7

Policy Performance and Support for European Integration

Slava Mikhaylov and Michael Marsh

7.1. Introduction

Following Easton’s conceptual framework discussed in the introductory chapter, a hierarchical relationship exists between three objects of support: output support, support for institutions, and support for the community. The latter two objects of support are examined in turn in two subsequent chapters on trust in European political institutions and the relationship between citizenship and identity in the European Community. This chapter focuses on the first object of support – support derived from the accrued material benefits of EU membership.

Public perceptions of benefits accruing from EU membership have been explained previously in terms of national economic circumstances (economic growth rates, inflation, unemployment, share of intra-EU trade, and EU contributions to the national budgets), subjective evaluation of economic well-being (the ‘feel-good’ factor), and socialization (duration of membership in the EU) (Marsh 1999). The wider literature on support for the EU is generally consistent with this set of results, suggesting a strong utilitarian basis for such judgements. However, in recent years, identity (or the Haasian ‘shifting loyalties’ in general) became the focus of much theoretical and empirical research aiming to explain public perceptions of European integration. It has also been proclaimed that in the context of general public support for the EU ‘identity rules’: while utilitarian factors are taken into account by citizens ‘the conceptions of group membership are more powerful’ (Hooghe and Marks 2004).
This chapter assesses the extent of utilitarian roots for the perception of benefits from membership in EU member states comprising different accession waves over the period from 1984 to 2005. We examine economically driven explanations provided in the literature and evaluate whether they remain consistent over a much longer time period than utilized in any of the previous studies. The time period covered includes a major qualitative change in the nature and functioning of the EU, and consequently possible changes in the degree to which people approve EU outputs as well as the basis on which they do so.

7.2. Previous research

Support for European integration is affected, and at least partially driven, by the anticipated benefits of European integration to individuals in member states (Gabel 1998b). The influence of policy output on the level of both general and specific support for a political system has been highlighted in Easton (1965a). As argued in Marsh (1999), the functionalist, and later neo-functionalist, central premise is that well-performing institutions are invested with more authority; that is, states and pseudo-states, like the EU, are judged on their relative effectiveness in performing a service. Within the neo-functionalist approach, the assumption is that performance is being evaluated via its impact on functional social groups. More specifically, citizens in social groups that expect to receive benefits from EU policy output will welcome the integration process and the economic liberalization associated with it. Anderson and Reichert (1996), Gabel and Palmer (1995), and Gabel (1998a, 1998b) showed that citizens with relatively low levels of competitive advantage in an integrated economic environment (like the working class and generally citizens with lower levels of human capital) are likely to be negatively predisposed towards the EU. At the same time, people with high levels of human capital (education and specific occupational skills) are likely to be positively disposed towards closer integration. However, if functional social groups are re-defined within a European rather than a national context, national governments can be viewed as playing a role of mediating institutions with people pressing national governments for more benefits for their countries from the EU (Marsh 1999).

The most direct form of benefit consists of transfer payments made from the EU budget, where citizens of countries that are net beneficiaries of EU transfers would be more supportive of the EU than citizens of donor countries (Anderson and Reichert 1996; Whitten, Gabel, and Palmer 1996; Medrano...
Policy Performance and Support for European Integration

A related utilitarian perspective focuses on another aspect of direct cost/benefit calculations, the existing extent of economic integration. This has been operationalized in several aggregate level studies as the proportion of trade with EU countries in total trade of a country (Eichenberg and Dalton 1993; Gabel and Palmer 1995; Anderson and Reichert 1996; Bednar, Ferejohn, and Garrett 1996; Gabel and Whitten 1997; Eichenberg 1999; Marsh 1999; Palmer and Gabel 1999). This sort of utilitarian consideration could be seen as a very direct feature of EU integration.

In addition to such direct benefits, there is a second economic explanation of public support for European integration that bases its account on more indirect influences on perceptions. This extends the logic of comparative studies that link macroeconomic conditions to citizen approval of government performance (Eichenberg 1999) to explain how national economic circumstances can influence perceptions of the EU. It is assumed that people perceive national economies to be affected by the EU policy output, and base their evaluations of EU effectiveness on the performance of their national economies. Evidence for this indirect political economic model of EU support has been presented in a number of studies (Dalton 1993; Anderson and Kaltenthaler 1996; Bednar, Ferejohn, and Garrett 1996; Eichenberg 1999; Eichenberg and Marsh 1999). Duch and Taylor (1997) show that the link between economy and public support for the EU is the result of citizens’ evaluation of the national economy. Although evidence is not consistent due to different model specifications, several studies found a negative relationship between public support for integration and inflation (Eichenberg and Dalton 1993; Anderson and Kaltenthaler 1996; Bednar, Ferejohn, and Garrett 1996; Eichenberg 1999), although Palmer and Gabel (1999) found no significant relationship. Unemployment has been shown to have a weak relationship (Anderson and Reichert 1996; Bednar, Ferejohn, and Garrett 1996), while the economic growth rate is weakly positively related (Eichenberg and Dalton 1993; Anderson and Reichert 1996). At the same time, Gabel and Whitten (1997) found no significant relationship between inflation, unemployment, and economic growth and citizens’ support for EU integration.

