



No.45 / November 2004

Who Is in Favour of Enlargement?
Determinants of Support for EU Membership in the
Candidate Countries' Referenda

Orla Doyle
IIS, Trinity College

Jan Fidrmuc
Brunel University



IIS Discussion Paper No. 45

**Who Is in Favour of Enlargement?
Determinants of Support for EU Membership in the
Candidate Countries' Referenda**

**Orla Doyle
Jan Fidrmuc**

Disclaimer

Any opinions expressed here are those of the author(s) and not those of the IIS.
All works posted here are owned and copyrighted by the author(s).
Papers may only be downloaded for personal use only.

Who Is in Favour of Enlargement?

Determinants of Support for EU Membership in the Candidate Countries' Referenda[∇]

Orla Doyle^{*} and Jan Fidrmuc^{**}

November 2004

Abstract

This paper investigates both the macro and micro determinants of EU support as expressed in the 2003 referenda on EU membership and the 2002 Candidate Countries Eurobarometer survey data. It is found that favourable individual and regional characteristics, i.e., the “winners” of the transition process, are positively correlated with support for accession and voter participation. In contrast, those who should benefit from future EU transfers, i.e., the “losers” of the process, are less likely to vote and/or support EU membership. It is therefore argued that voters in the new member states assign greater weight on future benefits from liberalization and integration than on potential gains through redistribution.

[∇] Prepared for the ZEI/WDI conference on *Political Economy of Transition: Job Creation and Job Destruction*, held at ZEI, Bonn on August 15-16, 2003. We are grateful to Tilman Brück, Victor Ginsburgh, Jurek Konieczny, Amie Kreppel, and Abdul Noury, participants in the ZEI/WDI conference and in seminars at ECARES, ZEI, and DIW Berlin for many helpful comments and suggestions. We are indebted to Peter Huber and Mihails Hazans for help with collecting regional data on economic characteristics in the candidate countries, and to Robert Manchin of The Gallup Organisation Europe for giving us access to the Candidate Countries' Eurobarometer survey data. Orla Doyle was a Government of Ireland scholar funded by the Irish Research Council for the Humanities and Social Sciences, in IIS Trinity College, while this research was being carried out.

^{*}Institute for the Study of Social Change (ISSC), University College Dublin, Ireland Email: orla.doyle@ucd.ie

^{**} Corresponding author. Brunel Univeristy; ECARES, Université Libre de Bruxelles; ZEI, University of Bonn; CEPR, London; and WDI, University of Michigan. Contact information: Brunel Univeristy, Uxbridge UB8 3PH, United Kingdom. Email: Jan.Fidrmuc@brunel.ac.uk. Phone: +44-1895-266-528, Fax: +44-1895-203-384.

1 Introduction

It seems indisputable that the enlargement of the European Union, which occurred on May 1st 2004, will be vastly beneficial for the ten new member states from Central and Eastern Europe and the Mediterranean.¹ Yet, when nine prospective entrants held referenda on accession during the course of Spring and Summer 2003,² it transpired that EU membership was not always an easy sell. While all of the referenda eventually resulted in the approval of accession, this positive outcome came on the back of low participation rates. In Poland and Slovakia, for example, participation barely exceeded the legally mandated threshold of 50% required to make the outcome valid.³ It is also interesting to note that only in two countries (Lithuania and Slovenia) did EU membership enjoy the support of more than half of all eligible voters.⁴ Indeed, opinion poll results suggest that the most enthusiastic European are the citizens of those countries that, to date, have not been offered EU membership: Bulgaria, Romania and Turkey.

These observations show that despite the positive final outcome of the referenda, support for EU membership is not universally shared within the new member countries. The consequences of accession are likely to diverge across various socio-economic groups, with some gaining and others losing. Therefore, assuming voters are prospectively oriented and thus take their future well being into account when casting their vote, the extent of support for EU membership should reflect the distribution of expected gains and losses.⁵ In order to gain insights into the factors that shape support for the ultimate economic reform, i.e., EU membership, this paper analyses voting behaviour in the accession referenda utilising two previously untapped

¹ Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia joined the EU on 1st May 2004. Bulgaria and Romania are tentatively scheduled to become members as of 2007, while no accession date has been set for Turkey.

² Cyprus approved the accession in the legislature, thus being the only candidate country that did not hold a referendum.

³ No such threshold was in effect in the Czech Republic, whereas Hungary required either at least 50% participation or an affirmative vote by at least 25% of eligible voters.

⁴ In the presence of minimum turnout requirements, non-participation can indicate either indifference or strategic considerations, whereby one abstains in the hope of driving the participation rate below the legally mandated threshold.

⁵ An alternative explanation for the low turnout rates is that voters used the accession referendum to express their discontent with the current government. However, if membership in the EU is going to be largely beneficial for most voters, forgoing these gains seems a high price for sending a message to the incumbent government.

data sources. First, the actual referenda results at the regional level in seven candidate countries are considered: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland and Slovakia. Second, this analysis is complemented with individual data on voting intentions in the EU referendum from the March/April 2002 Candidate Countries Eurobarometer (CCEB) survey covering all 13 candidate countries.

Accession will affect the citizens of the new member countries in at least two distinct ways.⁶ As previous studies (e.g., Gabel, 1998, 2000) have shown that utilitarian considerations are one of the most important determinants of support for the EU, this paper focuses on the economic repercussions of membership, thus omitting political and emotional considerations, such as the dilution or loss of national identity, etc. First, the new members can take full advantage of economic integration within the European Single Market, bringing with it the free movement of goods, capital and – albeit with a lag of up to seven years – labour. While this opens up important opportunities for the new entrants, it also brings considerable challenges (e.g., increased competitive pressure and more stringent EU regulations). Second, as the new members are relatively poor compared to the EU-15 states, stricken with high unemployment and, in some cases, large agricultural sectors, they should benefit from redistribution within the EU channelled through the Structural and Cohesion funds and the Common Agricultural Policy (CAP).

As the candidate countries display considerable economic disparities both at the individual and regional level, the variation in expected net gains from accession among individuals and regions should be considerable. An individual's expected net gain from EU membership, should to a large extent, depend on his individual characteristics such as age, education, employment or current income. In addition, as regions differ in their underlying economic structure, the regional repercussions of accession will also be uneven – a region predominantly oriented towards agriculture or heavy industry, for instance, will fare differently from one dominated by service industries. As a large part of EU spending is explicitly linked to regional characteristics such as average per-capita income or unemployment, individual regions' entitlement to transfers from the EU will differ substantially. This paper

⁶ A number of recent studies have assessed the expected benefits of EU membership using sophisticated modelling techniques (see for example Baldwin, Francois and Portes, 1997; Breuss, 2001; and Lejour, de Mooij and Nahuis, 2001; and DIW, 2002).

explicitly controls for these kinds of effects in order to assess their impact on support for EU membership.

As previous research has shown (e.g., Doyle and Fidrmuc, 2003) the outcome of the economic reform process affected different socio-economic groups and regions in diverging ways, with some groups gaining and other losing. Such studies find that the “winners” of the transition process are generally young well-educated individuals, who can take advantage of the new opportunities available in the market economy. The “losers”, conversely, are those possessing human capital characteristics that may be outdated in a market economy and find it difficult to adjust to the new environment e.g., elderly blue-collar workers with little education. Typically, the winners of the transition process tend to support the continuation of reforms, while the losers oppose them. This paper therefore extends this analysis by examining support for the pinnacle of the transition process - membership to the European Union. It is likely therefore, that support for EU membership may follow a similar pattern.

This paper differs from related literature in two ways. First, while support for the EU has attracted considerable attention in the academic literature, most previous studies have been limited to considering the current EU members (see Gabel and Palmer, 1995; Gabel and Whitten, 1997, and the references therein). Second, those few studies that do analyse support for EU membership in the candidate countries typically rely on individual survey data which was collected in the early to mid 1990s: the Central and Eastern Eurobarometer, commissioned by the European Commission and discontinued in 1998 (see Tucker, Pacek and Berinsky, 2002; Tverdova and Anderson, 2003; and Kemmerling, 2003). These analyses are based on respondents’ statements about their intended voting in a referendum on EU membership and support for the EU. However, given the time lag between these surveys and the actual referenda, which only took place in 2003, the respondents’ opinions might have been different had the prospect of membership been more tangible.

