Draft version of Henjak, Andrija, Gábor Tóka and David Sanders. 2012. "Support for European Integration." In *Citizens and the European Polity: Mass Attitudes Towards the European and National Polities*, ed. by David Sanders, Pedro Magalhães, and Gábor Tóka. Oxford: Oxford University Press, pp. 169-212.

Tables, figures and notes at the end

Chapter 8 Support for European Integration

Andrija Henjak, Gabor Toka and David Sanders

This chapter examines generalised support for the EU rather than attitudes towards specific institutions and policies. We subject theories about its origin to more comprehensive empirical tests than previous analyses attempted: we cover all member states from the 1970s to 2007 and simultaneously consider most micro- and macro-level explanations hitherto proposed in the literature. We argue that common typologies dividing empirical determinants of EU-support into categories like rational cost-benefit calculus, identity, cue-taking from trusted sources and cognitive mobilisation are rarely as clearcut as they are presented. Nonetheless, we attempt to operationalise a number of important theoretical claims about the sources of EU support.

We focus our efforts on three main theoretical perspectives. The first involves 'hard' *instrumental rational choice* approaches that attempt to assess the effects of the utility calculations which citizens make about the relative costs and benefits engendered by EU membership. The core hypothesis is support for the EU is likely to be strongest among those who perceive that they clearly benefit from it. The second approach involves 'soft' *low information cueing rationality*, in which citizens use heuristic shortcuts to make judgements about the EU based on their assessments of more familiar institutions or actors. We distinguish between 'transfer cueing', where citizens directly translate their positive (negative) assessments of national institutions into positive (negative) assessments of the EU, and 'substitution cueing', where citizens' negative (positive) assessments of domestic institutions lead them to take a more positive (negative) view of the EU. The third approach is *cognitive mobilisation*. The central idea here is that higher levels of education, political awareness and engagement encourage people to be more cosmopolitan in their worldviews, thereby making it more likely that they will support supranational integration also in the European context.

In relation to each of these three approaches, it is by no means easy to find reliable operational measures of the signature concepts involved. Nonetheless, a plausible case can be made that the indicators we present below do capture key aspects of the concepts they purport to operationalise. The same cannot be said of a fourth perspective, the 'identitarian' approach, which we deliberately exclude from our analysis. This exclusion does *not* reflect a conviction on our part that there is anything intrinsically wrong with identitarian theory – on the contrary, the idea that a stronger sense of European identity is likely to foster greater support for the EU has a good deal of face plausibility. Rather, it reflects the sparseness of suitable identity measures that we could incorporate in our empirical analysis. Although such measures do exist, they cover such limited time periods and so few countries (see

Isernia et al. forthcoming) that our empirical analysis would be unacceptably impoverished were we to include them in our statistical estimations. However, in addition to considering the three core theoretical perspectives mentioned above, we do seek to assess the effects of several further possible causal factors that lie outside their ambit. We accordingly investigate the potential *ad hoc* effects on EU support of (a) the coincidence of a country's accession to the EU with its status as a 'third wave democracy', (b) the extent to which each country exhibits centralised wage bargaining and (c) the overall volume of EU legislation.

In section one, we update the available time-series data on EU support and highlight the main variations in support across member states and over time. Section two summarizes extant theories about the origins of this variation. Section three lists the specific theoretical propositions that we test, discusses their underlying assumptions, and outlines the operational measures that we deploy. Section four presents our empirical analyses of the changing economic and political circumstances as well as individual characteristics that account for variation in EU support across time, space, and individuals. The empirical results we report suggest that there is a clear explanatory role for all three of our main perspectives. However, our findings also indicate that the main drivers of EU support across time and space relate primarily to variations in economic and political conditions within nation states rather than in matters relating to the EU itself. Broadly, the better things are at home, the more people seem to value the EU; the worse things are, the less they value it.

1. Generalised support: measurement and trends

Our analysis, like most previous studies, relies on the Eurobarometer series, which has fielded surveys in all EC/EU member states every year since 1973 (cf. Schmitt 2003). The Eurobarometers and the Candidate Countries Eurobarometers also provide similar survey data for new member states in the last (few) year(s) before their accession to the union. The differences between the multiple surveys conducted in the same country within the same calendar year are largely irrelevant and ignored here since quarterly or monthly data are only available for a few plausible determinants of EU-support. Thus we pool together all such surveys and treat the nearly 500 individual country-years – starting with nine observations in 1973 and ending with twenty-seven in 2007, corresponding to the number of member states in the given years – as the aggregate level in our analysis. We examine the factors that cause variation in EU support both across country-years and across individuals nested within each of those country-years.

The Eurobarometers feature several measures of generalised support for integration, but only one was administered in nearly all years, having been omitted only from the pre-1973 studies. Therefore this chapter, just like much of the literature, mostly relies on this item, which gauges support for membership by asking: "Generally speaking, do you think that [NAME OF RESPONDENT'S COUNTRY]'s membership of the ... [COMMON MARKET, EUROPEAN COMMUNITY, EUROPEAN UNION] is a good thing, neither good nor bad, or a bad thing?" For ease of interpretation and analysis, we recode the responses to a 0-100 scale so that 100 and 0 stands for evaluating membership as 'good' and 'bad thing', respectively, with 'neither good nor bad' coded as 50. 'Do not know' and other missing responses were replaced using the multiple imputation procedure of the Amelia 2 software (see Honaker et al. 2010). This imputation is superior to ignoring such

responses or replacing them with the mean because non-responses to attitude items tend to come from somewhat distinct population groups in terms of opinion profiles (cf. Berinsky 2004). Imputation removes any comparability problems that could arise from the unequal occurrence of non-response across countries and years.

The interpretation of our dependent variable as a measure of generalised support is relatively straightforward. Although the object of evaluation is not integration per se, we suspect that few ordinary citizens display the advanced sophistry of maintaining separate opinions about European integration in general on the one hand, and their own country's EU membership on the other. Rather, the EU membership question measures support for integration in the most natural way for citizens, exactly as they are most likely to encounter the issue in everyday discourse and political practice. The question wording is very general: unlike other similar items in the Eurobarometers, this one does not frame the issue through specific aspects like a given policy domain or the speed and extent to which integration should be advanced. Instead, it focuses on the general but nevertheless simple evaluation of EU membership of the respondent's own country. There is considerable merit in this very concrete question compared to asking citizens, as other Eurobarometer items do, about 'further' and/or 'faster' integration in some unspecified direction, which inevitably remains open to different interpretations by different respondents. It may be a limitation that the item focuses on a specific country's membership rather than the idea of European unity in general, or that the wording seems implicitly to invite rather utilitarian evaluations (Eichenberg and Dalton 2003). Yet the sample mean of this item correlates at r=.93 with the similar mean of an alternative item, which is available for 276 of the country-years in our analysis, and asks "If you were to be told tomorrow that the ... [COMMON MARKET, EUROPEAN COMMUNITY, EUROPEAN UNION] had been scrapped, would you be very sorry about it, indifferent or very relieved?" This strong correlation makes us confident that our dependent variable, at least at the aggregate level, is a highly reliable tool of detecting patterns in support for the EU.

It has been argued that support for the extension of EU competence into various policy domains is in fact a better measure of generalised support for integration than our dependent variable (cf. Magalhães forthcoming). We concur that there is only a moderately strong correlation between these two measures of EU-support, and that – as a comparison between our results and those of Magalhães in this volume will demonstrate – opinions about membership may be more responsive to short-term factors than preferences about the EU's policy scope. This looks reasonable given that policy integration does not change its substantive meaning over time as much as EU-membership. Integrating, say, foreign policy has carried more or less the same meaning since the early 1970s. In contrast, approving of France's membership in the Common Market in 1973 was not the same as approving of France's membership in the much larger, more elaborate and much more closely integrated EU of 2007. It follows that, if preferences for the integration of particular policies were unchanging, support for membership would decline, as membership comes to entail a higher level of integration, which increasing numbers of people find exaggerated. Put differently, a constant level of support for membership in a deepening Union means, implicitly, increasing support for policy integration, and thus membership support is indeed a somewhat misleading measure of support for integration. This said, membership does nonetheless have a distinct meaning and importance that emerges from the fact that it

amounts to a holistic evaluation of the Union, closely connected to voting behaviour in, for instance, accession referenda.

Table 8.1 illustrates this last point. Here we look at the impact of membership evaluation and preferences for policy integration on voting behaviour in the pre-accession referendums of the nine countries that joined in the 2004 accession wave (the data are not available for Cyprus). As is evident from Table 8.1, evaluation of membership shows a much stronger impact on vote choice in accession referenda than does Magalhães' (forthcoming) summary measure of preferences for policy integration. Thus, support for membership is naturally more than just a reflection of preferences for policy integration. In spite of its specificity, it is probably the most general evaluation of the EU that ordinary Europeans – who, after all, are citizens of the Union only on account of their nationality – are ever likely to make as political actors.

(Table 8.1 about here)

We now proceed to a review of trends over time and across countries in generalised EU-support. Figures 8.1 to 8.6 show the mean value of our indicator from 1973 to 2007 for member states grouped by their wave of accession. The first striking fact is that support only very exceptionally falls below 50 points, i.e. to the point where more people find membership a bad rather than a good thing. This only ever happened in Sweden and the UK, in both cases just for a few years following their entry in the union. It is hardly surprising, however, that support is more frequent than opposition: since accession is naturally tied to a democratic decision, the countries with opposition majorities are unlikely to join in the first place.

(Figure 8.1 about here)

(Figure 8.2 about here)

(Figure 8.3 about here)

(Figure 8.4 about here)

(Figure 8.5 about here)

(Figure 8.6 about here)

It is more remarkable that for most country-years, support varies within the even further restricted range between 60 and 80 on our 100-point scale. Higher values than this were only ever recorded in the founding member states; then, in Ireland from the end of the 1980s; and, for a somewhat shorter period that ended by 1994, in the three Southern European states that joined in the 1980s. On the other extreme, the only countries that ever recorded support below the 60 point mark are Denmark and the UK from the 1973, and Austria, Finland and Sweden from the 1995 accession wave. All in all, EU-membership tends to be valued by a clear – and often very large – majority of the public in the member states, though it has rarely got close to being generally accepted.

Since the early 1970s, support for membership gradually dropped in nearly all of the six initial members, but increased in the countries that joined in 1973 (see Figure 8.7). Elsewhere, only a few countries show either downward or upward movement over the whole period – Hungary and Portugal exemplify the first while Estonia, Greece, and Poland the second development – and trendless country-specific fluctuations rather than across-the-board trends prevail. In terms of EU-support among citizens, the six founding members became more heterogeneous over time, while the countries in the different accession waves remained internally as diverse as ever, even if a few leapfrogged others in the degree of enthusiasm for membership.

(Figure 8.7 about here)

All in all, a period of 'permissive consensus' only ever existed among mass publics in the six initial members – all later entrants started off with significantly less enthusiasm for union than the EU6 displayed at the time of the first enlargement in 1973. Nonetheless, supporters came persistently to outnumber doubters in all member states – even, within two years of its accession, in the reputedly eurosceptic UK. As Figure 8.7 also shows, the initial differences between countries tended to persist, yet the low and high points of support in the series for a country are often separated by 20 or more points, as in France, Germany, Greece, Ireland, Sweden and Italy. The figure also indicates that support for membership was less variable by accession wave in 2007 than in 1973. Indeed, the crosscountry standard deviation in support was about half as big in 2007 than at its historic peak, just before Greece's accession in 1981 (data not shown).