In the same vein, a related explanation positing a different mechanism, but a similar pattern of association, focuses on the fact that citizens rely on domestic cues (proxies) when formulating their attitude towards the EU (Hooghe and Marks 2005) as, typically, they are neither interested in, nor informed about, the EU. Evaluations of the EU can be contextualized in domestic politics, which provides shortcuts for the respondents when

All economic explanations of support for the EU can be generalized as representing the relationship between a poor economic situation in a country and a negative perception of its citizens and between a good economic situation and positive perceptions of the EU. Arguably, this is weakened by the mediation of national political competition, since government might well seek to take credit for good times and blame the EU for bad ones (Marsh 1999). However, the opposition may argue that the government ought to take the blame for bad times and should not always take credit for good times, so it is reasonable, even allowing for such mediation, to hypothesize a relationship between local economic performance and EU support. However, alternative hypotheses, which suggest a negative rather than a positive relationship with some economic variables, are also plausible. When the national economy is actually doing well, people might be more inclined to see the EU as an unnecessary interference. When it is doing badly, they look to the EU for salvation.

A third explanation is couched in terms of socialization. Arguably, it will take time for people to see benefits. Many economic explanations are supplemented by the suggestion that membership will bring about more positive feelings with time. This ‘socialization’ argument may be seen to depend on the accumulation of outputs, but could also stem from the greater awareness of the EU that comes from longer membership (Inglehart and Rabier 1978; Eichenberg and Dalton 1993; Anderson 1995a; Anderson and Reichert 1996).

For some analysts, all utilitarian accounts are strictly limited. The research agenda in the early 2000s has been dominated by non-utilitarian explanations for why citizens would perceive the EU in a positive light, regardless of whether or not their economy performs well, and focuses on the concept of identity. It is argued that the EU could be seen as a threat to non-material well-being. In particular, ‘national identity’ has been identified as a constraint on citizens’ support for European integration (Van Kersbergen 2000; Medrano and Gutiérrez 2001; Carey 2002; Christin and Trechsel 2002; McLaren 2002). Although several authors identified strong national attachment as being positively related to the desire for further European integration (Marks 1998; Haesly 2001; Risse 2002; Citrin and Sides 2004; Marks and Llamazares forthcoming), citizens with an ‘exclusively’ national identity have been shown to perceive European integration as a threat (Hooghe and Marks 2004, 2005). Risse (2005) points out that an identity shift from the national to the European level has traditionally been
linked to the material benefits received through European integration, and later augmented by the concept of socialization, i.e. the slow embedding of Europeanness in national identities. This particular non-utilitarian explanation is picked up in two subsequent chapters, and, in particular, in Chapter 9, while here we focus largely on utilitarian explanations.

More generally are suggestions that the potency of some explanations may vary across countries. It has been suggested that public support for European integration in the new member states may be defined by people’s desire to cement democratic transition in their countries (Rohrschneider 2002). In fact, Rohrschneider and Whitefield (2006) show that in new member states, economic explanations, while still playing a role, are less important than concerns about democratic performance, values, and identity in shaping public perception of the EU. More generally, countries have probably joined the EU for different reasons, and publics in those countries have been encouraged to see the benefits of the EU in different lights. In Ireland, for instance, material benefits were always prominent in campaigns about EU membership and in subsequent referendums on further integration. Yet for countries joining later, even in second wave countries – Spain, Portugal, and Greece – the link with liberal democratic Europe was an important way to strengthen democracy, an argument also made in the new member states joining in 2004. This obviously poses the question of how far any utilitarian account will be equally persuasive for all member states, a question we will address in this chapter.

A second source of variation is time. The EU now is a rather different institution to what it was twenty-five years ago, when the second wave of accession took place, let alone fifty years ago when it was founded. It has many more powers over many more policy areas: in effect, there are more outputs, and many of these are not economic ones. It has been suggested, most recently by Eichenberg and Dalton (2007), that this has consequences for our understanding of the dynamics of EU support, with utilitarian calculations having much less significance in more recent years. Therefore, we will also examine the stability over time of economic and some non-economic explanations.

7.3. Public perceptions of benefits

There are a number of measures of public perceptions of the EU and its institutions available from the Eurobarometer, but relatively few that have been asked repeatedly over a long period. The most appropriate for the purpose here, where the objective is to consider how citizens view the
outputs of the Union, is the so-called ‘benefits’ question: ‘taking everything into consideration, would you say that [country] has on balance benefited or not from being a member of the EU?’ This is one of a number of items that seem to tap aspects of overall support for integration, the others being questions tapping support for ‘unification’, asking would respondents be sorry if the EU were to be scrapped, and whether their country’s membership of the EU was a good thing. The benefits question seems best suited to analyse policy outcomes – the basis of what Easton called ‘specific’ support – while it has been argued that the unification question best measures what Easton called ‘diffuse’ support. That said, it is also easy to exaggerate the real difference between these four questions, as each may be shown to tap a common attitude towards the regime of the EU (for a good review and analysis see Scheuer 2005: 3–7 and 49–50). Certainly there have been no successful attempts to validate these questions as operationalizations of the different Eastonian concepts. However, in terms simply of face validity, the benefits question seems best suited to our task here, and while a more broadly based measure might well be preferable as an overall indicator of EU support, we do not see that it would be a better measure of outputs.