This analysis, in contrast, uses both actual (regional) results of the referenda, and individual survey data from the recently reinstated Candidate Countries’ Eurobarometer, collected in Spring 2002, approximately one year before the actual referenda took place. The only other study to use the actual referenda results is Markowski and Tucker (2003), who similarly use opinion-poll data and actual regional results in their analysis of Poland. Finally, much of the previous literature, whether on current members or the candidate countries, relies on various attitudinal

variables (in addition to socio-economic characteristics) such as the respondents' ideological identification, political opinions, or their attitude towards the EU to explain support for integration. These studies find that respondents who expect their country to benefit from accession to the EU intend to vote in favour of membership. One potential problem with using such attitudinal variables to explain vote choice is that it is difficult to disentangle the endogeneity between the two variables. Previous studies (Wleizen, Franklin and Twiggs, 1996; and Doyle, 2004) find that attitudinal variables are often influenced by vote choice and one's socio-economic characteristics.

Therefore, to avoid such endogeneity problems, this analysis refrains from using attitudinal variables and instead concentrate exclusively on the respondents' socio-economic characteristics. As political opinions and attitudes reflect one's age, education, economic well-being and social class, focusing on such characteristics tells us more about the primary determinants of voting behaviour. Moreover, identifying the trigger factors that underlie support for EU membership is important if one seeks to understand how changes in objective economic conditions impact support for EU membership (for instance, a permanent change in a respondent's employment status or income may translate into simultaneous changes in her political attitudes and support for the EU).

The following section briefly reviews the history of this recent enlargement. Section 3 discusses the likely gains and losses associated with accession to the EU. Section 4 introduces the data used in the analysis and sections 5 and 6 present the empirical findings. Finally, the last section discusses the results and derives some conclusions.

2 History of the 5th Enlargement

On May 1st 2004 the EU experienced its fifth and most ambitious enlargement to date, as it incorporated eight Central and East European (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia) and two Mediterranean countries (Malta and Cyprus). Bulgaria and Romania are set to join in 2007. This enlargement symbolically began in 1989 after the break-up of the Soviet block, when the EU declared that it would welcome the countries of Central and Eastern Europe to

join the Union. However, it was not until the Copenhagen European Council in 1993 that this invitation was officially issued, on the condition that the countries could join once they satisfied the political and economic conditions necessary for membership and implemented the *acquis communautaire* (i.e., the body of EU norms and regulations). In the meantime, the EU gradually removed long-standing import quotas, extended the Generalized System of Preferences, concluded Trade and Co-operation Agreements with several of the post-communist countries and created the PHARE Program which provided financial aid to help the transition to a market economy (EUROPA, 2003). Throughout the 1990's the Association Agreements, also known as the Europe Agreements, established the legal basis for bilateral relations between the EU and the potential candidate countries. A significant outcome of these Agreements was the creation a free trade area for most industrial goods between the EU and the candidate countries.

It was not until March 1998 that the accession negotiations actually began with six of the applicant countries (Czech Republic, Estonia, Hungary, Poland, Slovenia and Cyprus), otherwise known as the first-wave applicants. In October 1999, the negotiations were extended to include Slovakia, Latvia, Lithuania, Romania, Bulgaria and Malta. By December 2002 accession negotiations were closed and in April 2003 Treaties of Accession were signed with the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, Slovenia, Malta and Cyprus. Nine of these countries held referenda in the course of 2003 to formally ask their citizens if they wish to become members of the Union, while Cyprus put the decision to the legislature. All of the referenda delivered an affirmative decision. Once the current EU members ratified the Accession Treaties, all ten acceding countries became full members of the EU in May 2004, in time to participate in the June 2004 European Parliamentary elections and in the next Inter-Governmental Conference.

3 Benefits and Costs of EU Membership

EU membership can be thought of affecting the citizens of the new member states through at least two distinct channels: economic integration and redistribution. These two channels are likely to have different implications for various socio-economic groups. By observing how specific individual and regional characteristics correlate

with voting behaviour, one can make inferences about the expected impact of enlargement on individuals or regions possessing those characteristics.

First, accession to the EU allows the new member countries to participate in the European Single Economic Market with its free and unhindered movement of commodities, capital and labour (however, labour flows will be subject to a transitional period of up to seven years). This opens up new opportunities in the areas of trade, investment and employment for firms and individuals from the new members.⁷ EU membership also makes it easier for citizens of the acceding countries to travel, live and study in the current EU countries. However, accession to the European Single Market also translates into more intense competitive pressure and may thus prove costly for those industries that are not internationally competitive or that currently enjoy relatively high protection against imports (the most notable case of the latter being agricultural producers). EU membership will subject the new members to EU norms and regulations in matters such as environmental protection, quality standards and safety norms, which may necessitate costly adjustment in some industries. In addition, upon membership, the new states also adopt the EU's Common External Tariff (CET) on imports from third countries. The potential benefits from this however, depend on the countries current import tariff rates. Finally, the entrants also benefit from accelerated economic and institutional reforms. The prospect of EU membership provided an important incentive for reform, and the EU offered direct support and guidance for reform measures in the prospective members. EU membership also promotes increased economic and political stability (Baldwin, François and Portes, 1997) by dramatically reducing economic uncertainty in the new member countries, resulting in lower interest rates and higher investment. Additionally, the new entrants are committed to entering the EMU in due course.

Classical trade theory, building on the Heckscher-Ohlin model, suggest that when two regions integrate, the return to a factor of production rises in the region where that factor is relatively abundant and falls where it is scarce. Thus, it is expected that labour in the new member states may benefit from entry to the EU whereas labour in the old members may lose out. In contrast, capital owners in the old members should gain whereas those in the new members should lose. Inasmuch as the

⁷ Detailed analyses of the implications of this enlargement for the current and new members are presented, *inter alii*, by Baldwin, François and Portes (1997); Breuss (2001, 2002); Lejour, de Mooij and Nahuis (2001); Boeri *et al.* (2002); Heijdra, Keuschnig and Kohler (2002); and DIW (2002).

EU-15 and new members differ in terms of skill levels of their respective labour forces, enlargement will also have repercussions for the skill premium.⁸ Typically, it is assumed that skilled labour in developed countries and unskilled labour in developing countries benefit from integration. The new member states however, differ from developing countries by having relatively highly skilled labour, just as the old members. Therefore, EU accession may also benefit skilled labour in the new members, especially if it leads to Foreign Direct Investment (FDI) inflows into skill-intensive industries and/or if skilled workers are able to seek employment in the EU-15 members.

In summary, integration is likely to have important and uneven repercussions for different socio-economic groups. Nevertheless, it is not straightforward enough to enable a-priori predictions to be made as to which groups will gain and which will lose, as the repercussions of integration crucially hinge on the relative competitiveness of firms and relative factor endowments in the current and the new members.

3.2 Redistribution

The new members will be included in the EU-wide system of redistribution including the Structural and Cohesion funds and the Common Agricultural Policy (CAP). Eligibility for transfers from Structural and Cohesion funds is directly related to the countries' and regions' level of economic development.⁹ The bulk of Structural Funds goes to Objective 1 regions (approximately two thirds of funds), defined as those with per capita GDP below 75% of the union-wide average, and Objective 2 regions (accounting for about one-tenth of regional aid), defined as those with above average unemployment rate and industrial employment, and experiencing a decline in industrial employment. Transfers from the Structural Funds are disbursed at the regional level and are channelled mainly into projects that build up the productive capacity of regions, such as infrastructure improvements and small and medium enterprise development. Given the eligibility criteria, most of the new members' regions easily qualify for funding under Objective 1 or 2 or both. Eligibility for transfers from the Cohesion Fund is also determined according to per capita income: countries that are below 90% of the EU average GDP qualify. These transfers are

⁸ See O'Rourke and Sinnott (2001), for a detailed discussion.

⁹ Section 3.2 of Boldrin and Canova (2001) gives a detailed description of the various instruments of EU regional policy. Unless stated otherwise, the following discussion draws on their analysis.

allocated at the national level, in contrast to the Structural Funds, and are mainly designated for large public investment projects. Again, all new member states meet the eligibility criterion in the enlarged EU.

The ability of the new members to fully benefit from EU transfers however, will be limited, at least initially, due to recently agreed reforms and transitional arrangements. In particular, the European Council in Berlin decided that the previously-agreed EU budget for 2000-06 will not be extended to finance this enlargement and only modest transfers will be made to the acceding countries up until 2006. Thus, the new members receipts from the EU budget will amount on average to 1% of their GDP in 2004, rising to 1.5% by 2006 (11 and 16 billion euro, respectively, according to Barysch, 2003).¹⁰ Moreover, EU transfers might, at least partially, displace any assistance that the depressed regions are receiving from their national governments at present (Vlachos, 2003, makes this argument with respect to Swedish regions' potential benefits and costs from their country's EU entry).