Figure 8.8 examines the over-time trend for the entire EC/EU and weights countries by their population size in calculating the all-union mean for each calendar year. It also shows the same population-weighted mean for all other indicators of generalised EU-support available in the Eurobarometers, which were all converted to a 0-100 scale for the purpose of this comparison (for the wording of these items see the Appendix). These other items solicit less EU-enthusiasm than the question on membership support, but appear to reveal much the same temporal pattern. Support declined in the second half of the seventies and the first half of the nineties, but increased almost continuously throughout the 1980s. The last decade witnessed relatively minor and annually pulsating changes in the all-EU level. Overall, membership support was about six percent lower in the EU as a whole in 2007 than in 1973. This decline occurred in spite of the relatively high levels of Euro-

support in 2007 in Spain, Poland and Romania, the country whose accession accounted for the bulk of the EU's population growth in the period.

(Figure 8.8 about here)

Comparing our findings with the long-term trends reported by Isernia et al. and Magalhães in this volume, we observe that support for membership exhibited probably larger temporal shift than the incidence of European identity or support for policy integration. Moreover, neither identification with Europe nor public support for the integration of policies with a high degree of 'inherent internationalization' show the significant decline over time that we see in the case of membership support. What this suggests to us is once again that membership support is more sensitive than European identity or support for policy integration to the changing meaning of union membership in the context of deeper and broader integration. The next section prepares the way for a multivariate analysis of the roots of EU-support by reviewing the propositions of the previous literature about the factors that may explain variation across countries, time and individuals.

2. Sources of public support for the EC/EU in the previous literature

The earliest studies of public opinion about European integration had little reason to probe the roots of cross-national and over-time variation as the core West European countries of concern at the time were all characterised by relatively high levels of support. Instead, these early studies focused on the role of individual-level factors (Inglehart 1970a, 1970b). However, subsequent enlargement waves and the Maastricht, Amsterdam and Nice treaties deepened integration, and the political controversies that they triggered apparently ended the era of permissive consensus between political elites and mass publics over the nature of the integration process (Hooghe and Marks 2008). On Handley's (1981) account, this decline in EU support had already been foreshadowed by the recession of the 1970s and by the difficulties with the integration process that were being experienced at the time. In any case, a lively industry of studies, started by Inglehart and Rabier (1978) and extended by Eichenberg and Dalton (1993), has provided statistical tests for a variety of contextual influences on both the level and the within-country determinants of EU-support. In addition, studies of individual-level correlates also suggest candidates for explaining cross-national and over-time differences in support, even though these rarely received attention in aggregate-level analyses (but see Duch and Taylor 1997; Janssen 1991; Netjes 2004).

The main shortcoming of previous research that this chapter aims to address is the lack of efforts at simultaneous testing of the diverse propositions in the literature. With the exception of a few studies on economic explanations (Çiftçi 2005; Eichenberg and Dalton 2007; Mikhaylov and Marsh 2009), previous analyses have failed to relate diverse theoretical propositions to data from all member states and for all time periods covered by currently available data. The diverse theories of the previous literature generally refer to one or more of three micro-logics allegedly used by citizens: the instrumental calculus of tangible benefits; expressive and/or instrumental judgements based on acquired taste (including socio-political identity); and cue-taking from trusted sources. However, there are ambiguities about how these logics are linked to particular sources of EU support

Advocates of the first micro-logic typically link support for market integration to the capacity of citizens to benefit from it, either personally or as members of a particular society or economic system. Economic theory is ambivalent about whether affluent or poorer countries could benefit more from EU integration, but the latter proposition receives more empirical support (Mikhaylov and Marsh 2009). From a functionalist perspective, however, it is clear that trade openness should be positively linked to support (Gabel and Palmer 1995), and several studies find impressive positive effects of within-EU trade on membership support (Anderson and Reichert 1996; Eichenberg and Dalton 1993; Gabel and Palmer 1995; Gabel and Whitten 1997; Mikhaylov and Marsh 2009; but cf. Çiftçi 2005; Eichenberg and Dalton 2007). The socio-economic benefits of integration are, of course, not equal within countries and are likely to flow mostly to those groups and individuals that give a country a comparative advantage in integrated markets. Favourable labour market position as signalled by a person's education, professional status and mode of employment is expected to increase EU-support, especially in more highly developed countries that base their competitiveness on human capital. Meanwhile manual workers may be more supportive in countries that have abundant cheap labour that can benefit from freedom of movement within the EU (Gabel 1998a, 1998b, 1998c; Gabel and Palmer 1995; Gabel and Whitten 1997).

Other sources of increased tangible benefits from integration explored in the literature include direct developmental assistance from the EU to one's country (Anderson and Reichert 1996; Bosch and Newton 1995; Carrubba 2001; Hooghe and Marks 2005; but cf. Eichenberg and Dalton 1993 and Duch and Taylor 1997 for negative findings); and the EU's supposed impact on macro-economic performance as signalled by low inflation and unemployment and high growth in the member states (Anderson and Kaltenthaler 1996; Anderson and Reichert 1996; Bednar, Ferejon, and Garret 1996; Eichenberg and Dalton 1993; Franklin and Wlezien 1997; Handley 1981; Inglehart and Rabier 1978; but cf. Duch and Taylor 1997; Gabel and Whitten 1997; Eichenberg and Dalton 2007).

The rationale for European integration has, of course, also been given in public discourse with reference to non-economic arguments, like the need to prevent wars in Europe, improve governance where this is less developed, and to consolidate democracy in Southern and Eastern Europe. In this context, Gabel (1998a) links membership support to the memory of World War 2 casualties. In a similar vein, Sanchez-Cuenca (2000) links EU support to poor national governance (for example, involving high levels of corruption), which citizens in affected member states might expect to overcome through greater EU integration. Indeed, many scholars have suggested that support for the EU in third wave democracies has been boosted by support for democracy. So far, the empirical literature does seem to support these ideas (see Çiftçi 2005, Gabel 1998a and Gabel and Whitten 1997 regarding WW2 memories; Kritzinger 2003 and Christin 2005 on dissatisfaction with the national political system; and Rohrschneider 2002 and Rohrschneider and Whitefield 2006b on democracy support). Moreover, similar determinants of support have been found in both Eastern and Western Europe (Anderson 1998b; Chichowski 2000; Tucker, Pacek, and Berinsky 2002; Tverdova and Anderson 2004, Rohrschneider and Whitefield 2004).

Further instrumentally rational explanations implicitly or explicitly adopt the so-called *thermostat* model of public opinion towards policy instruments (cf. Çiftçi 2005; Franklin and Wlezien 1997). This model suggests that the greater supply of European integration – like the deepening of the union through Maastricht, the monetary union and

subsequent treaties – should have reduced citizen demand for integration (Eichenberg and Dalton 2007; Netjes 2004). Other writers suggest that *uncertain expectations* about future EU policies may also have an effect. Assuming that most citizens value the benefits of high welfare spending and centralized wage bargaining and expect them to be undermined by European integration, Brinegar, Jolly and Kitschelt (2004) suggest that the presence of these factors will reduce EU-support. In countries with a restricted welfare state they expect support for integration to be concentrated at the lower end of the socioeconomic scale and on the political left. In contrast, in countries which have a comprehensive welfare state, support for integration should be stronger at the higher end of the socioeconomic scale and on the political right (for similar arguments see also Brinegar and Jolly 2005; Hix 2007; Hooghe and Marks 2005; Ray 2004).

Women and the elderly usually display below average support for EU-membership (but note Andersen and Reichert 1996 and Gabel 1998b for mixed or reversed findings regarding age). While the correlation with gender has usually been explained in terms of interest-based policy calculus (see Gabel and Whitten 1997; Gabel 1998b; Hix 2005; Nelsen and Guth 2000), the one with age often seems to invite explanations in terms of socialization, i.e. an acquired taste for more supranational governance among younger generations (Gabel and Whitten 1997; Inglehart 1970a, 1970b; Wessels 1995). Hix (2005), however, suggests that the age effect on EU-support follows a life-cycle rather than a generational pattern, which is probably more consistent with instrumental calculus. For instance, the greater opportunities offered by an integrated labour market may appeal to the young and the middle-aged, while the feared impact of international labour mobility and a creeping internationalisation of welfare systems may scare more risk-averse pensioners.

As we just saw, EU support has also been explained in terms of acquired taste. Thus the often-noted positive effects of a country's length of membership in the EC/EU on support is thought to emerge via socialization, identity building, and social learning regarding the benefits of integration (Anderson and Kaltenthaler 1996; Eichenberg and Dalton 1993; Inglehart and Rabier 1978; Mikhaylov and Marsh 2009). Cognitive mobilisation theory is another example of an acquired taste-type explanation in that it explains the typically greater EU-support among politically more attentive citizens either through differences in taste regarding supranational governance by degrees of parochialism, or by differences in socialization by degrees of exposure to the typically pro-EU elite discourse (Inglehart 1970a; 1970b; Gabel and Whitten 1997; Gabel 1998b). Acquired taste explanations are also advocated by the numerous studies that link EU support negatively to exclusive national identity, cultural homogeneity, and the perception of threat that European integration supposedly poses to *national identity* and culture (Carey 2002; Garry and Tilley 2009; Hooghe and Marks 2005; Lubbers 2008; McLaren 2002; van Kersbergen 2000; de Vries and van Kersbergen 2007). Unfortunately, data availability issues have restricted the testing of these identitarian explanations to one or just a few timepoints, in typically no more (and often less) than 15 member states. For the same reason, we will not discuss them here any further.

A third micro-logic links EU-support to *national political cleavages and cue taking* from national political elites or institutions. Anderson (1998a) suggests that citizens project their evaluation of the performance of their national political system and their trust in national institutions to the EU. Alternatively, Kritzinger (2003) argues that the 'true' causal relationship runs in the opposite direction, though the relationship remains hidden (and

perhaps never discoverable) by the endogeneity of EU support to satisfaction with national insitutions. In the discussion below, we retain Anderson's expectation, and only add the caveat that in countries where governance is relatively poor, this cue-taking effect may be counterbalanced by the utilitarian logic that generates a negative link between satisfaction with national institutions and EU-support (cf. Christin 2005).

Cueing logic has also been employed in relation to the idea that EU support should be higher in countries that hold the presidency of the EU Council in any given period (see Magalhães forthcoming). A similar logic is also deployed in analyses that suggest that citizens follow the lead of trusted parties, i.e., use their partisanship and ideological attachments in developing their positions towards European integration (Anderson 1998a; Franklin, Marsh and McLaren 1994; Gabel 1998b; Gabel and Scheve 2007; Lubbers 2008; Ray 2003a, 2003b; Rohrschneider 2002; Steenbergen, Edwards, and de Vries 2007; but cf. Duch and Taylor 1997). Party preference may of course also act as a proxy (a) for policy preferences that are directly related to EU support, or (b) for the perceived probability that the EU's complex system of veto players will either increase or reduce the chances that one's preferences will prevail in the policy process (cf. Hix 2007). Supporters of parties that, in left-right terms, are far from the Europe-wide median (5 on a 0-10 scale) may be less supportive of the EU. This might be because they take cues from their parties; or because they support policies that are at odds with the integration process; or because they realize that the more complex web of veto players at the European as opposed to the national level gives them a lesser chance of prevailing in the former arena. A similar ambiguity is also present in the proposition that Catholics are more supportive of integration than Protestants (Hix 2005: 163; Nelsen, Guth, and Fraser 2001). We are nonetheless inclined to interpret above-average support for the EU among Catholics less as a sign of an acquired taste or peculiar policy preferences than of cue-taking related to the Catholic Church's traditional advocacy and practice of supra-national governance, and do likewise with respect to left-right differences in EU-support. We would draw the opposite inference with regard to the putative role of postmaterialism though (Inglehart and Rabier 1978), except that multiple studies have demonstrated in the meantime that it does not, in fact, have any noteworthy systematic effect on EU-support (see Anderson and Reichert 1996; Anderson 1998a; Gabel and Whitten 1997; Janssen 1991).