Figure 7.1. Time-series cross-section plot for average benefit perception in EU member states (in a year with standard errors shown by vertical bars)
Policy Performance and Support for European Integration

Figure 7.1 shows the overall level of perceived (national) benefits across the member states since 1984, the first year for which the data are available. This is a cross-national average. It is evident that the perceptions of the EU as beneficial have followed a cyclical pattern. They grew steadily more positive until 1991, only to fall equally steadily for the next five years, after which they have again risen fairly steadily, without regaining

![Chart showing perceived benefits for different countries: Belgium, France, Germany, Italy, Luxembourg, Netherlands.](chart.png)

**Figure 7.2.** Perceptions of benefit from EU membership in the founding six members and average perception in the EU 25
The Legitimacy of the European Union after Enlargement

the heights of 1991, when an average of 66 per cent in each country saw the EU as beneficial for their country. However, the bars around this line indicate that this average has quite a high standard error, indicating a lot of disparity across countries. In fact it seems that disparity increased after 1991 and became smaller only a decade later.

Of course, the membership of the EU has not been consistent across this period, as new members joined in the 1980s, the 1990s, and most recently in 2004. In Figures 7.2 through 7.4 we show the trends in each of the various waves of accession. We are looking here to see how well member states in each wave fit with the overall trend. The original six (Figure 7.2) show significant variations in the levels of positive perception, but most countries follow broadly the same trend. The only clear exception is the Netherlands where support has declined steadily from the early 1990s and shows no sign of recovering.

Figure 7.3 focuses on states in the enlargement waves prior to 2004. The states in the first wave show rather different patterns: in Ireland and Denmark perceptions are increasingly positive while in the UK the pattern echoes the EU average, although perceptions are much more negative. In contrast, the states joining in the 1980s all show significant increases in

![Figures 7.2, 7.3, 7.4: Perceptions of benefit from EU membership in the countries of the first-, second-, and third-accession waves and average perception in the EU 25](image-url)

Figure 7.3. Perceptions of benefit from EU membership in the countries of the first-, second-, and third-accession waves and average perception in the EU 25
positive perceptions in the first few years. This increase has levelled off in Greece and Portugal, but has continued upwards in Spain. In the 1990s accession states, perceptions are much more negative, and a trend upwards from the late 1990s can be observed only in Sweden.

Finally, the ten new accession states (Figure 7.4) follow diverse patterns with some striking variations in responses over the short time over which data have been gathered.\(^2\) In general, most started below the EU average,
and show upward or stable trends with support trending downwards in Cyprus, Hungary and, perhaps, Slovenia.

Figure 7.5 shows a single trend line for each of these five sets of states. It demonstrates that in broad terms there is a similar pattern over time for each set: a rise until the early 1990s, followed by a clear decline (wave 1 may be an exception here), and then a recovery from the late 1990s. In other words, the sort of pattern observed for the EU 25 as a whole in Figure 7.1 is not much affected by the varying composition of the EU. In particular, the decline in the early 1990s was amplified by the accession of Sweden, Finland, and Austria, but exists independently of that compositional change. Moreover, the inclusion of ten new states in the 2000s is not responsible for the recovery of support. It has been suggested that there is growing convergence in support for the EU across the member states (Eichenberg and Dalton 2007). This is not really very apparent in Figure 7.5. Support levels were in fact more similar around the time of the...
Maastricht Treaty in 1992 than they have been over the last few years, even leaving aside the states in the third wave of accession, who certainly increase the degree of diversity.

In fact, as Figure 7.6 shows most clearly, diversity in perceptions of benefit from the EU also seems cyclical. After a short rise and fall initially, the lowest level of diversity was in 1990–1991. After that, diversity increased until 2000, when it returned almost to the level of 1992 (Figure 7.6).

It is clear that there is considerable diversity in terms of countries’ perceptions of the EU, both in terms of different levels at any one time, and in terms of the changes in levels over time, with Spain and Ireland showing a considerable increase and the Netherlands a marked decrease in positive perceptions of the impact of EU membership. What we seek to do in the next section is to explain some of that diversity.

