: Eurobarometer surveys 1973-2013. European Election studies 1999, 2004, 2009.

Description: individual year of birth of respondent computed on the basis of the individual age variable.

Cohort

Source: Eurobarometer surveys 1973-2013. European Election studies 1999, 2004, 2009.

Description: cohort defined by the authors as follows, on the basis of the individual year of birth.

1. Born before 1945
2. Born between 1946 and 1957
3. Born between 1958 and 1967
4. Born between 1968 and 1979
5. Born after 1979

Years of education

Source: Eurobarometer surveys 1973-2013. European Election studies 1999, 2004, 2009.

Description: individual years of education, computed on the basis of information on the age at which respondent left school (provided either recoded in groups or exact). It assumes education starts compulsorily for all Europeans at 8 years of age.

Gender

Source: Eurobarometer surveys 1973-2013. European Election studies 1999, 2004, 2009.

Description: Sex of respondent (Female = 1).

Occupation

Source: Eurobarometer surveys 1973-2013. European Election studies 1999, 2004, 2009.

Description: Occupation of respondent recoded in 10 categories. 1. Farmer, Fisherman (Skipper); 2. Professional - Lawyer, Accountant, Etc; 3. Business - Owner Of Shop, Craftsman, Proprietor; 4. Manual Worker; 5. White Collar - Office Worker; 6. Executive, Top Management, Director; 7. Retired; 8. Housewife, Not Otherwise Employed; 9. Student, Military Service; 10. Unemployed, D.K., N.A.

Example of wording: EB38, D.15A: “*What is your current occupation?*”

Left-right self-placement

Source: Eurobarometer surveys 1973-2013. European Election studies 1999, 2004, 2009.

Description: Respondent is asked to place his/her political views on a 10 point scale (1 = Left, ..., 10 = Right).

Example of wording: EB38, D.1: “*In political matters people talk of "the left" and "the right". How would you place your views on this scale?*”

iii. Macro-economic Variables

Unemployment rate

Source: AMECO (Annual Macro-Economic Database of the European Commission). *Series:* ZUTN

Description: Unemployed persons as a share of the total active population (labour force). Quarterly frequency. Period: 1960-2013

NAWRU

Source: AMECO database. *Series:* ZNAWRU

Description: Non-accelerating wages rate of unemployment. Annual frequency. Period: 1965-2013

Inflation rate (non-food, non-energy)

Source: OECD. *Series:* Consumer Price Indices (MEI database)

Description: Consumer prices - all items non-food, non-energy. Percentage change on the same period of the previous year. Quarterly frequency. Period: 1970-2013

E.C.B. Marginal Lending Facility Rate (MLR)

Source: European Central Bank, Key E.C.B. interest rates, Marginal Lending Facility (<http://www.ECB.europa.eu/stats/monetary/rates/html/index.en.html>).

Description: The Eurosystem Marginal Lending Facility Rate is the interest rate at which mayor financial institutions obtain overnight liquidity from national central banks in the Eurosystem, against eligible assets. Interest rate levels in percentages per annum. MLR revisions have been recast at quarterly frequency. In the occurrence of policy rate revisions during a given quarter, we impute the average of all standing rates during that quarter. Period: 1999-2013

National central bank discount rate

Source: IMF – International Financial Statistics. *Series:* line 60

Description: The Discount Rate/Bank Rate (d60) is the rate at which the central banks lend or discount eligible paper for deposit money banks, typically shown on an end-of-period basis. Luxembourg and Belgium show the same figures by virtue of the Belgium–Luxembourg Economic Union, which pegged the Luxembourgish franc to the Belgian franc since 1921. Period: 1984-1998

REPO rate (France)

Source: IMF – International Financial Statistics. *Series:* line 60lcr

Description: Repos (Repurchase Agreements) is the counterpart of cash received against securities/gold sold under a firm commitment to repurchase the securities/gold at a fixed rate on a specified date. The repo series includes holdings by households and non-financial corporations. For lack of data, this series substitutes the Banque de France discount rate in the pre-E.C.B. years. Period: 1984-1998