3. Assumptions, testable propositions and variables

Many of the general propositions outlined above fail to follow an integrated theoretical logic. They also give the impression that they have been largely inductively derived on the basis of largely *ad hoc* (and occasionally *sui generis*) theorising. We suspect that these limitations arise quite naturally from the subject matter and that they should be recognised and accepted in its study rather than purged from it. The EU is a complex, dynamically evolving and self-reflexive organisation that generates diverse, contradictory, and ever-changing expectations, which are unlikely to follow a unified logic or a given set of fixed preferences. For instance, Brinegar, Jolly, and Kitschelt (2004) argue that the most likely consequence of integration for welfare states in the eyes of the EU15 citizen population should be a slow convergence towards what Esping-Andersen (1990) called the 'Christian-democratic' model of continental Western Europe. They then proceed to suggest that this should generate popular expectations of higher adjustment costs to such a change,

and consequently lower EU-support, in the populations of 'liberal' and 'social-democratic' welfare states; i.e. the UK on the one hand and the Nordic member states on the other. While their statistical analysis of fourteen states at one point in time appear to support this theory, one must wonder if integration is really expected by citizens to lead to any convergence of national welfare states (given that this domain is outside of community jurisdiction) and in what direction. This example hints at the possibility that, depending on the peculiar communicative practices that characterise different political contexts, many factors may be related to EU-support, and there cannot be a priori guarantees of temporal or cross-national uniformity in what factors become relevant. Our strategy in this and similar instances is accordingly to try to improve on previous analyses by covering as many data points and controls for alternative theories as possible. This allows for the possibility that any observed effects of, say, welfare spending are not spurious but indeed caused by (some) citizens' perception that European integration may have some impact on welfare provision after all.

Utilitarian, acquired-taste and cue-taking explanations of EU-support all make strong assumptions about exactly how citizens arrive at their evaluations of EUmembership. It might seem prudent to replace some strong assumptions about citizens' knowledge and understanding of EU integration with the seemingly weaker assumption that their collective responses, assisted by the good work of competing opinion leaders and information shortcuts, can emulate informed behaviour even when (most) individual citizens remain information misers. However, this seemingly weaker assumption of collective rationality also leaves behind a huge burden of proof regarding the precise nature of the issue frames, information bites and simplistic cues that citizens receive about the EU from competing political elites, interest groups, mass media, economic analysts, government agencies, and so forth. We can only leave it to further research to establish whether the preferences and/or communicative processes presumed by one or another proposition examined here have actually been at place in one country-year or another. Our revisiting of these hypotheses merely focuses, therefore, on the statistical associations predicted by them, and benevolently ignores the possible problems associated with the underlying assumptions.

Developing testable propositions

We group the tested propositions around the three broad theoretical approaches outlined above – instrumental rationality, cognitive mobilisation/acquired taste and heuristic cue-taking. We add a fourth 'residual' *ad hoc* category for putative causal factors that do not obviously fit into any of these three categories. In presenting the propositions, we also distinguish among propositions that require testing at the micro or individual level; those that require testing at the macro or aggregate, country level; and those that imply a cross-level (macro*micro) interaction effect that combines both macro and micro levels. Most of our independent variables closely follow the extant literature and we only add new ones where the need is clearly implied by previous studies. The chief example here is the aggregate quality of governance, which, as we argue below, could act as either a 'transfer' or a 'substitution' cue. We further add a variable that stands for the annual number of regulations and directives adopted by the EC/EU (see Franklin and Wlezien 1997; Hix 2005). This variable refers to the 'thermostat' model, which – admittedly adapted here to a different dependent variable than in its original exposition by Franklin and Wlezien –

suggests that the more integrative activities the EC/EU provides at any given point in time, the less support there will be for integration, while drops in the supply of integration would prompt more popular demand for it, i.e. higher membership support. Following Magalhães (forthcoming), we also include in our aggregate-level analyses a dummy variable identifying the two countries that held the EU presidency in either half of each year. Previous works with individual-level analyses suggested that cognitive mobilisation, Catholicism, left-right extremism and satisfaction with national democracy are significant predictors of EU-support at the individual-level. If the theories underlying these propositions were correct, one would also expect to observe these effects at the aggregate level. Therefore our aggregate-level analyses include the sample mean for each country-year of the four respective individual-level variables that we could create from the Eurobarometer series. Last but not least, we aim at capturing the diminishing impact of the length of EU membership on support by a variable showing for each year the natural logarithm of the years that a country was member of the EC/EU until the given year.

Table 8.2 summarises the various propositions that we seek to test and identifies the specific indicators that we deploy to operationalise each of them. The first segment of the table relates to the instrumental rationality approach. As noted above, the core intuition underpinning this approach is that people with certain characteristics and/or those living in countries with certain characteristics will be more likely to benefit disproportionately from (or believe themselves more likely to benefit from) their country's membership of the EU. The first set of variables in the instrumental rationality segment of Table 8.2 relates to the role of the *individual's labour market position*, as reflected in education, gender, age and employment status. The basic claim of the individual-level hypotheses in this segment is that people who are relatively well placed in the labour market are more likely to be able to take advantage of the EU's common market for goods, capital and labour than those who are less well placed; the former are accordingly more likely to support the EU than the latter. The aggregate-level 'economic' hypotheses in this segment suggest that EU support is also likely to be higher among people living in countries that are more prosperous (measured by GDP per head), that are more integrated into the EU's trading regime (measured by intra EU trade) or that receive net financial benefits from the EU (measured as net transfers from EU budget as a share of GDP). There are also macro-level hypotheses relating to the value of the EU in pre-empting intra-European war (support for the EU will be higher where World War II casualties were highest); to the extent of domestic social welfare provision (support is expected to be highest where national social welfare expenditure is lowest); and to the 'thermostatic' role of EU legislation (support is expected to decline, ceteris paribus, as the supply of EU legislation increases). Finally, the instrumental rationality segment of Table 8.2 contains two sets of cross-level interactions suggested by the previous literature – between the micro employment status variables and macro measures of prosperity and social welfare expenditure. In most of these cases, the theoretical expectation is that the effects of employment status will be greater where GDP per capita and social expenditure are higher; the only exception is that the negative effects of manual worker status may be attentuated where the economy is relatively weak (and, by implication, where wage rates are relatively low).

The second segment of Table 8.2 refers to the potential impact of *acquired taste/cognitive mobilisation*. The key idea here is that as individuals become more educated and informed about politics they acquire new, more cosmopolitan tastes and hence are more likely to register support for a supranational body like the EU. Two individual-level measures of such mobilisation are employed – education and engagement in political discussion, with the expectation that both should exert positive effects on EU support. Note, of course, that education also features in the labour market position segment – a reflection of the fact that his variable is 'claimed' by advocates of both instrumental rationality and cognitive mobilisation explanations. Clearly, any observed empirical tendency for education to exert a positive effect on EU support must accordingly be interpreted as support for both of these accounts. Political discussion is also hypothesised to have an effect at the aggregate macro level, together with length of time that the individual's country has been an EU member state. This latter variable is included on the grounds that higher levels of cosmopolitanism will typically be associated with more extended exposure to EU policies, procedures and practices.

The third segment of the table summarises the putative *cue-taking* mechanisms that we explore. The core theoretical idea here is that citizens, confronted with a complex multi-level system of governance like the EU, are likely to make use of cognitive shortcuts or heuristics in order to make judgements about it. Three such heuristics are operationalised here at the micro level – Catholic religion, left right ideology, and political performance evaluations. Following the logic outlined earlier, Catholics are expected to be more supportive of the EU on the grounds that the Church has traditionally advocated the merits and practice of supra-national governance. The possible effects of ideological position are more ambiguous, given that the EU is supported by parties of both the centre left and the centre right. Nonetheless, the term that we include to decribe those who take extreme positions on either left or right is expected to have a negative effect on EU support, on the grounds that both extreme left and extreme right parties have generally tended to be hostile to the EU project. The most ambiguous predictions for the direction of effects on EU support, however, derive from our two measures of domestic political performance – satisfaction with democracy and quality of governance. The existing literature, as noted previously, makes opposing claims about the likely consequences of strong domestic political performance, with some arguing that it spills over into greater support for the EU and others that it produces more cautious and more negative EU evaluations. In our view, this apparent contradiction can be resolved by recognising that there are in fact two distinct sorts of cueing mechanisms that EU citizens might use in arriving at their EU evaluations. On the one hand, people who evaluate their own national institutions positively (negatively) may uncritically extend these evaluations to the supranational sphere and, as a result, also make positive (negative) evaluations of EU institutions. This transfer effect clearly implies a positive relationship between attitudes towards national and EU institutions. On the other hand, it is equally possible that people are likely to have more (less) confidence in EU institutions and processes precisely when they evaluate their own national institutional institutions negatively (positively) – which implies a negative substitution relationship between attitudes towards national and EU institutions. We subject the rival claims of transfer and substitution cueing to empirical test at both the micro and macro levels. At the micro level we assess the extent to which individuals' sense of democracy satisfaction acts as a transfer or substitution cue in determining their EU

evaluations. At the macro level we consider the equivalent effects of governance quality and aggregate-level democracy satisfaction.

The last segment of Table 8.2 identifies three additional *ad hoc* macro sources of EU support that have been suggested in previous studies, but which do not correspond to any particular theoretical perspective. The first refers to the putative effects of 'third wave' democratisation, where the central claim is that EU support is higher in situations where (most) people see EU membership as important for consolidating the democratic process in their respective countries. The second relates to the idea that EU membership, given the Union's myriad rules for ensuring competition in markets of all sorts, might pose a threat to centralised (national) wage bargaining). The key claim here is that countries with higher levels of wage bargaining centralisation should exhibit lower levels of EU support. Finally, as noted above, we include a term that measures whether or not a country has the EU Presidency at a particular time-point. The assumption here is that having 'our' leader as Council President will tend to promote a more positive view of the EU among 'our' citizens, however temporary any such effect might turn out to be.

The set of hypotheses shown in Table 8.2 clearly does not represent all of the possible hypotheses that could be tested against small spatial and/or temporal subsets of the available data on EU support. Nonetheless, we consider that the set is sufficiently comprehensive to mean that our analysis represents the most exhaustive thus far conducted.

This said, it is worth highlighting the hypotheses that we deliberately exclude from the analysis. First, we ignore the influence of a number of individual-level variables because recent Eurobarometers did not include the relevant measures and therefore entire countries would drop out of any analysis that included these factors. This applies in particular to measures of European and national identity, voting preferences, subjective economic evaluations, income, religiosity and postmaterialism. Second, while we aim to include all theoretically relevant macro-variables that have been found to have effects on EU support in previous analyses, we take exception to the use of the large range of dummy and related variables, which identify particular periods or particular country-years as 'special'. The chief examples include the timing of individual country's accession (as, e.g., in Anderson and Kaltenthaler 1996), and particular events in the history of the community, like the 1979 European Parliament Election, the adoption of the Single European Act, various referenda and treaty reforms, German unification, a country's entry into the monetary union, and the events of 9/11 (cf. Bednar, Ferejon, and Garret 1996; Ciftçi 1995; Eichenberg and Dalton 1993, 2003, 2007; Netjes 2004). Such factors may no doubt have some effects on their own. However, the theoretical expectations about the direction and possible mechanisms of these effects are not so clear that they would identify where else we should expect to see similar effects. As long as this is the case, we fear that the inclusion of some opportunistically selected dummies to pick up the unique effects of some periods or country-years just because something hits the eyes in the available time-series is more likely to distort than advance our understanding of the underlying causal processes.

