Pocketbooks, Politics, and Parties: The 2003 Polish Referendum on EU Membership

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Abstract

We analyze the results Poland’s historic June, 2003 referendum on whether or not to join the European Union (EU). We find that demographic factors did not play a particularly large role in determining vote choice in the referendum. As alternatives, we propose economic, political, and party based hypotheses, and find empirical support for all three. We also examine the decision to participate in the referendum in an effort to assess the affect of the strategic dilemma posed by a referendum with a minimum turnout threshold for opponents of the referendum. Analysis is conducted on both the aggregate and individual level, utilizing an original county-level dataset and a national public opinion survey.

Key Words: Poland, Referenda, Voting Behavior, Turnout, European Union
Introduction

On June 7-8, 2003, over 17 million Polish citizens turned out to vote in the country’s historic referendum on whether or not to join the European Union (EU) the following year. Poles faced two challenges in passing the referendum: securing at least a 50% turnout and ensuring that more citizens voted in favor of EU membership than voted against it.¹ In the months before the referendum, both outcomes seemed likely; in April and May most opinion polls predicted a turnout between 70% and 80% and a "yes" vote floating between 65% and 80%.

Despite these predictions, past experience suggested reasons for concern. By Polish standards, these predicted turnout figures were extremely high. The parliamentary elections since 1991 had attracted only between 43% and 52% of the eligible voters; in the most recent parliamentary elections, 1997 and 2001, the turnout figure was 48% and 46%, respectively. All prior national referenda had failed to achieve a 50% turnout. The presidential races had attracted more attention, but even at the peak of the neck to neck contest between Lech Walesa and Aleksandr Kwasniewski only 68% of the electorate participated in the second round of the election. Moreover, in previous Polish elections the gap between citizens' a priori declarations in opinion polls concerning participation and actual turnout figures was often between 15 to 20 percentage points. However, there were also reasons to suspect that turnout might be higher than usual, given both the historical nature of the referendum and the fact that voting was extended - for the first time in the democratic post-1989 Polish experience - to two days.

¹ If the 50% turnout had not been reached three plausible scenarios were envisioned. First, the government could accept that Poles had decided not to join EU and abandon attempts at membership for an unspecified period time. Second, the government could have re-negotiated the agreement between Poland and EU and called a new referendum in a near future (although no formal provisions existed as to when such a second referendum could be called). Finally, the government had the option to bring the measure to the parliament for separate consideration by both chambers
When all of the votes were tallied, though, Poles had voted rather convincingly to join the Union. Of those who participated in the referendum, 77.45%, or approximately 13.5 million citizens, had voted for membership. And despite an initial scare after the first day of polling – turnout had reached only 17.61% by the time the polls closed - the final turnout numbers were comfortably above the 50% minimum, with 58.85% of Poles participating in the referendum.²

Exit polls that appeared in the press in the following days gave a cursory description of what had happened in the referendum.³ Both education and residence seemed to have affected the vote, although hardly dramatically, as more educated and more urban citizens voted in higher proportions for EU membership (88% vs. 74% and 86% vs. 74%, for the least educated and least urban respondents, respectively). Interestingly, neither gender nor age appeared to have much of an effect at all on the vote for membership. But perhaps most intriguing was the fact that party preference in the previous election seemed to have a very strong effect on the vote choice. Supporters of the Democratic Left Alliance (SLD), Citizen’s Platform (PO), and Freedom Union (UW) were all very likely to support EU membership (at least 90% of respondent in all three cases had voted in favor of membership), while supporters of the Self Defense of the Republic of Poland (Samoobrona) and the League of Polish Families (LPR) were much less likely to have supported membership, with only 50% and 36% of supporters voting in favor, respectively.

These results raise a number of interesting questions for both students of Polish politics and political scientists alike. First, why was the turnout so much higher in this referendum than in previous parliamentary elections and previous referenda? Second, was there really as small an effect for demographic factors as the exit polls suggested? And if demographic factors cannot explain much of the variation in the vote, then what can? Finally, was there really as strong a

connection between vote in the 2001 Sejm elections and vote in the referendum as suggested by
the exit polls? On the surface, this is a somewhat surprising finding because Polish parties are
far from well organized, institutionalized entities and partisan identification is often assumed to
be weak (Markowski 2002, Lewis 2000).