A particularly controversial issue in regards the costs and benefits of enlargement is the application of the Common Agricultural Policy to the new members. The European Commission decided in January 2002 that the 10 acceding countries would only receive one quarter of the subsidies paid to existing member states initially. This effectively implies that while agricultural markets in the new members are opened to competition from the current EU members, farmers in the new member countries do not enjoy the same level of subsidies as their competitors. Their agricultural markets, however, are protected from imports from third countries.

In summary, the new members can expect to be net recipients of transfers from the EU budget. Since a large part of EU funds are disbursed directly to regions or even individual recipients (as is the case with the CAP), underdeveloped, poor, over-industrialized and/or agricultural regions should benefit more than others. The remainder of the paper studies how these potential gains translate into both voting intentions and behaviour in the candidate countries' referenda on EU membership.

¹⁰ These figures, however, combine receipts from Structural and Cohesion Funds with the CAP.

4 Data

The empirical analysis utilises two previously untapped data sources: actual referenda results at the regional level, and survey data on intended voting in a future referendum on EU membership. The regional analysis is performed for seven countries: Czech Republic, Estonia, Latvia, Lithuania, Hungary, Slovakia and Poland (for the two remaining countries, Malta and Slovenia, either the regional referenda results or the corresponding socio-economic indicators were not available). The analysis with the individual data is based on the March/April 2002 Candidate Countries Eurobarometer (CCEB) opinion poll commissioned by the European Commission and carried out by Gallup Europe in all 13 candidate countries (i.e., also including Bulgaria, Romania and Turkey, in addition to the ten new members). The CCEB survey includes the responses of 14,163 individuals and contains extensive information on their socio-economic characteristics, in addition to their intended vote in the referendum on EU membership. The data set contains approximately 1,000 respondents per country, except for Cyprus and Malta with 500 respondents each and Poland and Turkey with 2,000 each. The surveys were carried out by means of face-to-face interviews and are representative at the national level.¹¹

Table 1 reports the support for EU membership as measured by the CCEB survey. While supporters of accession are the largest group in every country, several of the new member countries – the Baltics, Czech Republic, Malta, Poland and Slovenia – appear rather unenthusiastic about EU membership, with those in favour of membership accounting for 50% or less of all respondents. Ironically, the countries that were not invited to participate in the next enlargement – Bulgaria, Romania and Turkey – show particularly high support for EU membership. Clearly, the low share of supporters is not necessarily due to high opposition to membership but rather reflects the fact that by early 2002, a non-negligible part of respondents remained undecided (12% on average). Nonetheless, the outcomes of the ensuing referenda reveal a similar pattern of reserved enthusiasm as Table 2 demonstrates (for Cyprus, where no referendum on accession was held, the table reports the result of the latest available opinion poll). The referenda results show that in all countries except Malta, a resounding majority of voters cast a vote in favour of their country's membership in

¹¹ Between one and two CCEB surveys were carried out per year since the Eurobarometer survey was extended to the candidate countries in 2001 but the primary data of these surveys so far have not been released publicly.

the EU. However, again with the exception of Malta, high support for membership comes on the back of low participation rates. In fact, only in Lithuania and Slovenia did more than half of eligible voters endorse their country's EU membership. Low participation need not indicate indifference about the referendum's outcome. As all candidate countries, except the Czech Republic, had limits requiring a certain minimum participation (usually 50%)¹² for the referendum to be valid, not voting was just as effective (if not better) a strategy for an opponent of EU membership as voting against, especially when opinion polls conducted shortly before the vote predicted low turnouts. For example, had enough of those who opposed EU membership not voted, the turnout rates in Poland and Slovakia would have fallen below the 50% threshold. Thus, a voter who was opposed to accession was more likely to thwart the referendum by not participating than by voting against it.¹³

To ascertain how participation in the referenda on EU membership compares with participation in regular elections, the last column of Table 2 reports the turnout rates recorded in the most recent parliamentary election in each country. In three cases (Hungary, Slovakia and Slovenia) turnout was lower in the referendum than in the previous election by ten percentage points or more, while the opposite was the case for Poland. The remaining six countries are more or less equally split between those that had somewhat higher turnout rates in the referendum (Lithuania and Estonia) and those that experienced a small decline in turnout compared to the most recent election (Malta and the Czech Republic), with Latvia reporting almost no change. While strategic considerations may have contributed to low participation in some countries, this does not appear to be a generally shared phenomenon.

Table 3 presents summary statistics for the dependent variables in the regional analysis – the share of those who voted in favour of their country's membership in the EU, in addition to the turnout rate. The analysis is carried out at the level of districts (the so-called *okresy* in the Czech Republic and Slovakia, *maakond* in Estonia, *rajons* in Latvia and Lithuania, *megye* in Hungary and *powiat* in Poland), with 77 observations for the Czech Republic, 16 in Estonia, 33 in Latvia, 60 in Lithuania, 20

¹² In Hungary, while the turnout fell short of the 50% required threshold, the result was nonetheless valid according with Hungarian law as more than one-quarter of the electorate voted Yes. The Czech Republic is the only country which did not require a 50% turnout or any other minimum participation in order for the referendum to be legally binding. Nonetheless, even there the 50% threshold was politically and psychologically important.

¹³ It is not clear what would have happened if any country had failed to receive popular endorsement for accession. Possible outcomes include submitting the decision to the parliament, repeating the referendum or staying out.

in Hungary, 79 in Slovakia and 373 in Poland. As the mean vote shares are computed as average values across regions, they differ somewhat from the national figures reported in Table 1. There is notably less regional variation in the Yes vote in the Czech Republic, Estonia, Slovakia, Lithuania and Hungary than in Poland and Latvia. In the case of Poland, this is due to relatively low support for EU membership in underdeveloped Eastern Poland, alongside the Ukrainian and Belorussian borders. In fact, all ten *powiats* with a majority vote against EU membership are located in Eastern Poland.¹⁴ Similarly in Latvia, five of the thirty-three *rajons*, which reported an overall majority vote against membership, are all (bar one) bordering either Russia or Belarus.¹⁵ None of the regions in the Czech Republic, Estonia, Lithuania, Slovakia or Hungary reported a majority vote against accession. In all seven countries, turnout displays considerable variation across regions; in the Czech Republic and Hungary, turnout varies much more than the Yes vote (the corresponding coefficients of variation are 6.9% for turnout vs 3.1% for the Yes vote in the Czech Republic and 11.1% and 2.3%, respectively, in Hungary).

Table 4 reports the summary statistics for the socio-economic indicators used to explain voting and turnout at the regional level.¹⁶ All seven countries report considerable regional variation in unemployment and wages. While unemployment is moderate in the Czech Republic and Hungary, it reaches double digits in Latvia, Estonia, Slovakia and Poland. Finally, Poland stands out among the new members as having a large share of employment in the agricultural sector.¹⁷

5 Regional Determinants of Support for EU Membership

As Tables 1, 2 and 3 illustrate support for EU membership, as revealed in the opinion polls and the actual referendum results, varies considerably across and also within countries. The variation in turnout is even greater. The first step in the analysis is to study the determinants of support for EU membership and turnout as reflected in the

¹⁴ These *powiats* were Janowski, Wysokomazowiecki, Skierniewicki, Siedlecki, Lomzynski, Losicki, Radzynski, Zamojski, Wegrowski and Lubelski.

¹⁵ These *rajons* were Daugavpils city, Daugavpils, Rezekne, Kraslavas and Ludzas.

¹⁶ Descriptive statistics for the individual-level analysis are omitted to save space. They are available from the authors upon request.

¹⁷ Table 4 reports simple, unweighted means of the various indicators. Nation-wide, nearly 20% of Polish employment is in agriculture.

regional results of the EU accession referenda. Both support for membership and turnout are analysed separately, as it is possible that those who opposed EU membership may have chosen not to vote, hoping that their abstention would be more effective in keeping the turnout below the legally mandated minimum threshold, thus rendering the result invalid. As the primary interest of this paper is to determine whether patterns of support can be generalised across the seven candidate countries and because each referendum was held with essentially the same underlying question, the regional data is pooled across all countries.¹⁸ The choice of explanatory variables for the pooled regressions is then dictated by the need to find the ‘smallest common denominator’ in terms of availability and comparability of data across countries. Therefore, both support for membership and turnout are regressed on regional unemployment rates, average wages and employment in the main branches of the economy: agriculture, industry (which also includes construction), and services (as the omitted category). All regressions also contain country dummies.