4. Empirical analysis

Our statistical analysis spans the period between 1975 and 2007 and includes all states that were full members of the EC/EU in each year. We conduct separate individual and aggregate-level analyses because some technical characteristics make our dataset unusually large and complicated.ⁱⁱⁱ Indeed, we report our empirical findings under four

main headings. We begin with *individual-level effects* in which we conduct 449 separate regression analyses – one for each of the 449 country-years in our dataset. These analyses, using multivariate OLS regression, estimate the net impact of all available individual-level variables – age, age-squared, education, frequency of political discussion, satisfaction with democracy, left-right position, left-right extremism and dichotomous variables identifying men, managers, professionals, non-agricultural manual workers, farmers/agricultural workers, the non-farming self-employed, the unemployed, and Catholics – on EU-support for each country-year separately. We then report the summary pattern of these 449 sets of individual-level results. This summary pattern reveals considerable *variability* in the patterns of relationship across the various country-years, though they also indicate a small number of *consistent and relatively robust effects* that seem to operate across a variety of temporal and spatial contexts.

The second phase of the empirical analysis involves supplementing our analysis of individual-level effects with a limited number of cross-level effects. This phase involves shifting our focus from 449 separate analyses of individuals sampled in different countryyears to an analysis of the pattern of *coefficients* – estimates of individual-level effects on EU support – observed in those separate 449 country-years. In these analyses, we wish to know how far macro-level country characteristics can explain variations in coefficient signs and magnitudes across the 449 samples. This strategy of modelling coefficients, however, is complicated by the fact that, in order properly to analyse all of the available data, we need to use four distinct pooled cross-sectional time-series datasets. The four datasets in this context are: an unbalanced set covering the EU25 over the period 1975-2007; a balanced set for the EU9, 1975-2007; a balanced set for the EU12, 1986-2007; and a balanced set for the EU15, 1995-2007. In deference to the range of methods available for estimating both coefficients and standard errors with country-clustered time-series data, we estimate identical models of cross-level effects across all four datasets, using six different estimation methods. The summary results from these 6*4=24 sets of estimations are then used to evaluate the putative cross-level effects.

The third phase of the investigation switches to *cross-sectional*, *aggregate-level* analysis of macro, time-invariant country characteristics across the EU27. In this phase, we adopt a novel statistical approach in order to identify the optimal set of time-invariant country characteristics that explain national variations in EU support. We analyses five different cross-sections, defined by the timing of the five main waves of EU accession. The final phase of our analysis involves *testing macro time-series effects* using aggregate-level cross-sectional time series data. We again deploy four different datasets, though here they are aggregate- rather than individual-level: one each for the EU25 (1975-2007 unbalanced), EU9 (1975-2007 balanced), EU12 (1986-2007) and EU15 (1996-2007).

Phase 1: Individual-level effects

Table 8.3 reports the results of an illustrative estimation of our individual-level model of EU support for one of the 449 country-years. As the last two columns show, it makes no relevant different in the results if we estimated the model with linear regression or ordered logit. In this particular instance only a subset of the estimated effects is statistically significant, though most are signed as expected. The crucial question, however, is the extent to which significant effects are observed across all 449 country-years for which data are available.

Table 8.4 provides summary statistics about these individual-level effects across the 449 samples. The first column of Table 8.4 shows the direction and size of each variable's net effect for the average country-year. The figures are comparable in the sense that all these individual-level variables were scaled from 0 to 1 in the analysis – but not very usefully so since with the dichotomous variables (like male, manual worker or Catholic) every respondent was coded either 0 or 1, while on continuous variables (like age, age squared, democracy satisfaction or left right ideology) few if any record either of these extreme values. Therefore it is more informative to read the last two columns first. These report the percentage of country-years in which the variable in question records a statistically significant (net) effect. If a variable never had a real effect, then by chance alone we would expect a figure of about 2.5 (percent) to appear in both columns. In reality, self-employed is the only variable that has about as many positive as negative significant effects, but since the percentage figures – 4.9 and 4.7, respectively – clearly exceed 2.5, the correct interpretation appears to be that self-employment rarely has an effect on EUsupport, but when it does, the effect is as often positive as negative. All other effects, however, have a predominant direction, even if – as in the case of professionals, farmer, and especially left right ideology – we see clear evidence that they can go either way depending on context. In fact, for most variables we see such a small percentage -1.1percent or less – of country-years with significant effects going in the less common direction that these exceptions may well be provided merely by the statistically inevitable rogue samples. Hence we can conclude that men, the better educated, managers, those relatively satisfied with democracy in their own country and those who discuss politics frequently are probably always more supportive of EU-membership than the average citizen. In contrast, manual workers, the unemployed, and ideological radicals (i.e. those who place themselves far from the centre of the left-right scale) are always less supportive. It is just that these differences do not always reach statistical significance in polls due to their limited sample size. Only a little less universal is the above-average EU-support among Catholics and the young.vi

(Table 8.4 about here)

What is novel about all these findings is not the often reported main direction, but rather the relative invariability of these effects across periods and countries. For most variables, the standard deviation across the country-years is less than one and a half times the average standard error (cf. columns two and three of Table 8.4). This means that the cross-contextual variance of these effects is barely more than the random noise introduced in the estimates by the inevitable sampling errors. Across Table 8.4 as a whole, only four variables produce an average estimated effect that is both (a) more than twice its average estimated standard error and (b) balanced predominantly toward either the positive or the negative. These are education, political discussion, democracy satisfaction and left-right ideological position – all of which have consistently positive effects on EU support, but apparently bigger in some country-years than others. There are five further variables which

meet only criterion (b), that is, they display a clear 'predominant balance' of either significant negative or significant positive effects and little variance in the size of the effect. Of these, unemployment, manual worker status, age, and ideological extremism all produce negative effects; being male and being Catholic produce a positive effect. The relatively consistent effects of manual work, unemployment, and education support one of the key hypotheses of the instrumental rationality approach – that labour market position affects EU support; the consistent effects of education and political discussion support the claims of cognitive mobilisation theory; those of left-right ideology and democracy satisfaction support the cueing approach. The fact that the democracy satisfaction term is consistently positive rather than negative in this latter context implies that transfer, rather than substitution, cueing appears to be the dominant mechanism.

Phase 2: Cross-level effects

But if the effects of individual-level variables on EU support are relatively modest, is there any evidence that structural conditions in different countries might be responsible for the varying effects that we observe? It will be recalled from Table 8.2 that previous research has suggested the possible existence of a series of 'cross-level interactions', particularly involving our various measures of labour market position. Previous research suggested, in essence, that the effects of certain individual-level variables on EU support might depend on variations in social welfare expenditure, the level of economic development and the quality of governance. We investigated these possibilities by running a number of time-series analyses for each of the nine country-year specific individual-level effects as the dependent variables and the relevant macro-level characteristics as the independent variables. Two models are bivariate: the individual-level effect of satisfaction with democracy on EU-support is expected to depend on relative quality of governance, while the impact of left-right ideology on support is expected to vary by relative social welfare spending. The remaining seven models regressed measures of education and employment status (measured with separate variables for managers, professionals, manual workers, farmers, self-employed, and unemployed) on relative economic development and relative social spending. We estimated all seven models for each of four panel data sets, and with each of six different specifications of model dynamics, unit heterogeneity, and other estimation details. vii For reasons of space we do not present all 168 models and the tests of stationarity, autocorrelation, and unit heterogeneity that guided our choice between the six model specifications. VIII Instead, Table 8.5 presents only the relevant coefficients (omitting constants) for whatever seemed to be the most appropriate model specification for a given series in the complete dataset, i.e. the unbalanced panel of the EU27 from 1975 to 2007. We only briefly comment on results with other specifications or in other panels in the text.ix

The first row of the table speaks to the probably most characteristic proposition of the *substitution* logic argument, namely that good governance further increases the generally positive impact of satisfaction with democracy on EU support because in poorly governed countries the less satisfied will be most supportive of EU integration on account of its expected benefits on political performance. Separate Woolridge and Hausman tests of the relevant regression of the level-1 effects of satisfaction with domestic democracy on governance quality shows significant, non-random unit effects and a lag-1 autocorrelation in the data. Therefore, our preferred model here is a fixed-effects regression with a first-

order autoregressive term. When we re-estimate the regression with this specification, the relative quality of governance appears to reduce rather than increase the level-1 effect, both in the complete dataset (see the first row of Table 8.5) and in the balanced panels for the EU9, EU12 and EU15, although not significantly so. While the cross-level effect turns positive with a few other model specifications, it is always negative when – with two of the six model specifications, and only in the panel for the EU9 in 1975-2007 – it reaches statistical significance. Hence the relevant hypothesis – expecting that the positive impact of satisfaction with national institutions on EU support would turn into its opposite where a low quality of governance may trigger a substitution logic in popular evaluations of the EU – is not supported. Instead, the transfer logic seems to be at work irrespectively of the quality of governance in the member states.

Second, the expectation that the impact of labour market position (mostly positive for higher education, managers, self-employed and professional positions, and negative for the other occupation dummies) increases with level of economic development is supported in the case of unemployment and the self-employed in the complete data set with the preferred random effect GLS model, and the signs of these effects remain largely consistent across panels and alternative model specifications. However, when we look at the effect of development on the level-1 impact of other occupational dummies on EU-support, the effects, though they mostly run in the expected direction, rarely become significant, and some significant effects have the opposite sign than expected. Most notably, economic development significantly reduces the positive effect of being a manager or a professional worker on EU-support in the 1975-2007 panel for the EU9, irrespectively of model specification. Overall, then, the findings do not support the hypothesis that the domestic class basis of EU-support depends on whether a country is a potential labour- or capital-exporter within the EU.

The hypothesis that the impact of labour market position on EU support depends on the level of social welfare spending receives a bit more support from the data. Higher social spending relative to the EU average makes the impact of manual work on support for the EU even more negative, and that of education even more positive than usual. These effects are generally consistent and significant across model specifications and panels, and greater social spending also appears to reduce EU-support among non-managerial or professional workers significantly and quite consistently across panels and model specification, which may or may not be considered consistent with the theory that seems underspecified in this respect. The effects of social welfare spending on the impact of unemployment, managerial, farming and self-employed status on EU support are less consistent and relatively rarely significant, but at least do not contradict the theory in any panel or model specification.

Finally, there appears to be no support for the proposition that the domestic political basis of EU evaluations shifts from the left to the right as social spending increases relative to the EU average. The relevant coefficients run in different directions in different panels and model specifications, and none comes close to reaching statistical significance. Expectations about a possible convergence of social spending rates within the EU are clearly not what makes left-right differences in support for integration vary across country-years.