Nominal G.D.P. in bn EUR/ECU

Source: AMECO. *Series:* UVGN

Description: Gross national income at current market prices (EUR/ECU bn). Period: 1971-2013

Real G.D.P. (2005 prices) in bn EUR

Source: AMECO. *Series:* OVGd

Description: Gross domestic product at 2005 market prices (EUR bn). Period: 1960-2013

Gross contributions to – and receipts from – the E.U. budget in EUR mln

Source: Kauppi and Widgren (2004) for the period 1976-2001 and Financial Programming and Budget - Revenue and Expenditures file for 2001-2012 (http://ec.europa.eu/budget/reveexp/revenue_and_expenditure_files/data/revenue_and_expenditure_en.xls)

Description: **Receipts:** Total expenditures in the E.U. budget. **Contributions:** Total own resources (Traditional own resources + total national contribution)

10-year government harmonized bond spread with German Bund

Source: Thomson Reuters Datastream. *Series:* LXESSFUB, BDESSFUB, ITESSFUB, FRESSFUB, DKESSFUB, IRESSFUB, NLESSFUB, BGESSFUB, GRESSFUB, OEESSFUB, SDESSFUB, EESSFUB, FNESSFUB, PTESSFUB, UKESSFUB

Description: 10-year benchmark/harmonized government bond yields in percentage points, at daily frequency. Data have been recast at yearly frequency by taking the average within years and are expressed in difference from the German Government Bond. Period: 1980-2013

Exports towards the EU

Source: Eurostat. *Series:* DS-016890

Description: Bilateral trade flows since 1988 by CN8. For each E.U. country, data have been aggregated by trade partner to obtain the value of exports in billion EUR (current) to other EU/EEC countries. Period: 1988-2012.

Value of exports in current prices

Source: Eurostat. *Series:* nama_ex_i_c

Description: Exports and imports by Member States of the EU/third countries, current prices. Period: 1957-2013

Foreign residents by country of citizenship

Source: Eurostat. *Series:* migr_pop1ctz

Description: Resident population by sex, age group and citizenship. For each E.U. country, data have been aggregated by citizenship to obtain the stock of immigrants from the EU. Period: 1998-2012

iv. Country-specific Institutional/cultural Variables

World Governance Indicator: government effectiveness

Source: World Bank

Description: Index capturing perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies (increasing in government capacity). Methodology described in Kauffman et al (2010), *Policy Reference: Research Working Paper 5430*. The measure is provided with 90% confidence intervals and standard error, but we use the point estimate. Period: 1996-2012.

World Government Indicator: control of corruption

Source: World Bank

Description: Index capturing perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests (decreasing in corruption). Methodology described in Kauffman et al (2010), *Policy Reference: Research Working Paper 5430*. The measure is provided with 90% confidence intervals and standard error, but we use the point estimate. Period: 1996-2012.

Deaths in the World Wars

Source: Wikipedia, World War II casualties (http://en.wikipedia.org/wiki/World_War_II_casualties) and World War I casualties (http://en.wikipedia.org/wiki/World_War_I_casualties).

Description: The sum of civilian and military deaths during World War I as a percentage of 1915 population and civilian and military deaths during World War II as a percentage of 1939 population.

Population

Source: Eurostat. Series: demo_pjan_1

Description: Total resident population on 1st January. Frequency: annual. Period: 1960-2013

Genetic distance

Source: Authors database from E. Spolaore and R. Wacziarg, *The Diffusion of Development*, QJE 2009; version of 8/8/2008

Description: Bilateral genetic distances between countries. For missing data (e.g. former Yugoslavia) we have used the genetic distances of a genetically identical country (e.g. one with genetic distance equal to zero). Data have been aggregated to compute weighted genetic distances of each country with the rest of the E.U. at each point in time. Frequency: yearly (genetic distances are constant over time, population and E.U. member countries change). Period: 1960-2013.