In response to the questions raised by the results and the exit polls, we address the
following topics. First, we seek to explain the turnout in the election by exploring support for
two competing hypotheses. On the one hand, it may be that there was nothing particularly
special about the referendum in terms of turnout. In this case, we would expect to see largely the
same people turning out in both the referendum and the recent parliamentary election, only in
greater numbers for the referendum. However, the referendum was distinguished from a
parliamentary election by the fact that there was a strategic imbalance between supporters and
opponents of EU membership. Supporters of membership in the EU had a clear strategy: they
should have turned out to vote (and thus increased participation) and voted in favor of
membership (and thus increased support for the measure). Opponents, however, were faced with
a strategic puzzle: they could either have stayed home in an attempt to keep turnout below 50%,
or they could have participated in an attempt to increase the vote against membership. The
nature of this strategic dilemma provides an alternative hypothesis for explaining turnout.

Second, we examine the vote for or against EU membership in much greater detail, using
both aggregate and individual level data to explore a richer range of variables than offered by the
exit polls. We begin with the demographic variables examined in the exit polls to see if the
findings hold up in more rigorous statistical analyses. We then move on to consider three
alternative sets of hypotheses: economic, party-oriented, and political factors. The economic
hypothesis assesses the Tucker et al. (2002) proposition that “winners” are more likely to favor
EU membership while “losers” are likely to oppose it; we examine income and unemployment. The parties hypothesis explores the link between vote choice in the 2001 parliamentary election and the 2003 referendum. Finally, we assess the effect of a number of political factors – evaluation of the current government, ideological self-placement, and interest in politics – as an additional source of influence on the vote for or against membership.

Broadly stated, the paper makes three general conclusions. First, there is compelling evidence to support both of the hypotheses regarding turnout, suggesting that both mechanisms may have played an important roll in affecting participation in the referendum. Second, we are in agreement with the exit polls: other than residence – and to a lesser extent education – demographic variables played a surprising small role in affecting voting behavior in the referendum, although there are interesting aggregate level patterns of demographic support. Finally, we find relatively strong support for all three of the alternative hypotheses proposed: pocketbooks, parties, and politics all seem to have had clear and meaningful effects on the outcome of the referendum vote, even when controlling for each other.

In the following section, we briefly describe the data and methods used in our analyses. Empirical results are then presented in two sections: turnout and then the vote for or against EU membership. We conclude with a discussion of the rich possibilities for future research raised by these analyses.

Data and Methods

In the analyses presented below, we utilize both aggregate and micro-level data. The aggregate dataset is composed of election results, macro-economic, and demographics data
aggregated to the level of Polish counties (Powiat).⁴ The advantage of using county level data is that it greatly increases one’s N, but the disadvantage is the difficulty in finding statistics disaggregated to this level.⁵ We therefore rely on two demographic measures – the percentage of residents living in urban areas and the percentage of what the Polish Statistical Office refers to as post-productive aged citizens (men who are at least 65, women who are at least 60, hereafter elderly citizens) – and two economic variables: the unemployment rate and average income.⁶ In addition, the dataset contains the results of the 2001 Polish Parliamentary elections and, of course, the turnout and percentage of the vote in favor of EU membership in the 2003 referendum. Even with these limited variables, though, we are able to use the dataset to examine questions regarding turnout as well as parts of three of our four sets of hypotheses; only political factors can not be examined on the aggregate level. All statistical analyses of these data are conducted using Least Squares Regression analysis. Descriptive statistics of these variables can be found in the Appendix in Table A1.

Our micro-level analysis is conducted using the results of a survey administered by the Centrum Badania Opinii Społecznej (CBOS, or Public Opinion Research Center) on May 29 –

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⁴ Powiat is an old/new administrative and regional unit; it existed until mid 1970s under communism and was reestablished under the new constitution in the late 1990s. It is the intermediary level unit between the governmental-administrative regions called "wojewodztwo" and self-governed local communities called "gmina". Their size varies significantly, from tens of thousand to hundreds of thousand of inhabitants (with one powiat, Warsaw, over 1.5 million); the median powiat has approximately 78,000 residents. The dataset was created by the authors by pooling data made available on the websites of the Panstowa Komisja Wyborcza (Polish Election Commission), (http://referendum.pkw.gov.pl/sww/kraj/indexA.html.) and in publications of the Polish Główny Urząd Statystyczny (Main Statistical Office). The dataset is available from the authors upon request.

⁵ Our aggregate regressions have an N of 370; using data from regions would have yielded an N of only 16.

⁶ The two demographics variables are from the end of 2000; however, given the slow rate at which such demographic variables change, we are comfortable using a demographic variable that was two and a half years old. For unemployment, we rely on figures from the start of 2003. Unfortunately, income figures by powiat were only available through the start of 2002. Income by region (wojewodztwo), however, was available through the beginning of 2003. We therefore created county income measures for 2003 by extrapolating from the 2002 data by assigning each county a “multiplier” that was equal to the rate at which incomes grew in its region. In order to test the validity of this approach, we followed the same pattern using 2001 and 2002 data, and then compared the extrapolated 2002 values to the real 2002 data; the two correlated at a rate of .98, which led us to believe that this was a reasonable proxy.
June 1, 2003, or about a week before the referendum. The survey questioned 1260 Polish citizens and employed a random sampling design representative of the adult Polish population.