(Table 8.5 about here)

Overall, then, with the partial exception of the impact of social welfare spending on the relationship between EU support and labour market position, the hypotheses of the political economy literature do not seem to take us far in understanding cross-contextual variation in which population segments show more and less support for the EU. Lack of sufficient time-series data on, say, party positions on EU integration, extreme nationalist mobilisation, and immigration figures prevent us from examining if identitarian or cuetaking explanations might offer a better leverage on the same question. Yet some conclusions emerge quite clearly from our analysis of individual-level effects. At this level, support for the EU is a combination of rational calculation (based largely on labour market position), transfer cueing (satisfaction with domestic political conditions and left-right ideological position) and cognitive mobilisation (education and engagement in political discussion). The only macro-level characteristic that appears to confound these generally consistent individual-level relationships is social welfare expenditure, which appears to intensify the effects on EU support of a limited set of labour market positions. Nonetheless, what is most striking about the results in Tables 8.4 and 8.5 is how similar the basis of EU support is across countries and over time. Virtually independently of the conditions of a country at a given point in time, it is the more politically engaged, better educated, ideologically more centrist, and – politically speaking – more satisfied citizens who are more likely to support the EU than the rest of the population, and this situation has remained unaltered by both the passing of time and subsequent waves of enlargement.

Phases 3 and 4: Aggregate-level analysis

Our analysis so far has focused on the individual-level sources of EU support and how such individual-level factors might be mediated by country-level characteristics. Yet regardless of the individual-level drivers of EU support, it is clearly the case that aggregate support levels differ both across countries and, within individual countries, over time. Our analysis turns now to analyse these macro-level variations in EU support and to assess how far our three main theoretical approaches can contribute to our understanding. The sources of differences in levels of support across the cross-national time-series are analysed in two stages. First, we examine the impact of enduring country-characteristics that change little or not at all over time, and then explore the roots of temporal change in support for EU membership. The separation of these two stages was necessary because the time-series data revealed a non-stationary process (a random walk with a drift) in how EU support evolved over time in most countries. Therefore we prefer to first-difference the dependent variable in the subsequent time-series analysis. That is to say, the dependent variable in the second stage becomes the *change* of support level in 449 country-years compared to the previous year's level in the same country. This means that all enduring cross-country differences in levels of support drop out of the time-series analysis due to the technical necessity of making the data stationary for time-series analysis. However, these enduring cross-country differences account for over two-thirds of the total aggregate-level variance in support across country-years. xi Rather than ignore these two-thirds of the variance or attribute it to the work of theoretically meaningless country dummies, we conduct a separate analysis of what may drive these enduring cross-national differences.

Phase 3: Time-invariant sources of aggregate variations in EU Support

This part of the analysis focuses on five different cross-sections comprising the over-time averages of all macro-variables for a given set of countries and period. The first covers the EU9 over the 1975-1985 period, the second the EU12 in 1986-1994, the third the EU15 in 1995-2003, the fourth the EU25 in 2004-2006, and the fifth the EU27 in a single year, 2007. One candidate independent variable measuring supply European legislation drops out of the analysis of static cross-sections because it does not vary across countries. Altogether then we have 17 independent variables to account for variation in over-time averages of EU-support across 27, 25, 15, 12 and 9 cases in the various crosssections, respectively. Since it would be either meaningless or even impossible to run statistical analyses with such an unfavourable ratio of cases to variables, we devised a twostep procedure to develop a similar and theoretically plausible model for all five crosssections, which assumes that the causal determinants of EU-support remained relatively stable over time but permits the exact weight of individual factors to change over time as the population of member states becomes larger and larger. Our model selection procedure is admittedly ad hoc but it considers a vast amount of empirical evidence in a disciplined and systematic way where the only alternative would be to improve theories – which we cannot undertake here – or to choose arbitrarily between them.

Instead, then, in the first step we regressed EU-support on each of the 131,072 logically possible combinations of the 17 independent variables in both the EU27 and EU25 cross-sections with the help of Clyde, Ghosh, and Littman's (2011) software for Bayesian model averaging. The relevant results are shown in the two leftmost columns of Table 8.6. The figures reported indicate the combined probability, in each of the EU25 and EU27 cross-sections, of all the 65,536 models that include the given variable. Probability is estimated from statistical criteria of model fit and parsimony. xii The combined probability of the other 65,536 models (which exclude the given the variable) is, naturally, one minus the number shown in the table. So when one value is close to 0.5, then so is its counterpart, and there is little empirical ground to choose, either way, between models that include and models that exclude the variable. Crucially, we find just six variables – referring to the proportion of Catholics, annual inflation, the importance of within-EU trade for the national economy, social spending, centralization of wage-bargaining, and the length of EU-membership – for which our key statistics in the first two columns of the table is higher than .51 for either of the two cross-sections. For the other variables there seems to be little chance that their inclusion in the models for the EU27 and EU25 would improve model fit and therefore we drop them from the subsequent analysis. xiii

(Table 8.6 about here)

The second step of this analysis repeats the first, except that now we focus only on the 64 possible combinations of the six variables selected in the first step, and run all these models for all five cross-sections, as shown in the 'Second Analysis' in Table 8.6. We find that there are three variables that have a more than fifty-fifty chance to improve model fit in a majority of the five cross-sections: length of EU-membership (which we expect to impact either acquired taste for EU-membership or a nation's ability to shape the union to its own liking, or both); social spending (which, assuming that more people prefer than

oppose high levels of spending and that most expect integration to level out spending levels across countries, should create more liking for the integration of labour and capital markets in low- than in high-spending countries); and within-EU trade (which we expect to create a stronger preference for integration in countries that trade more with member states). Of the other variables, only centralized wage bargaining passes the same threshold in at least one cross-section. However, the average impact of this variable is in the opposite direction than expected in the extant literature (data not shown), which we are inclined to count as a further reason to drop this variable from any further analysis. Therefore we propose a model of enduring cross-national differences in EU-support that includes only three variables. Table 8.7 presents simple OLS-regression results of this model for each of the five cross-sections as well as a pooled data set comprising the five cross-sectional samples together.

(Table 8.7 about here)

The F-test results, the explained variance, and the steady sign of each model variables' effect suggest that the model fits the data from all cross-sections reasonably well. Except for the unusual result for the variable measuring the length of EU membership and the intercept in the earliest cross-section, the estimated effects all vary within sampling error across the cross-sections. If we are to believe the pooled data set, every percentage increase in within-EU trade increases EU-support by 0.3 percent and every percentage increase in social spending reduces it by one percent. A one logarithm increase in length of membership, in turn, increases support by 6 percent – for comparison, the logarithm value of Hungary's four years of membership in 2007 is 1.38, so Austria's 13 years is 2.56, that of Greece's 28 years is 3.33, Italy's 52 years is 3.95, while. Thus length of membership alone might produce a more than seven percent gap in EU-support between Austria and Hungary but a less than four percent difference between Greece and Italy. By and large, the model explains probably just over a third of the enduring cross-national differences with a parsimonious, theoretically plausible model, which yields believable coefficient estimates and rather consistent results over time. Figure 8.9 plots the observed over-time averages of EU-support against the predicted values based on these three-variable models and demonstrates that the model accounts for patterns in different groups of countries fairly evenly.

(Figure 8.9 about here)

It would certainly be wrong to suggest that our data analysis rejects hypotheses about the impact of other variables than the three included in our final model, but we feel reasonably confident that from all 17 variables that we could consider here, these are the most likely to have had a consistent effect on cross-national differences throughout all five periods, and that these three should certainly not be excluded from any comprehensive explanation of EU support. The substantive implications of the model are clear. Long-term national variations in EU support are attributable primarily to three sets of factors. First, EU support tends to be lower in countries where social welfare spending is already high – presumably because rational citizens in those countries tend to be disproportionately concerned about the risks to future social welfare provision that EU membership might bring. Second, EU support tends to be higher in those countries whose trade is focused

mainly on other EU member-states. This may again reflect rational calculations. Finally, length of membership in the union also stimulates EU support.

Phase 4: Time-series sources of aggregate variations in EU Support

The final stage of our analysis concerns the sources of within-country variations in EU support over time. This issue is explored with time-series analyses summarized in Tables 8.8 and 8.9. As noted above, stationarity problems forced us to use annual change of EU-support as the dependent variable in this analysis for all available panels (the EU9 1975-2007, EU12 1986-2007, EU15 1995-2007 and the EU25 1975-2007 unbalanced panel). Therefore long-term cross-national differences disappear from these data, except as far as trends in the mean and changes in variance are concerned. Since we are concerned with explaining change, the original independent variables were also first-differenced in this analysis, e.g. the relative quality of governance is replaced with the change in the relative quality of governance compared to a year earlier. xiv

In the absence of significant unit heterogeneity, variables like WW2 casualties (Gabel's indicator for fear of a European war), whether the country is a third-wave democracy, and the barely changing percentage of Catholics in the population stand no chance of revealing their true impact (if there is any) in this analysis. Therefore they are dropped from the list of independent variables here. Affluence, measured as GDP per head, is also dropped since its differenced value is equivalent to economic growth – a change variable that is already present in our model. However, the variables that vary little or nothing across countries but which do vary over time (such as the legislative activity of the EU or which countries provide the EU presidency) now get their chance to reveal the dynamic impact that they may have and are thus included in the models.

Time-series analysis results tend to be sensitive to seemingly technical details of model specification. It is therefore advisable to double-check the consistency of results obtained from any one model specification with a variety of plausible specifications (Wilson and Butler 2007). Evidence of spatial and temporal correlation, together with the dimensions of our dataset, delimited our choice set of plausible statistical models. Woolridge tests (Woolridge 2002) in all four balanced panels, with three different model specifications for each panel, rejected the hypotheses of no first-order autocorrelation in the residuals in ten out of the twelve resultant tests. The possibility of no cross-sectional correlation was, in turn, consistently rejected by a similar series of Pesaran tests (Pesaran 2004). Since the number of time-points is relatively small in most national series, we suspect that maximum likelihood models would not be a prudent choice and OLS models are most probably preferable to GLS estimation.

(Table 8.8 about here)

The model that we consider most appropriate is presented in Table 8.8. This specification uses OLS estimators and corrects for spatial autocorrelation and within-cluster correlation of residuals with the use of panel-corrected standard errors. The same model was re-estimated with eleven alternative estimation techniques, with the results largely concurring (see below). The model always included the predictors grouped under the four headings that we have employed before: instrumental rationality, cueing rationality, cognitive mobilisation, and ad hoc variables. The dependent variable in each of

the four panels is the year-on-year change in EU support. Looking at the pattern of significant coefficients across all four panels, it is clear that only two predictors consistently achieve statistical significance across all sets of estimations: one that reflects instrumental rationality (change in GDP) and one that reflects cueing rationality (change in average democracy satisfaction). Two other predictors yield significant effects which, though they do not occur in all models, are spread across at least three panels: change in unemployment (another instrumental rationality variable) and change in average political discussion (which reflects a cognitive mobilisation effect). All other predictors fail to achieve significance across more than two panels, with some (such as change in EU legislation and changes in ideological extremism) failing to achieve significance in any of them. These observations apart, the general conclusion suggested by the table resonates with our earlier observation that different findings have been obtained in previous studies in part because those studies have analysed data from different groups of countries in different time periods. If we consider all of the different groups and periods simultaneously, as we do in Table 8.8, the only consistent pattern that aggregate (over time) changes in EU support follow a transfer rather than substitution logic – i.e., support increases with rising rather than falling national GDP and satisfaction with democracy –, and only very generic aspects of regime performance – i.e. growth, satisfaction with democracy – matter reliably, while more specific things like inflation or net EU transfers do not have similarly clear-cut effects.

It appears that the unbalanced EU25 panel represents our best chance to summarise the macro-level sources of EU support. This panel, though it contains varying numbers of cases for different groups of countries, is obviously the most comprehensive and inclusive of the panels we analyse. It is also clear from Table 8.8 that the pattern of significant effects in that panel is not wholly out of line with the results observed in the other panels. Viewed in this light, we consider that the EU25 panel offers the single best representation of the likely macro-level sources of EU support.