Racism: immigrants make [country] worse place to live

Source: European Social Studies, Round 1 to Round 6. Series: imwbcnt

Description: Share of respondents who answer 4 or less on an 11pt scale (0 = *Worse place to live*, ..., 10 = *Better place to live*). Frequency: bi-annual. Period: 2002-2012

Wording: "Is [country] made a worse or a better place to live by people coming to live here from other countries?"

Racism: immigrant workers are bad for [country]'s economy

Source: European Social Study, Round 1 to Round 6. Series: imbgeco

Description: Share of respondents who answer 4 or less on an 11pt scale (0 = *Bad for the economy*, ..., 10 = *Good for the economy*). Frequency: bi-annual. Period: 2002-2012

Wording: *Would you say it is generally bad or good for [country]'s economy that people come to live here from other countries?*

Racism: don't like as neighbors: people of different race

Source: European/World Value Survey

Description: Share of respondent who mention *People of a different race* on a 2pt scale (0 = *Not mentioned*, 1 = *Mentioned*). Variable has been summarized by country as the average of the oldest three waves available. Period (EVS): 1981, 1982, 1990, 1999, 2000, 2008, 2009. Period (WVS): 1981-84, 1983-93, 1994-99, 1999-04, 2005-09, 2010-14

Wording: *On this list are various groups of people. Could you please mention any that you would not like not to have as neighbors? ...People of a different race*

Racism: don't like as neighbors: immigrants/foreign workers

Source: European/World Value Survey

Description: Share of respondent who mention *People of a different race* on a 2pt scale (0 = *Not mentioned*, 1 = *Mentioned*). Variable has been summarized by country as the average of the oldest three waves available. Period (EVS): 1981, 1982, 1990, 1999, 2000, 2008, 2009; Period (WVS): 1981-84, 1983-93, 1994-99, 1999-04, 2005-09, 2010-14

Wording: *On this list are various groups of people. Could you please mention any that you would not like not to have as neighbors? ... Immigrants/foreign workers*

Nationalism: how proud are you to be a ... (country) citizen

Source: European/World Value Survey

Description: Share of respondents who declare themselves *Very Proud* on a 4pt scale (1 = *Very Proud*, 2 = *Quite Proud*, 3 = *Not very proud*, 4 = *Not at all proud*). Variable has been summarized by country as the average of the oldest three waves available. Period (EVS): 1981, 1982, 1990, 1999, 2000, 2008, 2009. Period (WVS): 1981-84, 1983-93, 1994-99, 1999-04, 2005-09, 2010-14

Wording: *How proud are you to be [nationality]?*

Dummy = “2004 onwards” (Eastern block accession)

Description: dummy = 1 for all countries in 2004 and subsequent years.

Dummy = “Country in Eurozone” (Eurozone)

Description: country-specific dummy = 1 for each year after the changeover from the former national currency to the Euro.

v. Electoral Variables

Intentional turnout at the European Parliament elections

Source: Eurobarometer surveys 1973-2009.

Description: Share of respondents who declare their likelihood to vote in the next European elections is 5 or above on a 10pt scale (1 = *Definitely not vote*, ..., 10 = *Definitely vote*). Alternatively, it is the share of respondents who declare their likelihood to vote in the next European elections is 2 or above when the question is measured on a 4pt scale (1 = *Will certainly go and vote*, ..., 4 = *Will certainly not vote*).