5.1 Pooled Regional Results

The results obtained concerning the support for EU membership are reported in Table 5, while those for participation are in Table 6. Four regression equations are reported in each table. First, support and participation are regressed on regional unemployment and average wage alone, then the shares of employment in agriculture and industry are added and finally, a dummy that distinguishes districts surrounding major urban centres in the Czech Republic, Hungary, Slovakia and Lithuania is added to the previous two regression specifications.¹⁹ This last dummy is included to distinguish suburban regions from other rural areas that may have similar economic conditions but are far away from major cities – residents of suburban regions often work in the nearby city and therefore their political preferences may be closer to those of urban dwellers rather than to those of rural residents.

¹⁸ Results of the country-by-country analysis, and results obtained with additional explanatory variables are available from the authors upon request

¹⁹ These urban centres are the following (with the corresponding suburban regions in parentheses): Prague (Prague East and West), Plzen (Plzen South and North and Rokycany), Brno (Brno-vicinity), Budapest (Pest), Bratislava (Malacky, Pezinok and Senec), Kosice (Kosice-vicinity), Alytus (Alytus-region), Kaunas (Kaunas-region), Klaipėda (Klaipėda-region) and Vilnius (Vilnius-region).

The results for support and participation are quite dissimilar, suggesting that different considerations were driving voting behaviour and participation in the referenda. The unemployment rate is positively related to support for EU membership (although it is only significant after the structure of employment is controlled for). In contrast, higher unemployment rates translate into lower participation in the referenda. The opposite holds for wages (although the estimated coefficients are at best marginally significant): they appear with a negative sign in the regressions for support and with a positive sign in those for participation. As discussed above, it is not clear whether lower turnout in high-unemployment and low wage regions (with the qualification that the results for wages are not highly significant) indicates indifference or opposition towards EU membership. Nevertheless, these results show that while depressed regions tend to have a significantly lower turnout rate, the voters who do cast their votes in these regions show greater support for EU membership – possibly in anticipation of membership improving their regions’ economic malaise.

The second columns show that when employment in the main sectors of the economy are added (except for Latvia and Lithuania for which comparable employment data is not available), the share of employment in agriculture is negatively correlated with support for EU membership and (along with the share of employment in industry) also with turnout. Thus, it appears that workers in these sectors fear they will lose out, or at least, do not expect to benefit as much from accession compared to the service sector (the omitted category). In particular, the negative impact of employment in agriculture on support for accession and turnout may also reflect fears concerning the opening up of the market for agricultural goods and disappointment with the low level of subsidies from the CAP that farmers in the new member countries will receive. Similarly, the negative coefficient obtained for industrial employment may be motivated by fears that membership in the EU will accelerate the downsizing of inefficient firms.

Suburban districts display higher support for membership and higher participation than regions with comparable economic conditions that are further away from major cities (however, the coefficient is only significant when the regressions include the employment variables). This suggests that economic conditions in the adjacent urban region (which tend to be more favourable than conditions in rural areas) have an important impact on suburban voters’ political preferences. Finally, the coefficients on country dummies are all strongly significant, both for support and

participation, indicating that there are important differences in support for EU membership across countries beyond those can be attributed to different objective economic conditions (at least as measured by the very basic indicators used in this analysis). Hungary, Slovakia and Lithuania display higher support for membership than the Czech Republic (the omitting category), while Poland, Estonia and Latvia display lower support. In regards turnout, the Estonians, Latvians and Lithuanians were more likely to turnout out to vote, than the Czechs, while the Polish, Hungarian and Slovaks were less likely to turnout to vote.

6 Individual Determinants of Support for EU Membership

The previous section found that support for membership was higher but turnout was lower in depressed regions. It also observed that both support for accession and turnout were lower in regions with a large share of employment in agriculture and industry. These results were obtained at an aggregate level – by analysing regional variation in support for membership and participation. While these results yield valuable insights for our understanding of pro-EU sentiment in the candidate countries, as they were obtained at the regional level, their extension to the individual-voter level is not straightforward. Therefore, this section extends this analysis by using data from the March/April 2002 CCEB survey.

6.1 Model 1: Determinants of Voting Intentions

The dependent variable in model 1 is based on responses to the following question: *“And if there were to be a referendum tomorrow on the question of (our country)’s membership, would you personally vote for or against it?”* The possible answers included: *“for”, “against”, and “I would not go to vote”*. As in the preceding section, both the support for EU membership and participation in the referendum are considered. As *“not going to vote”* was presented as one of the alternatives in parallel with voting for or against accession, the respondents’ choices are analysed jointly by means of a multinomial logit regression²⁰ (see Alvarez and Nagler, 1998, for a

²⁰ A Heckman Probit Selection model was also estimated, due to a possible selection bias, whereby voters could potential make two decisions- first, they must decide whether to vote or not and second, contingent on stage 1, they must then decide whether to vote Yes or No. However, both theoretically and empirically the Heckman Probit model was an inappropriate choice. First, given that the question

discussion of the applicability of different statistical methods to decisions situations with multiple choices). This method requires that one of the choices is designated as the base category, therefore, to make the interpretation of the coefficient estimates straightforward, “*voting against*” is designated as the base category.

A number of socio-economic variables are included among the explanatory variables: gender, marital status, age (including a quadratic term), number of children in the household, number of household members, dummies for education, occupation and place of residence (village, small town or city), respondents’ history of unemployment (number of unemployment spells over the past five years) and household income or standard of living. Concerning the latter, regressions estimated using self-reported well-being (rich, comfortable, average, getting along or poor, with rich/comfortable being the reference category) are reported. The results obtained with nationally based income quartiles and an indicator stating whether the respondent considers their household income higher than necessary, sufficient or insufficient to meet their household’s needs (insufficient income being the omitted category) are qualitatively very similar and therefore are not reported (they can be obtained from the author upon request). Finally, a number of dummy variables indicating the respondent’s country are also included in order to take account of country specific effects.

6.2 Results of Model 1

The results of model 1 are presented in Table 7. The first column presents the coefficient estimates for the probability of choosing “*voting in favour*” compared to “*voting against*”. The second column, similarly, reports the coefficient estimates characterising the probability of choosing “*not voting*” compared to “*voting against*”. In addition, as the coefficients in MNL models are difficult to interpret since they correspond to the relative effect of each independent variable on the log-odds ratio of a given party in comparison to the base category, the marginal effects are also reported beside the coefficient estimates.

asked in the survey was posed as a single question with 3 choices 1. Vote Yes, 2. Vote No, 3. Do Not Vote, the respondent had to make the decision simultaneously, not sequentially as modelled in a Heckman Probit. Second, due to the high number of parameters, the model would only converge when the majority of the explanatory variables were excluded.

In order to interpret how the various factors affect respondents' choices over the three alternative courses of action (voting in favour, voting against or not participating), one has to consider both sets of results jointly. Accordingly, women are less likely than men to participate in the referendum, whereas the opposite holds for married respondents. However, neither gender nor marital status is correlated with supporting membership among those who intend to vote. Older respondents are less likely to choose either voting in favour or abstaining, suggesting that age is correlated with the probability of voting against EU membership (the relationship is U-shaped, so that support and non-participation start increasing again once the respondent reaches 50 years of age). Higher education and being a student both increase the likelihood of participating and voting in favour of EU membership. Having a white-collar occupation, a higher standard of living (or higher income), and living in a town or city are all associated with higher support for accession but do not affect the choice between voting against or not participating. Current unemployment and having experienced two or more unemployment spells in the past have an opposite effect on participation, suggesting that unemployed respondents are more likely to participate, except for those who have a history of multiple past unemployment spells. Neither being currently unemployed nor having had unemployment spells in the past, however, affects the respondents' support for the EU (unemployment may lower support for accession indirectly because it lowers the respondents' well-being but does not appear to have an effect going beyond that). Farmers, finally, are less likely to cast a vote in favour of EU membership and, even more so, less likely to abstain, indicating that farmers are quite strongly opposed to entering the EU.