(Table 8.9 about here)

Table 8.9 reports the pattern of coefficient significance across the E25 panel using our 12 alternative estimation methods. xvi The first column of the table replicates the first column of Table 8.8 in order to indicate the signs and magnitudes of the estimated coefficients, which vary hardly at all across the different estimation methods. What changes with the use of the different methods are the coefficients' estimated standard errors and their resultant significance levels. Table 8.9 shows that only two predictor variables are significant in all 12 estimations – change in GDP (which supports instrumental rationality theory) and change in democracy satisfaction (which supports the idea of transfer cueing). Three further variables achieve significance in more than half the estimated models – two that lend further support to instrumental rationality theory (change in EU trade and change in unemployment) and one that supports cognitive mobilisation theory (change in political discussion). The fact that this set of five predictors are both signed as theoretically expected and consistently significant across different estimation methods using the EU25 macro-level panel complements the broad conclusion that we drew earlier in relation to the individual-level sources of EU support. Taken together, they indicate the importance of taking an eclectic theoretical approach to the understanding of

EU support. The results of the EU25 panel, in short, indicate that the origins of EU support lie in part in instrumental rationality; in part in the sort of cognitive shortcuts associated with cueing rationality; and in part in the changing taste patterns associated with cognitive mobilisation. For all the remaining predictor variables in Table 8.9, we conclude that the case for their having an effect on changes in EU support is at best 'not proven'. Interestingly, none of the *ad hoc* predictors identified as important in previous studies appears to exert any consistent effect on EU support whatsoever. The theory that EU-support is rooted in a substitution logic fares worse yet: all indications are that citizens support the EU when things are going well, rather than when things are going wrong in the domestic arena. This suggests that citizen may just see the EU and the nation state as part of the same political system, and responsible for much the same aspects of system performance.

Summary and Conclusions

We have attempted here to subject the claims of three broad theoretical perspectives on EU support (instrumental rationality, cueing rationality and cognitive mobilisation) to more stringent empirical testing than previously possible. We have simultaneously attempted to assess the explanatory power of a number of *ad hoc* hypotheses that have been advanced in previous studies to account for specific temporal or spatial variations in EU support patterns. Lack of suitable data has prevented us from assessing the possible role other theoretical perspectives, such as identitarian theory. Using the most comprehensive micro- and macro-level datasets available, we have sought to assess how far the signature variables of these various perspectives are capable of explaining both individual and aggregate-level variations in EU support. We have deliberately eschewed the development of a single, all encompassing multi-level model of EU support because we are convinced that the technical difficulties associated with the simultaneous estimation of individuallevel, cross-country and within-country time-series effects (as well as any possible crosslevel effects) are so great as to render any such estimation procedure meaningless. We have accordingly broken down the process of estimating different sorts of effect into four separate estimation procedures – one each for individual level effects, cross-level effects, cross-country effects and within-country time-series effects.

Table 8.10 summarises the results of our endeavours. As the table indicates, we find evidence that at least one of the signature variables associated with each of our three theoretical perspectives is significant at both the micro and macro levels. At the micro level, for example, there are significant roles in the determination of EU support for instrumental rationality (five of the indicators of labour market position have significant, correctly signed coefficients), for cueing rationality (satisfaction with democracy, ideological position and Catholic religion are all significant and plausibly signed) and for cognitive mobilisation (engagement in political discussion and level of education are both significant and correctly signed). Similarly, in the macro time-series, the set of significant predictors (changes in GDP, EU trade, unemployment, democracy satisfaction and political discussion) indicates that each of the three perspectives contributes something to the explanation of EU support. Significantly, though, EU-support is consistently increased, rather than decreased, by the kind of factors that can be expected to boost regime support at

the national level. Hence, EU-support is dominated by a transfer, rather than substitution logic.

(Table 8.10 about here)

Overall, Table 8.10 suggests the following conclusions. First, there is evidence for *instrumental rationality* in the determination of EU support at all four data-analytic levels. At the individual level, labour market position has clear and predictable effects on support: the educated, the young and men are more likely to support the EU; the unemployed and manual workers are less likely to do so. As our analysis of cross-level effects shows, these labour market effects are strengthened by social welfare spending. Where spending is high, the positive effects of education and the negative effects of unemployment and manual work are all increased. In terms of relatively stable cross-country differences, EU support is highest where intra-EU trade is highest and where social welfare spending is lowest. We interpret these effects as rational responses, respectively, to the recognition of material economic interests and to the expectation that in the long term current national social welfare spending will converge in the EU. At the macro timeseries level, EU support rises (falls) when the domestic economy, as reflected in GDP and unemployment, improves (declines); it also rises (falls) as a country's trade connections with other EU countries strengthens (weakens).

Second, Table 8.10 also indicates support for cueing rationality. At the individual level, there is strong evidence of 'transfer' as opposed to 'substitution' cueing. Across the EU, people who are satisfied with their national democratic institutions are significantly more likely to support the EU – as the transfer cueing hypothesis would suggest. In contrast to the claims of 'substitution' cueing, it is *not* those who are most *dissatisfied* with their national democratic processes who are most likely to support the EU. There is also evidence for relatively modest individual-level cueing roles for left-right ideology (with people on the centre right tending to be more pro-EU than those on the centre-left, but with those at both extremes tending to be less supportive of the EU project) and for religion (with Catholics being the most likely to be pro-EU). These individual-level cueing effects are complemented by a strong macro timeseries effect in which changes in aggregate democracy satisfaction have consistent and positive effects on changes in EU support. Finally, Table 8.10 also shows the consistent importance of cognitive mobilisation. At both the micro and macro levels, engagement in political discussion exerts a powerful positive effect. This is supplemented by the micro effects of education (effects that are also 'claimed' by instrumental rationality theory) and the country-level effects of length of EU membership.

Perhaps the most important conclusion suggested by Table 8.10, however, is the simple observation that, when all of the relevant data sources are considered and no one estimation method is relied upon, the set of consistent influences on EU support is very limited. By no means do all signature variables associated with the three main theories achieve consistent statistical significance – and none of the *ad hoc* explanatory variables achieves this status. As we have repeatedly indicated, we make no claims to test all of the possible hypotheses that can be advanced about the sources of EU support: the lack of suitable data make such a task impossible. However, our analysis shows the importance of treating 'partial' empirical evidence – based on a restricted time period or on a limited group of countries – with considerable caution. Our analysis shows that what we actually

know about the sources of EU support is quite limited and does not easily generalize from one period to another. We suspect that the key reason for this is in the nature of the EU itself as a complex, dynamically evolving and self-reflexive organisation that generates diverse, contradictory, and ever-changing expectations, which are unlikely to follow a unified logic or a given set of fixed preferences. Appropriate empirical tests of this possibility – and significant further progress in individual, cross-national and cross-temporal variation in support for the EU – can only be expected from further studies that can explicitly model the changing expectations towards the EU and how they transform the bases on which the EU is judged by its citizens.

Table 8.1: The predictive power of evaluations of EU-membership and a summary of preferences regarding policy integration in models of Vote Choice (yes or no) in nine accession referendums, 2003

Predictor:	Membership good or bad	No. of policies to be integrated
Czech Rep.	.71	.25
Estonia	.65	.13
Hungary	.57	.16
Latvia	.61	.11
Lithuania	.56	.15
Malta	.79	.38
Poland	.61	.18
Slovakia	.67	.25
Slovenia	.45	.13

Notes: Table entries are Nagelkerke R-squared values from bivariate logistic regressions calculated by the authors using data from the October-November 2003 Candidate Countries Eurobarometer. The dependent variable is how the respondent voted in the national referendum on EU membership (Yes=1; 0=No).

Table 8.2: Propositions Tested

Propositions	Variables	Level
Instrumental Rationality Approach		
Vulnerable (advantageous) labour market position reduces	education, managers, professionals, manual workers, farmer, self-	micro
(increases) support	employed, unemployed	
These effects are enhanced by welfare state development	SOCIAL EXPENDITURE*each of education, managers, professionals manual workers, farmer, self-employed, unemployed	cross
The same effects are enhanced by economic development	GDP/CAPITA*each of each of education, managers, professionals, manual workers, farmer, self-employed, unemployed	cross
Women show less support	male	micro
Position in the life cycle influences support	age age squared	micro
Relative economic development influences support	GDP/CAPITA	macro
Good economic performance increases support for integration	UNEMPLOYMENT INFLATION GDP GROWTH	macro
Within-EU trade increases support	INTRA EU TRADE	macro
Net transfers from European to national budgets increase support	NET EU TRANSERS	macro
Greater EU regulatory activity reduces support	EU LEGISLATION SUPPY	macro
Relative welfare spending reduces support	SOCIAL EXPENDITURE	macro
High WW2 casualties increase support for integration	WW2 CASULTIES	macro
Cognitive Mobilisation Approach		
Cognitive mobilization increases support	education, political discussion, POLITICAL DISCUSSION	micro & macro
Cueing Rationality Approach		
Quality of governance reduces support	QUALITY OF GOVERNMENT	macro
Satisfaction with national political institutions increases support	democracy satisfaction DEMOCRACY SATISFACTION	micro & macro
Governance quality enhances the above effect	democracy satisfaction * QUALITY OF GOVERNMENT	cross
Left-right position influences support	left-right ideology	micro
Welfare state development reduces support on the political left	left-right ideology*SOCIAL EXPENDITURE	cross
Extreme political positions reduce support	left-right extremity	micro & macro
Catholic religion increases support	catholic CATHOLIC	micro & macro
Length of EU membership increases support but less and less	EU MEMBERSHIP LENGTH	macro
Ad hoc propositions		
Council presidency by one's country increases support	EU COUNCIL PRESIDENCY	macro
Centralized wage bargaining reduces support	CENTRALIZED WAGE BARGAINING	macro
Democratic consolidation at time of accession increases support	THIRD WAVE DEMOCRACY	macro

Lower case variable names denote micro-level variables; UPPER case denotes macro-level variables.

Table 8.3: Individual-level influences on EU-support in France in 1990

	b	Standard	T-value	T-value
		error of b	(OLS)	(ordered
		·	, ,	logit)
Male	0.01	(1.24)	.01	.41
Age	-23.58	(20.24)	-1.17	-1.15
Age squared	23.20	(22.40)	1.04	1.03
Education	12.28***	(2.01)	6.10	5.59
Manager	-1.83	(3.46)	-0.53	34
Professional	-1.67	(1.63)	-1.02	92
Manual worker	-4.45**	(2.06)	-2.16	-2.42
Farmer	-13.43***	(4.57)	-2.94	-3.17
Self-employed	-0.69	(2.61)	27	07
Unemployed	-4.37*	(2.64)	-1.65	-1.94
Catholic	0.68	(1.60)	.43	.48
Political discussion	7.11***	(2.40)	2.96	2.82
National	21.42***	(2.10)	10.21	9.74
democracy				
satisfaction				
Left-right ideology	0.83	(2.92)	.28	01
Left-right extremity	-4.43**	(2.16)	-2.05	-1.81
Constant	66.42***	(4.58)	14.51	n.a.

***: p < .01; **: p < .05; *: p < .10.

Note: All table entries except the last column are based on linear (OLS) regression of EUsupport on the variables listed on the left. The last column shows corresponding T-values from an ordered logit analysis of the same model.