2pt scale: EB51 (1999)

4pt scale: EB11 (1979), EB21 (1984), EB30 (1988), EB31 (1989), EB40 (1993), EB41 (1994)

10pt scale: EB69.2 (2008), EB70.1 (2008), EB71.1 (2009)

Examples of wording:

- EB51, Q.30: “*The next elections to the European Parliament will take place this June in each member State. [...] b) Do you intend to vote in the next European Parliament elections this June?*”
- EB71.1, Q.C3: “*Can you tell me on a scale of 1 to 10 how likely it is that you would vote in the next European elections in [date]? Please place yourself at a point on this scale where '1' indicates that you would "definitely not vote", '10' indicates that you would "definitely vote" and the remaining numbers indicates something in between these two positions.*”
- EB21, Q.349: “*Next June, the citizens of countries belonging to the European community, including the (NATIONALITY) will be asked to vote to elect members of the European parliament. Do you think that you will certainly go and vote, probably go and vote, probably will not vote, or certainly will not vote?*”

Turnout at the European Parliament elections

Source: Eurobarometer surveys 1973-2013. European Election studies 1999, 2004, 2009.

Description: Share of respondents who declared to have voted at the last European Parliament elections on the total of all eligible voters in the sample by country (binary variable).

Examples of wording:

- EB12, Q.120 “*In this first European election a lot of people in some of the countries did not go and vote. Were you of voting age at the time of this election? If yes, were you able to go and vote or didn't you vote?*”
- EES2004, Q.09 “*A lot of people abstained in the European Parliament elections of [date], while others voted. Did you cast your vote?*”

Turnout at the national general elections

Source: Eurobarometer surveys 1973-2013. European Election studies 1999, 2004, 2009.

Description: Share of respondents who voted any political party at the last general elections over the total of all eligible voters in the sample by country.

Wording: EB.31, Q.533/534 “*Which party did you vote for at the [general election] of [year of the last general election]?*”

Vote to an Eurosceptic party at European Parliament elections

Source: Eurobarometer surveys 1973-2013. European Election studies 1999, 2004, 2009.

Description: For each of the European elections of 1999, 2004 and 2009, we computed the share of respondents who voted for an Eurosceptic political party among all respondents who declared to vote in that election. Eurosceptic parties are listed in a separate appendix.

Voter turnout behavior because of anti-E.U. feelings

Source: Eurobarometer surveys 52.0 (1999Q4) and 71.3 (2009Q2)

Description: Share of respondents who declared to have abstained from voting at the last European elections because they oppose the E.U. plus the share of respondents who declared they voted at the last European elections because they oppose the E.U.

Wording: EB.52, Q.42: “What were the two main reasons why you voted in the European Parliament elections?... I was/am against the European Union”. Q.43: “What were the two main reasons why you did NOT vote in that election?... I am opposed to the European Union”

European Parliament: Results of the European elections. Turnout by country

Source: <http://www.results-elections2014.eu/en/turnout.html>

Description: Current and historical turnout at the elections for the European Parliament (%). Period: 1999, 2004, 2009, 2014.

European Parliament: Results of the European elections. Result by national party

Source: <http://www.results-elections2014.eu/en/country-introduction-2014.html>

Description: Current and historical results by national political party at the elections for the European Parliament (%). Period: 1999, 2004, 2009, 2014.

Table A2 List of Eurobarometer waves in sample

Eurobarometer wave	Date	Responen s	Percent of the overall sample
European Community Study 1970	1970Q1	8,567	0.53
European Community Study 1973	1973Q3	13,484	0.83
2.0	1974Q4	9,060	0.56
3.0	1975Q2	9,561	0.59
4.0	1975Q4	9,133	0.56
5.0	1976Q2	8,575	0.53
6.0	1976Q4	9,084	0.56
7.0	1977Q2	9,056	0.56
8.0	1977Q4	8,788	0.54
9.0	1978Q2	9,151	0.56
10.0	1978Q4	8,677	0.53
11.0	1979Q2	8,884	0.55
12.0	1979Q4	8,989	0.55
13.0	1980Q2	8,819	0.54
14.0	1980Q4	9,985	0.61
15.0	1981Q2	9,898	0.61
16.0	1981Q4	9,903	0.61
17.0	1982Q2	11,772	0.72
18.0	1982Q4	9,682	0.59
19.0	1983Q2	9,790	0.60
20.0	1983Q4	9,718	0.60
21.0	1984Q2	9,746	0.60
22.0	1984Q4	9,907	0.61
23.0	1985Q2	9,929	0.61
24.0	1985Q4	11,849	0.73
25.0	1986Q2	11,831	0.73
26.0	1986Q4	11,837	0.73
27.0	1987Q2	11,651	0.71
28.0	1987Q4	11,583	0.71
29.0	1988Q2	11,729	0.72
30.0	1988Q4	11,791	0.72
31.0	1989Q1	11,678	0.72
31.A	1989Q2	11,819	0.73
32.0	1989Q4	23,395	1.44
33.0	1990Q2	11,775	0.72