---

**Figure 7.6.** Standard deviation in perceptions of benefit from EU membership within the founding six members, within subsequent enlargement waves, and overall in the EU 25.
7.4. Explaining diversity and change

As we have seen in our summary of previous explanations of EU support, there are several different explanations that have been examined, each of which has been consistent with some of the evidence put forward. Here we focus on the three explanations with the separate question of identity picked up in later chapters. The first explanation considered in this chapter is the direct economic benefits of membership, such as the impact of transfer payments; the second explanation concerns the more indirect benefits evident in national economic indicators, such as growth and employment; and the third is the impact of time, or socialization. The basic model to be estimated is:

\[
\text{Benefit} = \text{intra-EU trade as } \% \text{ of all trade } + \\
\text{net budget transfers } + \\
\text{unemployment } + \\
\text{inflation } + \\
\log (\text{GDP per capita in PPP}) + \\
\log (\text{number of years in the EU}) + \\
\text{country (full set of country dummies)} + \\
\epsilon
\]

The dependent variable is constructed as the proportion of respondents who considered that their country benefits from the EU membership. While there are alternative ways of deriving a measure from the benefit question, such as subtracting negative from positive responses, we chose this as it is the most straightforward and less inclined to vary wildly, which is the case for the most obvious alternative. In addition, this approach allows us to reduce the random variation in our dependent variable measure that may have resulted from aggregation (subtracting negative from positive evaluations) and alternative handling of the ‘don’t know’ category in the data.\(^3\) For the EU 15 member states the data are taken from the Eurobarometer trend file (1984–2002), and individual Eurobarometers from 2002 to 2005. For the new member states the data are from the Candidate Countries Eurobarometers (2001–2003) and from the general Eurobarometers for 2004 and 2005. Pre-accession, the ‘benefit’ question was asked as ‘advantage’, but it is treated as the same question here.

The data on budgetary transfers are taken from the Statistical Annex to the European Commission report ‘Allocation of 2005 EU expenditure by Member State’ (Tables 7.3f and 4f therein), which covers expenditure allocation from 1992–2005. Time-series were extended from 1984–1992
Policy Performance and Support for European Integration

based on the annual reports by the European Court of Auditors in the Official Journal. Other economic data are largely from Eurostat, supplemented where necessary (in the case of the new member states) from the World Bank World Development Indicators (WDI). Unemployment (as percentage of total labour force) data for all countries are from WDI. Data for pre-unification Germany are for West Germany and taken from the OECD Main Economic Indicators (historical series). The consumer price index is used here as a measure of inflation. Personal income is operationalized as GDP per capita in purchasing power parity (in current international dollars) and following general practice in the field is rescaled here as a natural logarithm. Intra-EU trade is the data from Eurostat on the share of exports to and imports from the EU member states in the total trade of a country. Socialization is operationalized as the number of years since the Treaty of Rome for the original six EU members, and the number of years since accession for all other countries. This analysis follows that of Marsh (1999) by operationalizing socialization as a natural logarithm of the membership time. This allows the effect to diminish over time, a logical necessity as support as measured here cannot exceed 100 per cent. This is different from other operationalizations used in the literature that allow socialization to grow in an unbounded way by taking simply the number of years that a country has been a member of the EU (e.g. Anderson and Reichert 1996; Gabel 1998b).

7.5. Analysis

There are a number of considerations to be taken into account before estimating this model. They are detailed in a technical appendix and briefly overviewed here. A first consideration is the obviously different levels of positive feeling in each country. While we do want to explain such differences, the existence of what might be essentially national-level peculiarities could bias our search for more general patterns. The normal solution to this is to include a set of country dummies.4

A second consideration is the result of our estimation on groups of EU member states after each accession wave. Here, analogous to our first consideration, peculiarities shared by groups of accession states could bias our search for more general patterns within all EU member states. For example, countries in the third accession wave (Austria, Finland, and Sweden) may share some characteristics that would set them aside from the EU 12 group of member states. At the same time, countries of the third accession wave may be similar in certain characteristics to Denmark and
The Legitimacy of the European Union after Enlargement

the UK from the first accession wave. This similarity (or dependence) within our estimation panels, especially in combination with autocorrelation in our data, would bias standard errors in our estimation results if ignored.

A third consideration is whether the series themselves are stationary, that is, do the mean and variance of each series remain stable over time, even if the sample size increases. It is well-known that standard regression analysis on data series that follow a non-stationary process produces spurious results. Our tests of the data suggest that the series are stationary, thus allowing us to proceed with standard estimation techniques.

In estimating the model we opt for a conservative approach that takes into account all three considerations. In particular, we estimate the model by ordinary least squares with Driscoll and Kraay (1998) standard errors. We have estimated the model for the full EU 25 as well as for sets of countries comprising the EU after each enlargement wave (i.e. EU 6, EU 9, EU 12, and EU 15). This allows us to see how robust the findings are across different sets of states without having to estimate models on what would be very small samples. Estimates are shown in Table 7.1. A graphical representation of the results reported is presented in Figure 7.7, which indicates the confidence interval for the coefficient for each variable and for each of the sets of EU member states. The results in the graphical presentation are of the estimates on standardized variables, which makes

<table>
<thead>
<tr>
<th>Table 7.1. Utilitarian model of EU support</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU 6</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>Inflation</td>
</tr>
<tr>
<td>(0.004)</td>
</tr>
<tr>
<td>Unemployment</td>
</tr>
<tr>
<td>(0.003)</td>
</tr>
<tr>
<td>Transfers</td>
</tr>
<tr>
<td>(0.292)</td>
</tr>
<tr>
<td>Trade</td>
</tr>
<tr>
<td>(0.162)</td>
</tr>
<tr>
<td>Log (income)</td>
</tr>
<tr>
<td>(0.044)</td>
</tr>
<tr>
<td>Socialization</td>
</tr>
<tr>
<td>(0.097)</td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>(0.287)</td>
</tr>
<tr>
<td>R-sq (within)</td>
</tr>
<tr>
<td>RMSE</td>
</tr>
<tr>
<td>N</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01, ***p < .001.