Even after controlling for individual characteristics, the country dummies remain strongly significant, indicating that there are important differences in attitudes towards the EU at the aggregate level. In particular, most countries, with the exception of Romania and Hungary, are less supportive of the accession than Bulgaria (which is the omitted country), with Malta, Estonia, Latvia and Slovenia appearing especially sceptical about accession. Interestingly, Turkey, which appeared strongly pro-EU (along with Bulgaria, Hungary and Romania) when reviewing aggregate numbers, turns out less enthusiastic about EU membership after individual characteristics are controlled for. It is interesting to note that Bulgaria, Hungary, Romania and Slovakia, which show relatively high rates of support for EU membership, have also higher rates of intended non-participation than the other countries. This indicates that the high

aggregate levels of support for EU membership in these countries may in fact disguise the fact the opponents of accession tend to choose non-participation rather than cast a negative vote.

6.3 Model 2: Attitudes towards the EU and Voting Intentions

Voters in any election are faced with two distinct decisions: they must first decide whether to participate or not and, second, they must choose how to cast their vote. The analysis so far could only investigate the attitudes towards EU membership for those respondents who indicated that they would participate in the referendum. This is dictated by the data, as the respondents who did not intend to vote (or were undecided) were not asked which outcome they would, nevertheless, prefer. It is possible, however, to obtain an insight into the preferences of abstainers by using a question that asks respondents whether they think their country will benefit from EU membership (*“Taking everything into consideration, would you say that (our country) could get advantages or not from being a member of the European Union?”*). Cross-tabulating responses to this question with those on intended voting indicates that voting intentions are indeed closely correlated with expectations on gains from membership: only approximately 5% of those who intend to vote in favour of accession think that their country could not gain from it; among those opposed to EU membership, 15% expect their country to gain nonetheless.

Respondents are therefore divided into four groups: (1) those who believe their country will not benefit from membership and do not intend to participate, (2) those who believe their country will not benefit from membership but intend to participate, (3) those who believe their country will benefit from membership but do not intend to participate, and (4) those who believe their country will benefit from membership and intend to participate. Again, a multinomial logit model is employed to analyse respondents’ decisions over multiple choices. The EU pessimistic respondents who intend to vote, i.e. 2, (this being the second largest category of the four) is designated as the base category. Regression results with income measured again by self-reported well-being are reported in Table 8.²¹

²¹ The results with the other two measures of income are qualitatively very similar and therefore are not reported here but can be obtained from the authors upon request.

6.4 Results of Model 2

The results for the EU optimists who intend to vote are similar to those obtained above for the Yes vote – not surprisingly, as the two regression equations are estimated over very similar supports. As before one should consider results across all three categories jointly to make proper inferences about attitudes towards the EU. Women are less likely to participate, however, there is little difference between those who are optimistic and those who are pessimistic about EU membership. Married respondents are less likely to be non-voting pessimists and, therefore, more likely to belong in any of the three remaining categories. Both of these results further refine the findings reported previously. The probability of being an optimist (voting or not) falls with age so that older people tend to be less enthusiastic about accession, but the effect again appears U-shaped, at least for those who intend to vote, and becomes positive after reaching approximately the age of 62 (a similar finding to the preceding paper). Students, those with university education and white-collar professionals are more likely to be optimists and cast their vote and less likely to be non-voting pessimists (i.e., education and skill are also positively correlated with overall participation). Again, farmers appear strongly sceptical about the entry into the EU. The pattern for subjective well-being is similar across all three categories: poorer respondents are less likely to belong to any category and thus are more likely to be pessimistic about accession and also participate in the referendum; this effect is particularly strong for the least affluent group. Finally, while current unemployment does not significantly affect any category, those who had been unemployed at least twice in the past are more likely to be optimistic about accession, but abstain from voting. Thus, while unemployment experience does not make people more pessimistic about EU membership, it does discourage them from voting in the referendum – a finding that is similar to the one obtained for unemployment in the regional analysis.

6.5 MNL and Tests of IIA

It is necessary to carry out both the Hausman and Small-Hsiao test in order to test whether the IIA assumption holds in the two MNL models. The results of both tests are reported in the appendix. Neither the Hausman test for Model 1 and Model 2 or the Small-Hsiao test for Model 1 reject the null hypothesis that IIA holds. However, the Small-Hsiao tests show that the IIA assumption is violated for model 2. This

suggests that the MNL results for model 2 should be interpreted with caution. The following section summarises and discusses the results.

7 Discussion

EU membership is widely expected to bring large gains to the ten countries that entered in May 2004. Yet, in recent opinion polls as well as in the referenda on accession that took place in the course of 2003, support for EU entry was far from overwhelming. In a number of cases (for example Malta, the Czech Republic and Estonia), it appeared conceivable beforehand that the referendum would not pass. Although all the referenda eventually resulted in an endorsement for accession, these high rates of support often disguised very low rates of voter turnout. In some countries (e.g., Poland and Slovakia), the turnouts barely exceeded the legally mandated 50% threshold that was required to make the vote binding.

This paper sheds some light on these developments by analysing the regional and individual determinants of support for accession and voters' participation in the referenda. It is argued that accession will affect the citizens of the new member countries in two ways: through efficiency gains and new economic opportunities arising from accession to the European Single Market, and by being included in the EU-wide system of redistribution via Structural and Cohesion funds and the Common Agricultural Policy. However, each effect will have different implications for the various socio-economic groups, with some gaining and others undoubtedly losing. By relating voting behaviour in the referenda or voting intentions as expressed in opinion polls, to regional and individual socio-economic characteristics, it is possible to identify the winners and losers of this EU enlargement.

The empirical results find that those with favourable and relatively flexible human capital tend to support EU membership. In particular, those with high education (or still in school), white-collar occupations, high income, young age and living in urban areas are more likely to participate in the accession referenda and vote in favour of EU membership. Similarly, regions with favourable economic conditions (low unemployment and high wages) display greater turnout (albeit not greater support). In contrast, and surprisingly, those who should in principle benefit from redistribution in the EU – the elderly, blue-collar workers, less educated, those with

repeated history of unemployment, those living in rural areas and also those living in underdeveloped or agricultural regions – tend to be against accession and/or do not vote. Hence, it appears that the nationals of the new member states tend to put a greater weight on the gains from improved efficiency and new opportunities, while they discount potential benefits from receiving subsidies from the richer EU member states. The latter conclusion appears surprising at first sight, however it seems warranted given that the transfers which the new members will receive have been revised and in effect scaled down considerably compared to expectations, and also relative to the transfers received by other less developed entrants in the wake of previous enlargements.

Another plausible explanation is that voters perceive accession to the EU as a natural continuation, and indeed ultimate outcome, of the post-communist transition from central planning to a market economy, and therefore their support for EU membership reflects whether they gained or lost from market-oriented reforms (and whether they expect to gain from further liberalisation and intensification of competition). Indeed, the supporters of EU membership tend to have similar socio-economic profiles as voters of liberal, pro-reform parties (see Fidrmuc, 2000a,b; Jackson, Klich and Poznańska, 2001; Doyle and Fidrmuc, 2003; and Doyle, 2004.²² Furthermore, membership in the EU, and eventually in the EMU, will impose important constraints on national fiscal policy and thus the ability of governments to compensate those made worse off by accession as well as the on-going reform process (Vlachos, 2003, makes a similar point about voting in the Swedish referendum preceding that country's EU entry in 1995).

Finally, and importantly, these findings show that voters in the new states supported accession holding greater efficiency and economic integration rather than fiscal transfers as their primary motivation. There is little political will among the EU-15 members to finance this enlargement by extending the transfers and subsidies to the ten new member countries without a substantial reform of the redistribution system. The voters in the new members appear to be aware of this but they approved the accession nonetheless. Thus, while the scaling down of the scope for transfers and subsidies (relative to initial expectations) probably helped drive down the support for

²² A study by Tucker, Pacek and Berinsky (2002), using the 1996 Eurobarometer survey, also found that regardless of demographic characteristics, the “winners” from transition are more likely to support accession to the EU than the “losers”.

EU membership, the other benefits (efficiency improvements but also increased political and economic stability) made the prospect of EU membership sufficiently attractive to sway a critical mass of voters in favour of accession.