34.0	1990Q4	13,883	0.85
34.2	1990Q4	7,706	0.47
35.0	1991Q2	13,121	0.81
35.A	1991Q1	12,819	0.79
35.1	1991Q2	13,149	0.81
36.0	1991Q4	13,004	0.80
37.0	1992Q1	13,082	0.80
38.0	1992Q3	13,008	0.80
38.1	1992Q4	13,024	0.80
39.0	1993Q2	14,142	0.87
40.0	1993Q4	14,068	0.86
41.0	1994Q1	13,029	0.80
41.1	1994Q2	13,096	0.80
42.0	1994Q4	15,644	0.96
43.0	1995Q1	16,238	1.00
43.1	1995Q2	16,166	0.99
43.1B	1995Q2	16,300	1.00
44.1	1995Q4	16,346	1.00
44.2B	1996Q1	61,805	3.79
45.1	1996Q2	16,335	1.00
46.0	1996Q4	16,248	1.00
46.1	1996Q4	16,246	1.00
47.0	1997Q1	16,362	1.00
47.1	1997Q2	16,154	0.99
47.2	1997Q2	16,201	0.99
48.0	1997Q4	16,186	0.99
49.0	1998Q2	16,165	0.99
50.0	1998Q4	16,155	0.99
51.0	1999Q1	16,179	0.99
52.0	1999Q4	16,071	0.99
53.0	2000Q2	16,078	0.99
54.1	2000Q4	16,067	0.99
55.1	2001Q2	16,163	0.99
56.2	2001Q4	15,939	0.98
56.3	2002Q1	16,038	0.98
57.1	2002Q2	16,012	0.98
58.1	2002Q4	16,074	0.99
59.0	2003Q1	16,370	1.00
59.1	2003Q2	16,307	1.00
59.2	2003Q2	16,161	0.99
60.1	2003Q4	16,082	0.99
61.0	2004Q1	16,216	1.00
62.0	2004Q3	27,807	1.71
62.2	2004Q4	27,008	1.66

63.4	2005Q2	27,823	1.71
64.2	2005Q4	27,925	1.71
65.1	2006Q1	24,750	1.52
65.2	2006Q2	27,665	1.70
66.1	2006Q4	27,647	1.70
67.2	2007Q2	27,717	1.70
68.1	2007Q4	27,768	1.70
69.2	2008Q1	27,661	1.70
70.1	2008Q4	27,618	1.69
71.1	2009Q1	27,718	1.70
71.3	2009Q2	27,830	1.71
72.4	2009Q4	27,731	1.70
73.4	2010Q2	27,641	1.70
75.3	2011Q2	27,713	1.70
76.3	2011Q4	27,594	1.69
77.3	2012Q2	27,637	1.70
77.4	2012Q2	26,622	1.63
78.1	2012Q4	27,622	1.69
79.3	2013Q2	27,605	1.69
80.1¹⁹	2013Q4	32,411	

Total		1,629,637	100
--------------	--	-----------	-----

¹⁹ This wave was used only in the pseudo panel analysis of section 5 since one of the main variables MEMBERSHIP was not collected in this survey. Thus, we do not report the size of the sample as a percentage of the overall sample because it is not used in the other figures and tables.