Note: Driscoll-Kraay SCC standard errors in parentheses.
Figure 7.7. Estimation results of the utilitarian model after each accession wave

Note: 95 per cent confidence interval around coefficients for each standardized variable.
The Legitimacy of the European Union after Enlargement

it easy to see how the magnitude as well as the significance of the coefficients change with the enlargement of the EU.

For the EU 25 the results suggest that a combination of direct and indirect economic effects, as well as socialization, all go some way to explain popular responses to the EU’s outputs. There are significant direct effects. Transfer payments via the EU budget and the extent to which trade is intra-EU are both significant. It also seems to be the case that people respond to domestic economic considerations and are inclined to give the EU credit for ‘good times’. The unemployment variable is significant, as is income, but inflation, which has been found to be significant in several other studies, is not significant here. Socialization is also important, with the accumulation of years of membership associated with more positive feelings.

These findings hold in large part for each set of EU member states, although there are exceptions. The most important is that transfer payments matter only for the larger number of countries and not for the EU 6, EU 9, and EU 12. This is not simply that similar results become insignificant when the N is smaller. The coefficients themselves are much smaller, and negative in the case of the EU 9. A second exception is the income variable, but only the EU 6 really looks different here, and even then the difference between the coefficient for the EU 25 and that for the EU 6 is only just significant. The third concerns socialization. The effect is strongest for the EU 6, although it is not positive as we expected, but negative. Positive effects are most marked for the EU 12, but generally positive for all but the EU 6.

The model seeks to explain the movement around the average public perception of the EU benefit within each member state. The R2 is .34 indicating that 34 per cent of the variation within countries over time is explained by the model. This pattern holds across all sets of EU member states, but it is evident that it is much better for EU 6 countries, where R2 is .46, than for the EU 9, where it drops to .17. In essence this would suggest that the utilitarian model is best suited to explain popular perceptions of EU outputs within the six founding countries, but it does hold up reasonably evenly for all the remaining sets of EU member states, with the possible exception of the first wave: Denmark, Ireland, and the UK.6

Eichenberg and Dalton (2007) argue that utilitarian concerns have become less important, and place the Maastricht Treaty at the heart of that change. Thus we should in essence face two distinct periods in the history of EU. This suggests that the model estimates should be significantly different before and after Maastricht. We test this proposition by estimating the structural stability of our model over two periods: the first being
the time up to and including 1993 and the second being after 1993. We find that for the EU 6 group of countries the model has been structurally stable across these two time periods. That is, estimates of parameters do not seem to differ (in statistical terms) between their values before and after the Maastricht Treaty. However, there is structural change in the way the utilitarian model explains people's benefit perception in other groups of EU member states (EU 9, EU 12, EU 15, and EU 25). However, when we look at the stability of the individual parameter, rather than in the set of parameters as a whole, only socialization (not for EU 12) and transfers differ significantly in their values before and after Maastricht. In general then, while we agree with Eichenberg and Dalton (2007) that Maastricht has significantly altered public perception of the EU, we find little evidence that most of the utilitarian factors in the model have a different impact after 1993.

7.6. Conclusions

This chapter explored the perceptions of EU outputs within the mass public, asking how much these have varied across time and space and how far we can explain that variation by reference to objective considerations of material gain as opposed to non-utilitarian considerations such as local national identities. We certainly do see changes in perceptions across time. In broad terms, perceptions of benefits have first risen, then fallen, and now seem to be rising again. This is not simply a consequence of the changing composition of EU. In fact, this sort of pattern is characteristic of most waves of accession, if with different degrees of clarity and of course at different levels of overall support. It has been suggested that there is growing diversity in national reactions to the EU, but we find little sign of this.

In looking to explain these variations we find that utilitarian considerations matter. Direct utilitarian benefits in terms of trade and transfer payments are associated with variation, as are changes in national economic performance, with the EU seemingly rewarded for good times. We have looked closely at various groups of EU members after each accession wave, and this finding is quite consistent across these groups, although there are differences: transfer payments, in particular, are more important in the larger groups and the effect of socialization is much clearer for the EU 6 group of countries than any other.
The Legitimacy of the European Union after Enlargement

If we look at this cyclical pattern in the light of our model, we see clearly that the model predicts just this cycle of surge and decline, which peaked in 1991 around the time of Maastricht and reached a trough in 1996, only to rise again to reach another peak on the eve of the 2004 accessions. Our model predicts just such a pattern, although the first peak is 1990 and the trough is in 1995. As is typical of such models, the hills and valleys of our predicted cycle are also less distinct than are those in the real world. Perhaps other sources of explanation, and other variables, can better match the real terrain, but the performance of this very simple, purely utilitarian, model is quite impressive at an aggregate level.