References

- Alvarez, R. Michael, and Jonathan Nagler (1998), "When Politics and Models Collide: Estimating Models of Multiparty Elections," *American Journal of Political Science* 42 (1), 55-96.
- Baldwin R., J.F. François and R. Portes (1997), "The Costs and Benefits of Eastern Enlargement", *Economic Policy* 24, CEPR.
- Baldwin, Richard E., Joseph F. Francois and Portes, Richard (1997) 'The Costs and Benefits of Eastern Enlargement: The Impact on the EU and Central Europe.' *Economic Policy*, April, 127-176.
- Barysch, Katinka (2003), "Will EU Money Be the Tune for New Members' Catch-up Song?" *The Transition Newsletter*, April/May/June 2003, The World Bank.
- Boeri Tito and Herbert Brücker, (2000), "The Impact of Eastern Enlargement on Employment and Labour Markets in the EU Member States," a study made for the Directorate General for Employment and Social Affairs, European Integration Consortium, Berlin and Milan.
- Boeri, Tito, Giuseppe Bertola, Herbert Brücker, Fabrizio Coricelli, Juan Dolado, John Fitzgerald, Angel de la Fuente, Pietro Garibaldi, Gordon Hanson, Juan Jimeno, Richard Portes, Giles Saint-Paul and Antonio Spilbergo (2002), *Who's Afraid of Big Enlargement: Economic and Social Implications of the European Union's Prospective Eastern Expansion*. CEPR Policy Paper No. 7, Centre for Economic Policy Research, London.
- Boldrin, Michele and Fabio Canova (2001), "Inequality and Convergence: Reconsidering European Regional Policies," *Economic Policy: A European Forum*.
- Breuss, Fritz (2001), *Macroeconomic Effects of EU Enlargement for Old and New Members*. WIFO Working Paper 143, Austrian Institute for Economic Research (WIFO), Vienna.
- Breuss, Fritz (2002), *Kosten der Nicht-Erweiterung der EU für Österreich*. Austrian Institute for Economic Research (WIFO), Vienna.
- DIW (2002), *EU Eastern Enlargement Can Be Financed: Increased Need for Reform*. Deutsches Institut für Wirtschaftsforschung, Berlin.
- Doyle, Orla and Jan Fidrmuc (2003), "Anatomy of Voting Behavior and Attitudes during Post-Communist Transition: Czech Republic 1990-98," in: Nauro F. Campos and Jan Fidrmuc (eds.): *Political Economy of Transition and Development: Institutions, Politics and Policies*. ZEI Studies in European Economics and Law, Kluwer Academic Publishers.
- Doyle, Orla (2004), "Unravelling Voters' Perceptions of the Economy: Analysing the Czech Voting-Popularity Function", Trinity College Dublin, *mimeo*.
- European Commission (2001), "The Economic Impact of Enlargement," a study by the Directorate General for Economic and Financial Affairs, May 2001.
- EUROPA (2003) "EU Enlargement", <http://www.europa.eu.int/comm/enlargement>
- Fidrmuc Jan (2000a), "Political Support for Reforms: Economics of Voting in Transition Countries," *European Economic Review* 44 (8), 1491-1513.
- Fidrmuc Jan (2000b), "Economics of Voting in Post-Communist Countries," *Electoral Studies* 19 (2/3), Special issue: Economics and Elections, June/September 2000,

- 199-217.
- Fidrmuc Jan, Mundschenk Susanne, Iulia Traistaru and Jürgen Von Hagen (2002), "EU Enlargement: Economic Consequences and Perspectives for the European Union," in Andrew M. Warner (ed.) *The European Competitiveness and Transition Report 2001-2002*, Oxford University Press and World Economic Forum, Oxford and Geneva, 2002.
- Fowles B. (2003), "Referendum Briefing No. 4: The Hungarian EU Accession Referendum", Centre for Russian and East-European Studies, European Research Institute, 12th April.
<http://www.sussex.ac.uk/Units/SEI/oern/ElectionBriefing/Referendum/Hungary4.pdf>
- Gabel, Matthew and Harvey Palmer (1995), "Understanding Variation in Public Support for European Integration," *European Journal of Political Research* 27, 2-19.
- Gabel, Matthew and Guy D. Whitten (1997), "Economic Conditions, Economic Perceptions, and Public Support for European Integration," *Political Behavior* 19 (1), 81-96.
- Heijdra, Ben J., Christian Keuschnig and Wilhelm Kohler (2002), *Eastern Enlargement of the EU: Jobs, Investment and Welfare in Present Member Countries*. CESifo Working Paper No. 718, Center for Economic Studies and Ifo Institute for Economic Research, Munich.
- Jackson, John E., Jacek Klich and Krystyna Poznańska (2001), *Economic Transition and Elections in Poland*. William Davidson Working Paper No. 391.
- Kemmerling, Achim (2003), *The Political Economy of Support for Eastward Enlargement: Job Loss, Institutions, and Political Alienation in Central and Eastern European Countries*, Free University of Berlin, mimeo.
- Lejour, Arjan M., Ruud A. de Mooij and Richard Nahuis (2001), *EU Enlargement: Economic Implication for Countries and Industries*, CESifo Working Paper No. 585, CESifo, Munich.
- Markowski, Radoslaw and Joshua A. Tucker (2003), *Pocketbooks, Politics, and Parties: The 2003 Polish Referendum on EU Membership*, Princeton University, mimeo.
- O'Rourke, Kevin and Richard Sinnott (2001), "The Determinants of Individual Trade Policy Preferences: International Survey Evidence," Trinity College Dublin, mimeo.
- Pelkmans, Jacques (2002), *Economic Implications of Enlargement*. BEEP Briefing No. 1, College of Europe, Bruges.
- Tucker J., Patek A., and A Berinsky. (2002), "Transitional Winners and Losers: Attitudes Towards EU Membership in Post-Communist Countries," *American Journal of Political Science*, Vol. 46, No. 3.
- Tverdova, Yuliya V., and Christopher J. Anderson (2003), "Choosing the West? Referendum Choices on EU Membership in East-Central Europe," *Electoral Studies*, forthcoming.
- Vlachos, Jonas (2003), "Who Wants Political Integration? Evidence from the Swedish EU-Membership Referendum." *Journal of Public Economics*, forthcoming.
- Wlezien, C. Franklin M. and Twigg D. (1997) "Economic Perceptions and Vote Choice: Disentangling the Endogeneity". *Political Behavior* 19(1): 7-17.

Tables

Table 1 Intended Voting in EU Referenda (Spring 2002 CCEB)

Country	In favour	Against	Will Not Vote	DK/RA	Respondents
Bulgaria	72.6	6.8	6.9	13.7	1000
Cyprus	65.4	17.2	3.8	13.6	500
Czech Rep.	50.8	18.4	13.5	17.3	1000
Estonia	43.4	27.4	15.8	13.4	1010
Hungary	74.0	5.8	7.2	13.0	1020
Latvia	41.8	36.8	8.4	13.0	1000
Lithuania	50.3	16.7	10.6	22.4	1015
Malta	42.2	34.0	5.0	18.8	500
Poland	53.3	24.1	13.4	9.2	2000
Romania	84.3	3.6	3.5	8.6	1049
Slovakia	68.1	9.9	11.2	10.7	1067
Slovenia	55.3	27.4	6.2	11.1	1002
Turkey	69.8	23.4	2.3	4.4	2000
CC's total	60.2	19.4	8.5	11.9	14163

Source: Candidate Countries Eurobarometer (CCEB), March/April 2002, Gallup Europe

Notes: The table reports answers to the following question: "Would you personally vote for or against it [EU membership]?" DK/RA stands for 'Don't know' and 'Refuse to answer' responses.

Table 2 Results of Referenda on EU Accession

Country	Turnout %	Yes %	No %	Support ^a %	Date	Recent Turnout ^c
Cyprus ^b	n.a.	58	25	n.a.	Autumn, 2002	n.a.
Malta	91.0	54	46	49.1	March 8, 2003	97.0 (2003)
Slovenia	60.3	90	10	54.3	March 23, 2003	70.1 (2000)
Hungary	45.6	84	16	38.3	April 12, 2003	70.5 (2002)
Lithuania	63.3	91	9	57.6	May 10-11, 2003	58.2 (2000)
Slovakia	52.2	93	7	48.5	May 17, 2003	70.0 (2002)
Poland	58.9	77	23	45.4	June 7-8, 2003	46.3 (2001)
Czech Republic	55.2	77	23	42.5	June 13-14, 2003	58.0 (2002)
Estonia	63.0	67	33	42.1	Sept. 14, 2003	58.2 (2003)
Latvia	72.5	67	32	48.6	Sept. 20, 2003	71.5 (2002)

Source: Gallup Europe, Enlargement Poll Monitor (<http://www.gallup-europe.be/epm/>), and Electionworld.org.

Notes: Candidate countries are ordered chronologically, according to the referenda dates. Only countries that will be part of the next enlargement are included.

^a Percentage of eligible voters who supported accession.

^b Cyprus approved EU membership without holding a referendum; the results of the latest available opinion poll are therefore reported.