Table 8.4: Summary of Individual-level influences on EU-support in 449 country-year

samples, 1975-2007

	Average	(Average	Standard	% of bs	% of bs that
	effect (b)	standard	deviation	that are	are negative
	across 449	error of b	of b across	positive	and
	country-	across	country-	and	significant
	years	country-	years	significant	(p < .05)
		years)		(p < .05)	
Male	2.1	(1.6)	2.6	32.1	1.1
Age	-22.6	(22.2)	33.5	0.7	25.6
Age squared	17.2	(24.2)	33.8	18.3	1.1
Education	10.4	(2.9)	6.2	79.7	0.0
Manager	4.6	(5.8)	7.7	20.9	0.4
Professional	0.6	(2.1)	2.8	10.0	2.7
Manual worker	-3.0	(2.5)	3.4	0.9	26.5
Farmer	-3.9	(7.8)	12.4	7.3	14.0
Self-employed	0.1	(3.3)	4.2	4.9	4.7
Unemployed	-3.8	(3.9)	5.2	0.4	20.1
Catholic	2.5	(4.7)	6.8	19.2	2.6
Political	5.3	(2.5)	4.2	49.4	0.9
discussion					
National	23.0	(3.6)	9.9	95.0	0.0
democracy					
satisfaction					
Left-right ideology	10.0	(4.0)	21.4	41.8	16.8
Left-right	-4.2	(2.6)	4.4	1.1	39.5
extremity					

Note: Table entries are based on multivariate regressions of EU-support on the variables listed on the left run separately for each country-year.

Table 8.5: Key findings from regressing the effects on EU-support of selected individual-level variables on theoretically expected macro-level determinants

Level-1 effect	Level-2 predictor	Preferred model	b	standard error
National democracy satisfaction	Governance quality	Fixed effects AR(1)	-3.85	(11.81)
Education	GDP/capita	Random effects AR(1)	.41	(1.82)
Education	Social expenditure	Random effects AR(1)	.18*	(.09)
Manager	GDP/capita	Random effects GLS	-3.48*	(2.05)
Manager	Social expenditure	Random effects GLS	.06	(.11)
Professionals	GDP/capita	Random effects GLS	-1.12*	(.59)
Professionals	Social expenditure	Random effects GLS	09***	(.03)
Manual worker	GDP/capita	Random effects GLS	64	(.89)
Manual worker	Social expenditure	Random effects GLS	16***	(.05)
Farmer	GDP/capita	Random effects GLS	-4.09	(3.06)
Farmer	Social expenditure	Random effects GLS	.11	(.16)
Self-employed	GDP/capita	Random effects GLS	-1.94**	(.89)
Self-employed	Social expenditure	Random effects GLS	02	(.05)
Unemployed	GDP/capita	Random effects GLS	-1.92**	(.91)
Unemployed	Social expenditure	Random effects GLS	07	(.05)
Left-Right ideology	Social expenditure	Random effects GLS	24	(.21)

^{***:} p < .01; **: p < .05; *: p < .10.

Note: Table entries show results one regression analysis for each of the nine individual-level effects in the unbalanced 1975-2007 panel of the EU27 using the model specification shown in the middle column. Constants not shown. N=449 except when a level-1 variable was missing in the Eurobarometer series in some years.

Table 8.6: Two-step selection of variables that are most likely to have a non-zero effect on overtime average levels of EU-support in member states, 1975-2007

	First Analysis			Sec			
Variable	EU27	EU25	EU27	EU25	EU15	EU12	EU9
National	.43	.42	-	-	-	-	-
democracy							
satisfaction							
Left-Rght	.47	.40	-	-	-	-	-
extremity							
Catholics	.44	.53	.38	.45	.27	.52	.37
Political	.50	.44	-	-	-	-	-
discussion							
GDP/capita	.47	.47	-	-	-	-	-
GDP growth	.47	.44	-	-	-	-	-
Unemployment	.45	.41	-	-	-	-	-
Inflation	.55	.39	.41	.31	.39	.43	.31
Intra-EU trade	.48	.58	.46	.62	.51	.67	.52
Net EU	.45	.41	-	-	-	-	-
Transfers							
Governance	.46	.42	-	-	-	-	-
quality							
Social	.71	.75	.81	.92	.90	.39	.29
expenditure							
Wage	.65	.66	.68	.61	.39	.39	.26
bargaining							
centralization							
Third wave	.45	.51	-	-	-	-	-
democracy							
Wolrd War 2	.49	.49	-	-	-	-	-
casulties							
EU membershp	.65	.80	.66	.91	.95	.46	.92
length							
Council	.44	.42	NA	NA	NA	NA	NA
presidenty							

Note: Table entries show the combined probability of the models including the given variable relative to the combined probability of all models that can be formed with the set of independent variables (17 in the first and six in the second analysis). Probability values above .51 indicated in **bold**.

Table 8.7: The performance of the selected model for enduring cross-national differences in EU Support in different cross-sectional data sets, 1975-2007: fit statistics and OLS regression coefficients

	EU27 in	EU25 in	EU15 in	EU12 in	EU9 in	pooled
	2007	2004-06	1995-03	1986-94	1975-85	dataset
Intercept	38.2***	25.4**	28.8**	25.2	-10.7	36.6***
	(11.3)	(12.1)	(11.4)	(17.3)	(15.7)	(6.7)
EU membership	5.2**	5.4***	6.4***	3.9	21.0***	6.0***
length						
	(1.9)	(1.2) .4**	(1.4)	(3.3) .7**	(3.4)	(.9) .3***
Intra-EU trade	.2*		.3*	.7**	.5*	
	(.1)	(.2) -1.0***	(.2)	(.3)	(.2)	(.1) -1.0***
Social expenditure	-1.1***	-1.0***	-1.4***	5	9	-1.0***
	(.4)	(.3)	(.3)	(.7)	(1.0)	(.2)
F-value	4.2**	8.39***	21.1***	3.4*	22.5***	16.5***
Adjusted R ²	.27	.48	.82	.40	.89	.35

***: p < .01; **: p < .05; *: p < .10.

Cell entries are regression coefficients, with standard errors in parentheses.

Table 8.8: Time-series model of aggregate EU Support in four data panels. 1975-2007

Table 8.8: Time-series model of aggregate E	LU Support	t in four d	ata panel	s, 1975-2007
	EU25	EU9	EU12	EU15
	1975-	1975-	1986-	1995-
Differenced independent variables	2007	2007	2007	2007
Instrumental Rationality Predictors				
GDP/capita (change)	0.20**	0.21**	0.20*	0.33**
Intra EU trade (change)	0.09*	0.11	0.01	0.02
Net EU transfers (change)	0.06	0.10*	0.01	0.16*
GDP growth (change)	-0.01	-0.05	-0.05	-0.04
Unemployment (change)	-0.11**	-0.1	-0.18*	-0.13
Inflation (change)	-0.06	-0.07	-0.02	0.04
Social expenditure (change)	0.08**	0.08	0.01	0.1
Cueing Rationality Predictors				
National democracy satisfaction (change)	0.30***	0.27***	0.37***	0.36***
Governance quality (change)	0.08**	0.03	0.07	0.01
Left-right extremity (change)	-0.02	-0.06	-0.01	-0.02
Cognitive Mobilisation Predictors				
Log EU Membership length (change)	-0.09*	0.12	0.03	0.10*
Political discussion (change)	0.10**	0.09	0.15**	0.09
Ad hoc Predictors				
EU legislation supply (change)	0.05	0.08	0.07	0.08
Council presidency (change)	0.06*	0.06	0.06	0.11
Wage bargaining centralization (change)	0.10***	0.12*	0.04	0.04
Lagged dependent variable and constant				
Lagged dependent variable (change)	-0.19***	-0.25**	-0.20*	-0.24*
Constant	0.0	0.0	0.0	0.0

* p<0.05; ** p<0.01; *** p<0.001 All variables are first differenced. OLS estimates with panel-corrected standard errors.

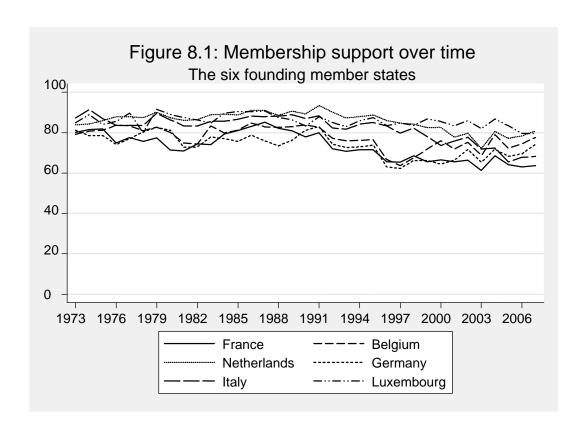
Table 8.9: Comparing alternative significance level estimates for the 1975-2007 unbalanced panel of the EU25

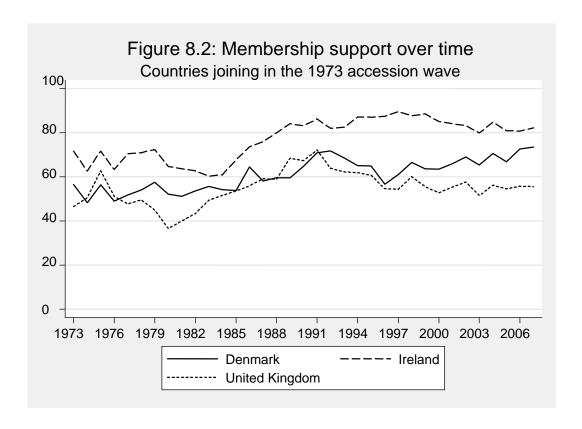
		Estimation method							N of times				
	1	2	3	4	5	6	7	8	9	10	11	12	<i>p</i> <.05
	Instru	mer	ıtal	Ratio	onal	ity F	rec	licto	rs				
GDP/capita	0.20**	**	***	***	***	**	**	***	***	***	**	***	12
Intra EU trade	0.09*		**	**	*		*	*	**	*			8
Net EU transfers	0.06					**	*				**	*	4
GDP growth	-0.01												0
Unemployment	-0.11**		*	*	*		*	*		**			7
Inflation	-0.06												0
Social expenditure	0.08**	**					*					**	
	Cuei	ng I	Ratio	nali	ty P	redi	cto	rs					
National democracy satisfaction	0.30***	***	***	***	***	***	***	***		***	***	***	12
Governance quality	0.08						*						2
Left-Right extremity	-0.02												0
	Cognit	ive .	Mob	ilisa	tion	Pre	dic	tors					
EU membership length	-0.09*		*	*	**	*					*		6
Political discussion	0.10**	*	*	*	**		*	*		*		*	9
		Ad	hoc	Pre	dict	ors							
EU legislation supply	0.05												0
Council presidency	0.06*			*			*						3
Wage bargaining centralization	0.10***	**					*					**	4
	Lagged d	ереі	ıden	t vai	riab	le ar	nd c	onst	ant				
Lagged dep. var.	- 0.19***	-						***	***	***	*	***	12
Constant	-0.00												

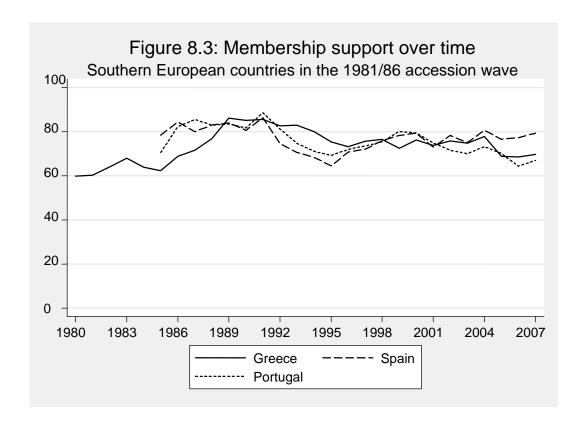
* p<0.05; ** p<0.01; *** p<0.001 All variables are differenced (change) variables. For an explanation of the estimation methods see the main text.