We have seen that the parameters of the model are fairly stable across the different waves of accession. At this lower level of aggregation, within each accession wave, the performance of the model is also fairly consistent, at least to the extent of reflecting the general trend of support – up, down, or pretty flat – in each of those groups. What is not explained are the sudden increases in negative perceptions following entry in the wave 3 countries – Sweden, Finland, and Austria. The predicted trend was an upward one, a trend visible in the data in Figure 7.3 only if the first entries are discounted. The equally sharp increases in support in the first couple of years of membership of the wave 2 countries are also remarkable and not captured in our model, although the broad upward trend in our predicted model is consistent with the trends in Figure 7.3.

There are perhaps only two countries where the pattern is clear and is not consistent with our utilitarian model. One is the Netherlands, where the gradual disenchantment with the benefits of membership since the early 1990s is not reflected in the underlying material changes. A more striking expectation, and the most striking negative result in our analysis, is the case of the UK. There, support has fallen since the early 1980s, and fallen sharply from the relative heights achieved in the early 1990s. Predictions from our model suggest support should have risen steadily, rather than fallen steadily from around 1993.

Leaving the special case of the UK aside, the model is quite consistent across member subgroups, but given the huge changes that have taken place with the EU since 1983 when this series of measures started, it would hardly be surprising if the models were unstable across the time period as a whole. In particular, the growing interventions in macroeconomic freedoms that date from the early 1990s might well increase differences between countries, while the growing scope of EU policy making could lead to more negative reactions based on non-utilitarian considerations. However, while we find limited evidence of the existence of two distinct
Policy Performance and Support for European Integration

periods in EU (before and after 1993), the utilitarian explanation of support seems to remain stable in time, a result that runs counter to the recent findings of Eichenberg and Dalton (2007).

We find more stability over time and, when it comes to national economic indicators, a different set of significant effects than some previous studies have found. It is obvious that more work needs to be done to resolve some of the inconsistencies in results from different analyses. Moreover, as discussed in the introductory chapter, while outputs should contribute initially to what Easton called ‘specific’ support, they could also – in time– encourage diffuse support, a supposition behind the neo-functionalist interpretation of EU development. The next two chapters investigate this argument further analysing the spill-over effect from output support to support for institutions and to support for the community.

Notes

1. Here we designate four enlargement waves as follows: 1st wave (Ireland, Denmark, the UK), 2nd wave (Greece, Portugal, Spain), 3rd wave (Austria, Finland, Sweden), and 4th wave (Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia).
2. The question asked by Eurobarometer in these countries before accession concerns ‘advantage’ rather than ‘benefit’ perception. See discussion in the next section for more details.
3. We thank Cees van der Eijk for pointing this out to us.
4. Such models are usually referred to as fixed effects models.
5. See Technical Appendix for details.
6. It seems that the weaker fit for EU 9 group of countries is due to weakness of socialization in that group, and to a particularly poor fit for one country: Ireland.
7. See Technical Appendix for details.
## APPENDIX: 1 CHAPTER 7