^c Participation rate in the most recent parliamentary election (the year to which the figure refers is in parentheses).

Table 3 Regional Results of EU Referenda

Country	Turnout [%]		Yes Vote [%]	
	Mean	St.Dev.	Mean	St.Dev.
Czech Republic	55.36	3.82	76.33	2.33
Estonia	62.46	3.38	65.33	4.03
Hungary	44.32	4.96	84.25	1.93
Latvia	70.91	5.51	69.36	13.31
Lithuania	63.25	5.70	90.40	3.52
Poland	56.11	5.82	74.35	10.33
Slovakia	51.27	5.59	92.82	2.35

Notes: Means are computed as averages across regions and as such are different from the nationwide results reported in Table 1.

Table 4 Descriptive Statistics of Regional Indicators

Country	Unemployment Rate [%]	Average Wage [local currency]	Agriculture [%]	Industry and Construction [%]
Czech Republic	9.94 ^c (4.15)	13,940.82 ^c (1363.39)	6.90 ^c (4.34)	48.74 ^c (7.96)
Estonia	10.88 ^d (3.88)	5,073.94 ^d (999.24)	12.63 ^d (6.89)	31.69 ^d (5.34)
Latvia	11.65 ^e (6.52)	119.09 ^b (24.08)	~	~
Lithuania	13.33 ^c (4.93)	842.50 ^c (156.64)	~	~
Hungary	6.07 ^c (2.07)	91,059.95 ^c (13252.59)	5.85 ^c (2.38)	39.99 ^c (7.45)
Poland	17.77 ^b (6.55)	1,636.86 ^a (220.93)	41.35 ^b (24.74)	26.20 ^b (12.91)
Slovakia	15.09 ^c (6.88)	12697.23 ^c (2600.43)	6.86 ^c (3.43)	40.96 ^c (8.53)

Sources: Regional data was obtained from the central statistical offices of the individual countries.

Notes: Agriculture, industry and construction are expressed as shares in total employment. Means are computed as averages across regions (standard deviation in parenthesis) and as such are different from the nationwide values. Data pertain to: ^a 1999; ^b 2000; ^c 2001; ^d 2002; ^e first half of 2003.

Table 5 Regional Determinants of Support for EU Membership: Pooled Data

Pooled Yes Vote	(1)	(2)	(3)	(4)
Unemployment Rate	0.081 (0.060)	0.244*** (0.038)	0.083 (0.060)	0.248*** (0.038)
Wage Ratio	-0.025 (2.769)	-1.648 (1.840)	-0.059 (2.775)	-1.732 (1.849)
Agriculture	~	-0.333*** (0.018)	~	-0.332*** (0.018)
Industry & Construction	~	0.019 (0.027)	~	0.021 (0.027)
Poland	-2.570*** (0.792)	8.359*** (0.580)	-2.520*** (0.790)	8.487*** (0.587)
Hungary	8.150*** (0.534)	8.394*** (0.559)	8.173*** (0.552)	8.472*** (0.606)
Slovakia	15.993*** (0.527)	15.066*** (0.530)	16.003*** (0.524)	15.104*** (0.529)
Estonia	-11.158*** (1.087)	-9.425*** (1.412)	-11.107*** (1.088)	-9.277*** (1.424)
Latvia	-7.186*** (2.328)	~	-7.137*** (2.333)	~
Lithuania	13.695*** (0.588)	~	13.697*** (0.589)	~
Suburb	~	~	0.737 (0.936)	1.680** (0.749)
Constant	75.624** (2.731)	77.014*** (2.537)	75.585*** (2.729)	76.805*** (2.540)
R-Squared	0.446	0.798	0.446	0.798
F-Statistic	330.39	309.04	297.70	273.22
P-value	0.000	0.000	0.000	0.000
No. of Observations	658	565	658	565

Notes: All estimated with pooled OLS, heteroskedasticity-robust standard errors are in parentheses. Unemployment rate is in percent. Wage ratio is the ratio of regional average wage to the national average wage. Agriculture and industry/construction are percentage shares of total employment, with services being the omitted category (structure of employment is not available for Latvia and Lithuania). The Czech Republic is the omitted category with respect to country dummies. Significance levels: *** 1%, ** 5% and * 10%.

Table 6 Regional Determinants of Participation in EU Referenda: Pooled Data

Pooled Turnout	(1)	(2)	(3)	(4)
Unemployment Rate	-0.255*** (0.039)	-0.237*** (0.029)	-0.251*** (0.039)	-0.229*** (0.029)
Wage Ratio	3.187* (1.706)	0.938 (1.296)	3.098* (1.711)	0.774 (1.312)
Agriculture	~	-0.214*** (0.012)	~	-0.212*** (0.012)
Industry & Construction	~	-0.087*** (0.023)	~	-0.082*** (0.023)
Poland	2.272*** (0.595)	7.682*** (0.585)	2.402*** (0.587)	7.932*** (0.578)
Hungary	-11.694*** (1.038)	-12.689*** (1.061)	-11.633*** (1.034)	-12.538*** (1.061)
Slovakia	-2.420*** (0.756)	-3.301*** (0.775)	-2.394*** (0.746)	-3.226*** (0.763)
Estonia	7.948*** (0.765)	7.401*** (0.898)	8.080*** (0.766)	7.690*** (0.900)
Latvia	16.595*** (0.857)	~	16.724*** (0.858)	~
Lithuania	9.010*** (0.867)	~	9.015*** (0.868)	~
Suburb	~	~	1.911 (1.183)	3.285*** (1.073)
Constant	54.755*** (1.734)	62.334*** (1.781)	54.653*** (1.739)	61.924*** (1.781)
R-Squared	0.488	0.624	0.489	0.629
F-Statistic	105.580	141.640	93.78	125.25
P-value	0.000	0.000	0.000	0.000
No. of Observations	658	565	658	565

Notes: All estimated with pooled OLS, heteroskedasticity-robust standard errors are in parentheses. Unemployment rate is in percent. Wage ratio is the ratio of regional average wage to the national average wage. Agriculture and industry/construction are percentage shares of total employment, with services being the omitted category (structure of employment is not available for Latvia and Lithuania). The Czech Republic is the omitted category with respect to country dummies. Significance levels: *** 1%, ** 5% and * 10%.

Table 7 MNL: Individual Determinants of Support for EU Membership

Base: Vote No	Vote Yes			Will Not Vote		
	Coef.	St. Error	Marg. Effect	Coef.	St. Error	Marg. Effect
Female	-0.041	(0.052)	-0.027	0.373***	(0.083)	0.026
Married/remarried/cohabiting	-0.017	(0.063)	0.013	-0.306***	(0.096)	-0.020
Age	-0.040***	(0.010)	-0.005	-0.058***	(0.016)	-0.002
Age squared.	0.0004***	(0.0001)	0.000	0.0005***	(0.0002)	0.000
Number of children	0.025	(0.025)	0.001	0.063*	(0.039)	0.003
Household size	-0.029	(0.023)	-0.006	0.011	(0.036)	0.002
Education: Secondary	0.142*	(0.075)	0.047	-0.399***	(0.117)	-0.032
Education: University	0.353***	(0.089)	0.084	-0.463***	(0.141)	-0.042
Student	0.342***	(0.138)	0.081	-0.564***	(0.211)	-0.042
Self-employed	-0.137	(0.117)	-0.018	-0.178	(0.205)	-0.004
White-collar professional	0.202**	(0.085)	0.042	-0.107	(0.138)	-0.016
House person	0.017	(0.103)	0.011	-0.151	(0.174)	-0.010
Unemployed	0.056	(0.102)	0.023	-0.271*	(0.167)	-0.018
Retired	-0.032	(0.102)	-0.008	0.029	(0.161)	0.004
Farmer/fisherman	-0.319**	(0.157)	-0.028	-0.868***	(0.334)	-0.031
Unemployment experience: once	-0.045	(0.080)	-0.010	0.029	(0.127)	0.004
Unemployment experience: twice/more	0.019	(0.101)	-0.013	0.286*	(0.160)	0.019
Well-being: average	-0.422***	(0.090)	-0.077	-0.084	(0.156)	0.017
Well-being: getting along	-0.767***	(0.094)	-0.144	-0.170	(0.161)	0.029
Well-being: poor/very poor	-1.098***	(0.112)	-0.226	-0.256	(0.182)	0.041
Small/mid-sized town	0.140**	(0.062)	0.034	-0.153	(0.096)	-0.017
City	0.239***	(0.066)	0.049	-0.104	(0.104)	-0.018
Cyprus	-1.377***	(0.195)	-0.255	-1.543***	(0.331)	-0.031
Czech Rep.	-1.972***	(0.164)	-0.428	-0.478**	(0.224)	0.064
Estonia	-2.239***	(0.158)	-0.475	-0.699***	(0.216)	0.052
Hungary	-0.112	(0.190)	-0.007	-0.296	(0.260)	-0.012
Latvia	-2.483***	(0.157)	-0.501	-1.641***	(0.233)	-0.013
Lithuania	-1.594***	(0.166)	-0.338	-0.535**	(0.230)	0.040
Malta	-2.653***	(0.187)	-0.530	-2.067***	(0.315)	-0.032
Poland	-1.817***	(0.149)	-0.374	-0.685***	(0.203)	0.039
Romania	0.845***	(0.236)	0.128	0.095	(0.317)	-0.032
Slovakia	-0.657***	(0.177)	-0.134	-0.091	(0.238)	0.030
Slovenia	-2.163***	(0.162)	-0.434	-1.660***	(0.243)	-0.019
Turkey	-1.399***	(0.158)	-0.218	-2.699***	(0.276)	-0.070
Constant	3.931***	(0.303)	~	1.800***	(0.445)	~
Log likelihood	-8000.1285					
Pseudo R ²	0.103					
Wald χ^2	1418.71***					
No. of observations	11,263					