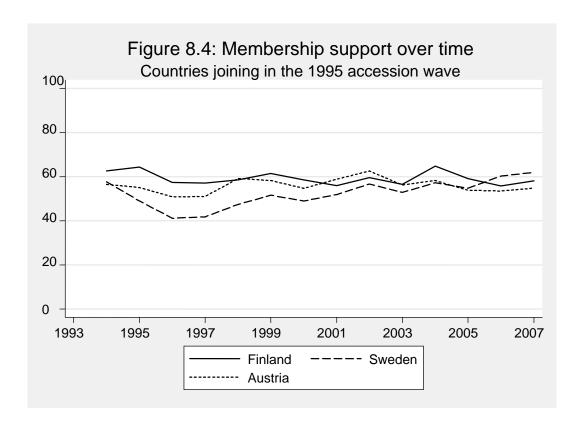
Table 8.10: Summary of empirical findings

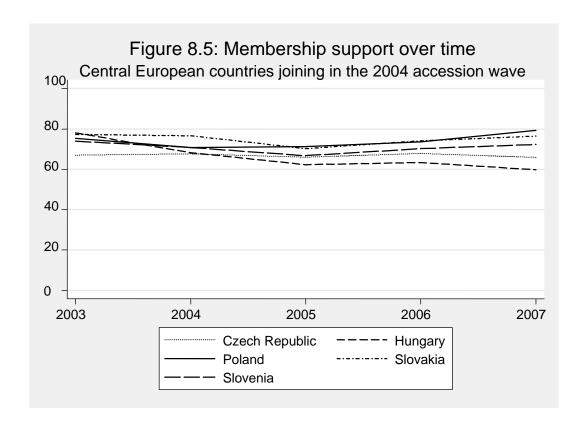
	Individual-Level Support (Table 8.4)	Cross-level Support (Table 8.5)	Cross-section Support (Table 8.7)	Timeseries Support (Table 8.9)
Instrumental Rationality	Strong support Education (+) Moderate support Unemployment (-) Manual worker (-) Age (-) Male (+)	Social expenditure: *Education (+) *Unemployment (-) *Manual worker (-) *White Collar worker (-)	Intra-EU trade (+) Social expenditure (-)	Changes in (log) GDP (+) Changes Intra-EU trade (+) Changes in Unemployment (-)
Cueing Rationality	Democracy Satisfaction (+) Left-Right ideology (+) Moderate support Catholic (+) Left-Right extremity (-)			Changes in Democracy Satisfaction (+)
Cognitive Mobilisation	Political Discussion (+) (Education +)		Length EU membership (+)	Changes in Political Discussion (+)
Ad hoc	_	-	_	-

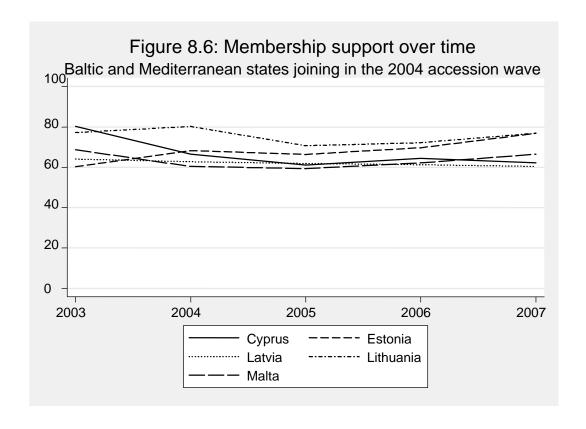


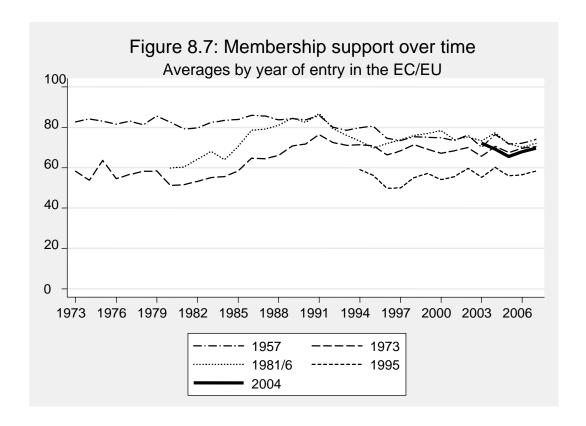












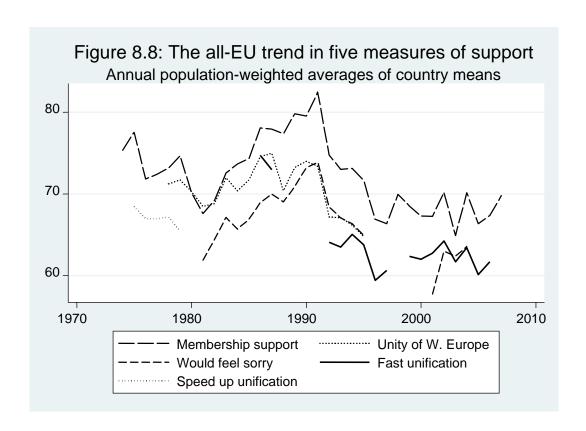
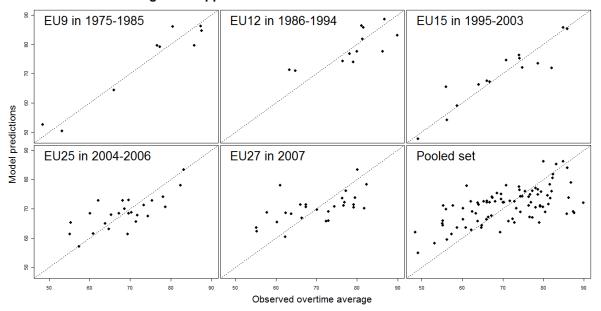


Figure 8.9: The explanatory power of the same model of overtime average EU-support in different cross-sections of member states



Endnotes

in . . .

ⁱ Previous time-series analyses mostly relied instead on the difference in the percentages of those who consider membership a good and a bad thing, respectively. While such details tend to make very little difference (cf. Eichenberg and Dalton 2007: note 7), our series makes a fuller use of the available information by taking both non-responses and neutral responses into account.

ⁱⁱ See Hooghe and Marks (2005) for a partly different classification and review of the relevant theories, and note that we subsume all identity-based reactions in our second category.

iii Recall that at the individual-level we have a multiply imputed dataset for over 200,000 individuals, who form unequally sized samples of an unbalanced sample of 27 countries over a 33-year period, and note that three of the individual-level variables in the analysis – satisfaction with democracy, left-right ideology self-placement, left-right extremism and religion – are missing for certain years in the Eurobarometer series.

^{iv} The standard errors of these estimated effects were adjusted for the multiply imputed nature of the data using the mim package of Carlin, Galati, and Royston (2008).

This choice is prompted by the fact that the dependent variable is a three-point scale with a typically skewed distribution. Therefore we replicated all individual-level analyses reported in this chapter with both ordered logit and linear regression but found no systematic differences between them (these additional analyses are available from the authors upon request). For ease of interpretation, the rest of the chapter only shows linear regression results.

vi The effect of age is apparently not linear and therefore we included both age and agesquared among the predictors. For the interpretation of their effects note that the age variable in this analysis is measured in years divided by 100, and thus the extreme values of 0 and 1 on either the age or the age-squared variable refer to the – practically speaking fictitious – newborn and 100-year old respondents. Consequently, in the average country year we expect that, ceteris paribus, a 100-year old person (at 17.2-22.6=-5.4 points) is just 1.6 points less supportive of EU-membership than a 20-year old (at 17.2*0.04-22.6*0.2=-3.832 points), while a 50-year old (at 17.2*0.25-22.6*0.5=-7 points) is rather more markedly, namely 3.2 points less supportive than the 20-year old. While there is considerable variance across country-years in the direction of the expected differences between the middle-aged and the old, the percentage of country-years where either the middle-aged or the old is expected to be significantly more pro-EU than the young is just slightly higher than we would expect by chance alone. Nonetheless, the non-monothonic pattern of generational differences seems hard to explain either in terms of relative labour market positions, or cues, or 'acquired taste' factors.

vii Since the dependent variables in these analyses were themselves statistical estimates rather than observations, it would be desirable to incorporate information about their level-1 standard errors in our level-2 time-series analyses as in two-step multilevel analyses. However, we are not aware of statistical software that could accomplish this task. We did find, however, that simple OLS regression analyses of our level-2 models produce virtually identical results as the FGLS analyses that adjusted for level-1 standard errors in the dependent variable as proposed by Lewis and Linzer (2005). Therefore we think that the

validity of our time-series results is not undermined by the lack of adjustment for level-1 standard errors.

wiii We conducted Fisher-tests of unit roots in all panels and found that these do not raise concerns. Woolridge-tests identified first-order autocorrelation in some panels for the first two level-1 effects. Hausman-tests showed that all series display significant unit effects, and that these, except for the effect of satisfaction with democracy, are approximately random. Table 8.5 shows what level-2 model we considered most appropriate in the light of this for explaining the cross-unit variance in each of the nine level-1 effects.

ix For each dependent variable we estimated the following time-series models (with the names of relevant STATA commands in parentheses): fixed-effects regression with AR(1) (i.e., first-order autoregressive disturbance) and Driscoll and Kraay (1998) standard errors (xtscc); fixed-effects (within) regression with AR(1) (xtregar); random-effects GLS with AR(1) (xtregar); random-effects regression with clustered sandwich estimator of standard errors (xtreg); random-effects regression with conventional standard errors (xtreg); Prais-Winsten regression with panel-corrected standard errors and a lagged dependent variable (xtpcse).

^x Non-stationarity was tested separately in all four panels mentioned in the previous note with the augmented Dickey-Fuller unit-root test.

xi That is, a variance analysis with country as the only independent variable yields an adjusted R-squared of .72, .69, .64 and .86 in the EU27 unbalanced panel for 1975-2007, and the balanced panels for the EU9 (1975-2007), EU12 (1986-2007), and EU15 (1995-2007), respectively.

wii We replicated the reported analyses with six different ways of estimating probability (goodness of fit) but found no difference between the results. The tables present the results obtained with the hyper-g prior, while the alternatives that we tested are described in the documentation of the software as "EB-global", "ZS-null", "AIC", "BIC", and "g-prior".

***Xiii** These choices were supported by further evidence available on request about the average and overall-distribution of T-values for each variable's effects, and additional Bayesian model averaging analyses that dropped all (but just one at a time) of the 17 variables from the analysis reported here.

xiv We took an exception with economic growth, which is already a change variable.

^{xv} The first specification only including the substantively interesting independent variables among the predictors; the second added to this the lagged dependent variable (LDV); and the third added fixed effects for countries (but not the LDV). Only two models for the EU12 panel (1986-2007) gave support for the null hypotheses.

regression with panel-corrected standard errors; pooled OLS regression with Driscoll-Kray standard errors; pooled OLS with robust standard errors and correction for clustering; population-averaged GLS with robust standard errors; pooled FGLS; pooled FGLS assuming heteroskedastic and correlated error structures; random effects GLS with robust standard errors; fixed effects GLS with robust standard errors; random effects FGLS; random effects FGLS assuming heteroskedastic and correlated error structures; fixed effects GLS assuming heteroskedastic and correlated error structures; fixed effects OLS regression with Driscoll-Kray standard errors.