### EU25 IN-SAMPLE DATA SUMMARY

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min.</th>
<th>Max.</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>0.5608</td>
<td>0.1537</td>
<td>0.1442</td>
<td>0.8701</td>
<td>N = 313</td>
</tr>
<tr>
<td>Between</td>
<td>0.1307</td>
<td>0.2575</td>
<td>0.8022</td>
<td></td>
<td>n = 25</td>
</tr>
<tr>
<td>Within</td>
<td>0.0713</td>
<td>0.2370</td>
<td>0.7881</td>
<td></td>
<td>Mean t = 12.52</td>
</tr>
<tr>
<td>Inflation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>3.6114</td>
<td>3.3809</td>
<td>-0.7078</td>
<td>23.0211</td>
<td>N = 313</td>
</tr>
<tr>
<td>Between</td>
<td>2.0664</td>
<td>1.0962</td>
<td>10.7123</td>
<td></td>
<td>n = 25</td>
</tr>
<tr>
<td>Within</td>
<td>2.4617</td>
<td>-4.4641</td>
<td>15.9202</td>
<td></td>
<td>Mean t = 12.52</td>
</tr>
<tr>
<td>Unemployment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>8.5804</td>
<td>4.1016</td>
<td>1.5000</td>
<td>23.9000</td>
<td>N = 313</td>
</tr>
<tr>
<td>Between</td>
<td>3.8460</td>
<td>2.6682</td>
<td>18.3500</td>
<td></td>
<td>n = 25</td>
</tr>
<tr>
<td>Within</td>
<td>2.3592</td>
<td>0.7954</td>
<td>16.0304</td>
<td></td>
<td>Mean t = 12.52</td>
</tr>
<tr>
<td>Transfers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>0.0077</td>
<td>0.0159</td>
<td>-0.0100</td>
<td>0.0624</td>
<td>N = 313</td>
</tr>
<tr>
<td>Between</td>
<td>0.0114</td>
<td>-0.0055</td>
<td>0.0331</td>
<td></td>
<td>n = 25</td>
</tr>
<tr>
<td>Within</td>
<td>0.0087</td>
<td>-0.0262</td>
<td>0.0463</td>
<td></td>
<td>Mean t = 12.52</td>
</tr>
<tr>
<td>Trade</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>0.6642</td>
<td>0.0787</td>
<td>0.4962</td>
<td>0.8568</td>
<td>N = 313</td>
</tr>
<tr>
<td>Between</td>
<td>0.0783</td>
<td>0.5443</td>
<td>0.8280</td>
<td></td>
<td>n = 25</td>
</tr>
<tr>
<td>Within</td>
<td>0.0330</td>
<td>0.5641</td>
<td>0.7440</td>
<td></td>
<td>Mean t = 12.52</td>
</tr>
<tr>
<td>Log(income)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>9.9204</td>
<td>0.3764</td>
<td>8.9807</td>
<td>11.2195</td>
<td>N = 313</td>
</tr>
<tr>
<td>Between</td>
<td>0.2478</td>
<td>9.4597</td>
<td>10.4606</td>
<td></td>
<td>N = 25</td>
</tr>
<tr>
<td>Within</td>
<td>0.2950</td>
<td>9.0855</td>
<td>10.7461</td>
<td></td>
<td>Mean t = 12.52</td>
</tr>
<tr>
<td>Socialization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>2.8212</td>
<td>1.0523</td>
<td>0.0000</td>
<td>3.8918</td>
<td>N = 313</td>
</tr>
<tr>
<td>Between</td>
<td>1.4004</td>
<td>0.3466</td>
<td>3.6367</td>
<td></td>
<td>n = 25</td>
</tr>
<tr>
<td>Within</td>
<td>0.4377</td>
<td>0.7044</td>
<td>3.7001</td>
<td></td>
<td>Mean t = 12.52</td>
</tr>
<tr>
<td>EU feeling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>0.5490</td>
<td>0.1120</td>
<td>0.2754</td>
<td>0.9257</td>
<td>N = 313</td>
</tr>
<tr>
<td>Between</td>
<td>0.0935</td>
<td>0.3838</td>
<td>0.6923</td>
<td></td>
<td>n = 25</td>
</tr>
<tr>
<td>Within</td>
<td>0.0603</td>
<td>0.3894</td>
<td>0.8359</td>
<td></td>
<td>Mean t = 12.52</td>
</tr>
</tbody>
</table>
APPENDIX 2: CHAPTER 7

It has now become customary in political science to use the Beck and Katz (1995) panel corrected standard errors (PCSE) method estimating models with time-series cross-section (TSCS) structure. Quite often researchers use PCSE without giving a second thought to underlying assumptions or justifying their estimation method theoretically. Simple citation of the Beck and Katz 1995 article seems to suffice. Neil Beck half-jokingly suggests that P in PCSE has become understood to stand for Panacea and not Panel (Beck 2007). Practical researchers have been repeatedly warned against using PCSE method as a quick fix in TSCS models (Beck and Katz 1995, 1996, 2004). Recent analysis of published work in leading political science journals presented in Wilson and Butler (2007) shows that only a relative minority heeded to Beck and Katz’s cautionary note. Hence, not to appear in Wilson and Butler’s ‘naughty’ list for Christmas, in this Technical Appendix we go through several methodological and theoretical considerations justifying our choice of estimation method.

A first consideration that was contemplated for estimation of the model is our specification of the model as a fixed effects model. In such models the set of independent variables is essentially the variation around national means. Because it is a fixed effects model, the assumption is that the relationships between dependent and independent variables are the same for each country. We tested the fixed effects assumption of the model against random effects model (a possible alternative) using the Hausman test, and the general validity of fixed effects using standard F-test. Both tests support estimation of the model through a fixed effects specification.

A second consideration is whether the series themselves are stationary or not, as performing standard regression analysis on non-stationary series produces spurious results (Greene 2003). When a dependent variable and a covariate follow a random walk (that is, the series are not stationary), Granger and Newbold (1974) showed that the usual t-statistics from standard regression technique (OLS regression) provide spurious results. We tested the data for the presence of unit roots, but found no significant sign of unit root processes in our data. We used a Fisher’s test, proposed in Maddala and Wu (1999), which combines p-values from independent unit-root tests for each panel. It is based on p-values of individual Augmented Dickey-Fuller unit root tests (Dickey and Fuller 1979) and assumes that all series are non-stationary under the null hypothesis with the alternative hypothesis being
that at least one series in the panel is stationary. The test has also been suggested as
a preferred choice in case of cross-sectional correlation, when standard alternatives
(the Levin-Lin and Im-Pesaran-Shin tests) are invalid (Maddala and Wu 1999). We
tested different alternative specifications of the test (with and without the trend)
but the results are unchanged.