Notes: Coefficient estimates and marginal effects are reported with heteroskedasticity-robust standard errors in parentheses. The dependent variable corresponds to the following question: “*And if there were to be a referendum tomorrow on the question of (country)’s membership, would you personally vote for or against it?*” Possible answers are ‘for’, ‘against’, and ‘will not vote’. Both equations are estimated jointly by multinomial logit with ‘will vote against EU membership’ being the base category. The omitted categories are: male, not married or not cohabiting, primary education, manual worker, no past unemployment experience, rich/very comfortable/comfortable well-being, village/rural area, and Bulgaria. Significance levels: *** 1%, ** 5% and * 10%.

Table 8 MNL: Interaction between Attitudes towards the EU and Intended Participation in Referendum

Base: EU pessimist- will participate	EU pessimist – will not participate			EU optimist – will not participate			EU optimist – will participate		
	Coef.	SE	ME	Coef.	SE	ME	Coef.	SE	ME
Female	0.270**	(0.138)	0.006	0.337*	(0.176)	0.004	-0.038	(0.055)	-0.014
Marrried/remarried/cohabiting	-0.409***	(0.155)	-0.007	-0.172	(0.217)	-0.001	-0.080	(0.066)	-0.006
Age	-0.012	(0.027)	0.000	-0.065*	(0.038)	0.000	-0.037***	(0.011)	-0.006
Age squared.	0.0002	(0.0002)	0.000	0.0005	(0.0004)	0.000	0.0003***	(0.0001)	0.000
No. of children	0.001	(0.068)	0.000	-0.033	(0.101)	-0.001	0.020	(0.026)	0.004
Household size	0.000	(0.059)	0.000	0.033	(0.082)	0.001	-0.017	(0.024)	-0.003
Education: Secondary	-0.278	(0.193)	-0.006	-0.319	(0.308)	-0.004	0.080	(0.079)	0.021
Education: University	-0.503**	(0.231)	-0.011	-0.285	(0.355)	-0.005	0.241***	(0.093)	0.049
Student	-1.057***	(0.391)	-0.016	0.491	(0.421)	0.003	0.350**	(0.147)	0.062
Self-employed	-0.011	(0.326)	0.000	0.017	(0.475)	0.000	0.009	(0.126)	0.002
White collar professional	-0.420*	(0.235)	-0.009	0.301	(0.289)	0.002	0.193**	(0.089)	0.035
House person	-0.227	(0.328)	-0.005	0.322	(0.373)	0.003	0.086	(0.109)	0.015
Unemployed	-0.182	(0.281)	-0.003	-0.141	(0.374)	-0.001	-0.013	(0.106)	0.001
Retired	0.262	(0.246)	0.004	0.291	(0.395)	0.003	0.051	(0.106)	0.002
Farmer/fisherman	-0.194	(0.394)	0.002	-1.185	(1.048)	-0.007	-0.371**	(0.159)	-0.061
UE experience: Once	-0.279	(0.229)	-0.005	0.205	(0.275)	0.003	-0.009	(0.083)	0.000
UE experience: twice/more	0.193	(0.261)	0.003	0.740**	(0.305)	0.010	0.068	(0.106)	0.000
Well-being: Average	-0.578**	(0.267)	-0.002	-0.344	(0.287)	0.001	-0.592***	(0.097)	-0.095
Well-being: Getting along	-0.406	(0.273)	0.005	-0.442	(0.306)	0.003	-0.878***	(0.102)	-0.155
Well-being: poor/very poor	-0.717**	(0.311)	0.004	-1.145***	(0.397)	-0.002	-1.316***	(0.119)	-0.261
Small/mid-sized town	-0.404***	(0.163)	-0.008	0.027	(0.203)	0.000	0.077	(0.065)	0.019
City	-0.174	(0.173)	-0.006	-0.334	(0.246)	-0.005	0.207***	(0.069)	0.041
Cyprus	-1.975***	(0.787)	-0.015	-0.618	(0.811)	0.001	-0.976***	(0.206)	-0.182
Czech Rep.	-0.395	(0.356)	0.022	-0.293	(0.596)	0.015	-1.995***	(0.164)	-0.441
Estonia	-0.209	(0.333)	0.028	-0.088	(0.587)	0.019	-1.946***	(0.157)	-0.434
Hungary	-0.027	(0.406)	-0.003	0.860	(0.616)	0.011	0.180	(0.195)	0.021
Latvia	-1.450***	(0.378)	-0.001	-1.922***	(0.724)	-0.005	-2.395***	(0.155)	-0.508
Lithuania	-0.177	(0.359)	0.018	0.469	(0.589)	0.028	-1.343***	(0.167)	-0.300
Malta	-3.003***	(0.778)	-0.016	-1.576**	(0.806)	-0.002	-2.482***	(0.188)	-0.525
Poland	-0.314	(0.306)	0.021	-0.057	(0.544)	0.018	-1.762***	(0.146)	-0.379
Romania	-0.115	(0.446)	-0.008	0.295	(0.734)	-0.001	0.514**	(0.209)	0.078
Slovakia	-0.179	(0.359)	0.010	0.663	(0.560)	0.025	-0.886***	(0.168)	-0.191
Slovenia	-1.331***	(0.379)	-0.002	-0.687	(0.593)	0.007	-1.943***	(0.161)	-0.415
Turkey	-2.630***	(0.477)	-0.020	-1.799***	(0.648)	-0.007	-1.281***	(0.156)	-0.229
Constant	0.377	(0.733)	~	-0.388	(1.019)	~	4.091***	(0.311)	~
Log likelihood	-6464.680								
Pseudo R2	0.105								
Wald χ^2	1179.10***								
No. of observations	9853								

Notes: Coefficient estimates and marginal effects are reported with heteroskedasticity-robust standard errors in parentheses. All three equations are estimated jointly by multinomial logit with ‘EU pessimist – will participate’ being the base category. The dependent variable combines answers to the question “*Taking everything into consideration, would you say that (country) could get advantages or not from being a member of the European Union?*” with an indication on intended participation in the referendum on EU membership. The omitted categories are: male, not married or cohabiting, primary education, manual worker, no past unemployment experience, rich/comfortable well-being, village/rural area, and Bulgaria. Significance levels: *** 1%, ** 5% and * 10%.

Appendix

Hausman and Small-Hsiao Tests of IIA Assumption

	Choices	Hausman Test		Small-Hsiao Test	
		$\chi^2(df)$	Result	$\chi^2(df)$	Result
Model 1	Vote Yes	-20.17(34)	For Ho	33.39(35)	For Ho
	Do not Vote	-8.42(34)	For Ho	31.13(35)	For Ho
Model 2	EU Pessimist- Will not Vote	-0.25(68)	For Ho	98.29(35)***	Against Ho
	EU Optimist- Will not Vote	0.86(68)	For Ho	74.47(35)***	Against Ho
	EU Optimist- Will Vote	-9.59(68)	For Ho	117.99(35)***	Against Ho

Note: Ho: Odds are independent of other alternatives



Institute for International Integration Studies

The Sutherland Centre, Trinity College Dublin, Dublin 2, Ireland