A third consideration is how far there is spatial correlation within our panels,
something that would bias our standard errors if we ignored it. Our discussion in
the second section gives reason to expect some spatial correlation. Under the
assumption that cross-sectional dependence is caused by unobserved common
factors, uncorrelated with included covariates, the effect would be translated
through the disturbance term. In that case, cross-sectional correlation is the aver-
age absolute value of the off-diagonal elements of the cross-sectional correlation
matrix of residuals (De Hoyos and Sarafidis 2006). Estimates of cross-sectional
correlation in our data range between 0.24 in the original six countries (the same
for accession waves 1 and 2), 0.26 in wave 3, 0.42 in wave 4, 0.34 in EU 9, 0.374 in
EU 12, 0.409 in EU 15, and 0.421 in EU 25. This is a descriptive and intuitive result
rather than a useable test statistic. We cannot resort to any spatial dependence
statistical tests due to the particular structure of our data (N/T ratio) and generally
small sample size. However, cross-sectional correlation results appear to be high
enough to suggest that cross-sectional dependence may be present in our data to a
degree of affecting the estimation results.

The effect of cross-sectional dependence depends heavily on the magnitude of
cross-panel correlation and the nature of dependence. However, typically standard
fixed- and random-effects estimators remain consistent, but inefficient, and esti-
mated standard errors are biased (Baltagi 2005). In particular, Beck and Katz (1995)
showed that, in the presence of group-wise heteroskedasticity and cross-sectional
and temporal correlation, which is a standard situation in time-series cross-section
models, regular assumptions about the error-term are violated, and models esti-
mated by feasible generalized least squares (standard approach in such circumstan-
ces) in finite panels produce overly optimistic results (anti-conservative), with
standard errors usually biased downwards. Beck and Katz (1995) propose a correc-
tion for two of these problems – groupwise heteroskedasticity and contemporan-
eous correlation of the disturbances – in their PCSE methodology.

We tested for the presence of temporal correlation in our data using the Arellano–
Bond test (Arellano and Bond 1991) and the Wooldridge test for serial correlation
in the errors of a linear panel-data model (Wooldridge 2002). These tests suggest
that autocorrelation features in our data. The PCSE approach does not correct for
autocorrelation, requiring it to be corrected before applying PCSE, but neither does
it account for temporal heteroskedasticity (another persistent feature in time-series
data and present in our data here) (Beck and Katz 2004; Kittel and Winner 2005).

One popular way to account for autocorrelation is by including lagged dependent
variables (LDV) among the covariates in PCSE estimation model (Wilson and But-
lar 2007). However, if autocorrelation is persistent after the inclusion of LDV the
Appendix

coefficient estimates are biased (Beck and Katz 1996; Wilson and Butler 2007). From
the theoretical point of view, we believe that including lagged popular perception of
the EU benefits (LDV) is not justified in our model. Moreover, tests for autocorrelation
in PCSE estimation of our model with LDV included among covariates point to
remaining autocorrelation, potentially biasing coefficient estimates.

Taking into account considerations discussed above, and the fact that we are
interested above all in the temporal component of the model, we opt for a fixed
effects model estimated by ordinary least squares with Driscoll and Kraay (1998)
standard errors. Driscoll and Kraay (1998) proposed a nonparametric covariance
matrix estimator, which produces heteroskedasticity and autocorrelation consist-
ent (HAC) standard errors that are robust to general forms of temporal and spatial
dependence. Furthermore, Driscoll and Kraay (1998) show with evidence from
Monte Carlo experiments that their estimator is independent of the cross-sectional
dimension of the data, which is particularly important to political scientists usually
operating with finite samples. Hoechle (2006), who adopted the estimator for use
with unbalanced panels, shows that in the presence of spatial correlation, which
we suspect exists in our data, the Driscoll–Kraay estimator performs much better
than standard existing estimators. Generally, Driscoll and Kraay (1998) apply
Newey and West (1987) HAC correction to a sequence of cross-averages of the
moment conditions (Hoechle 2006). Here we use the default lag length of two,
which is the first step in Newey and West (1994).

Regarding our tests of structural stability of the model, we create dummy vari-
ables for two periods (1984–93 and 1994–2005) and interactions of these period
dummies with all our covariates. We estimate a general model, which includes all
our covariates for full-time sample and interactions for a second sub-sample (this is
more numerically stable than estimating a model with interactions for both sub-
samples). This fully interacted model is fitted for our consistent spatial sub-samples
(i.e. groups of EU member states after each accession wave: EU 6, EU 9, EU 12, EU
15, EU 25). We then conduct a Wald test for a linear hypothesis that parameters in
the second temporal sub-sample equal the first sub-sample. This test is equivalent
to a Chow test for structural break.

Note

1. For an overview see Anselin (2001).

Author Queries

[AQ1] Please update ref citation.
[AQ2] Not listed, please check.