Our dependent variable in the micro-level turnout analyses is coded as a dummy variable based on whether or not a respondent said that they were very likely or rather likely to participate in the referendum. Our dependent variable for the vote analyses takes advantage of the fact that not only were respondents who indicated a likelihood of voting asked whether they would vote for or against the union, but even those who indicated they did not know if they would vote or were unlikely to vote were still asked whether they would vote for or against EU membership if they changed their mind and decided to vote. We rely on this combined measure both because it increases our N and because it leaves us with a variable that is much more closely distributed along the lines of the actual vote (79.6% in favor, vs. an actual result of 77.5% in favor) than if we relied on only those planning to vote (84.8% in favor). As our goal was to assess the factors distinguishing Poles who were against membership from those who supported it, as opposed to trying to predict the outcome of the election, this seemed an appropriate step to take.

As the dependent variables in the case of both turnout and vote in the referendum are dichotomous, we rely on binominal logit analysis, an appropriate method for analyzing dichotomous dependent variables. The problem with using logit analysis – especially as compared to Least Squares regression – is that coefficients have no substantive meaning. We attempt to rectify this shortcoming in two ways. First, all of the independent variables in our

7 As with most surveys, this one overestimates the percentage of people planning to turnout. Although turnout nationally was only 58.85%, 80.4% of respondents identified themselves as very likely (70.8%) or rather likely (9.6%) to participate in the referendum. Results are similar using a continuous version of the variable, but we chose to report results with the dichotomous version of the variable to facilitate comparison with the analysis of turnout in the 2001 parliamentary elections (see Table 2).

8 Moreover, we reran all of the analyses using only the respondents who were likely to vote, and the results were largely the same. The primary difference with the results presented below in Table 4 is that our confidence in the effect of education starts to drop off even more quickly as more variables are added to the regression. In addition, the size of a few of the standard errors are a bit larger in the final version (5) of the regressions than in Table 4.
analyses are re-coded along a 0-1 continuum; descriptive statistics of all variables are located in the Appendix in Table A2. 9 Second, we calculate a measure of the substantive effect of each variable by calculating a first difference of the change in the predicted probability of either turning out (Table 2) or voting in favor of membership (Table 4) when all other variables are held even at their mean and the variable in question is varied from its minimum to its maximum. 10 In both cases, these estimates can be found in the final column of the table under the heading “Substantive Effect”. 11

**Turnout**

Our first turnout hypothesis postulates that turnout in the referendum will be guided by the same factors as in any other national election in Poland. Imagine that there are a pool of likely voters in the population, and a pool of unlikely voters in the population. For one reason or another – perhaps the magnitude of the occasion, perhaps the fact that the referendum allowed for two days of voting as opposed to one day in parliamentary elections – more voters turned out for the referendum (58.85%) than had turned out for the previous parliamentary election

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9 For non-dummy variables, a coding of 1 signifies more of that variable (e.g., more education, more interest in the government).
10 In the case of two of the political variables – ideological self-placement and evaluation of the government – a significant number of respondents (271 and 149, respectively) chose not to give an answer. Rather than listwise delete these observations (see King et al. (2001) for concerns with this approach), we instead replaced the missing values with the means of the variables. To check that this was not influencing our interpretation of these variables, we reran the analyses without the mean-replacements and found practically the same effect for the variables in question. For this reason, we chose to use the mean-replaced version of the variables so as to avoid unnecessarily deleting cases and adversely affecting our interpretation of other variables. We also mean-replaced four missing observations for the political interest variable.
11 Readers will notice that the substantive effects contain an indicator of statistical significance but no standard errors. While it is not possible to calculate a probability distribution of a first difference, we can simulate this distribution using stochastic simulation as described in King et al. (2000). So instead of calculating one estimate of each first difference, we instead calculate 1000 estimates of the first difference. The value listed in the table is the mean of those simulations; the p-value is estimated by counting the number of simulations that are greater than (or less than, if the mean is negative) than zero. So p ≤ .01 means that at least 990 of the simulations were greater than zero for a positive variable, p ≤ .05 means at least 950, etc.
We can imagine that perhaps 80% of the likely voters participated as opposed to 70% of likely voters in 2001, and perhaps 20% of unlikely voters as opposed to 15% in 2001. But the key point is that there is nothing strategic about the vote decision: those who are likely to vote do, and once they get to the polling booth they vote either in favor of or against membership in the EU. For simplicity, we hereafter refer to this as the “common cause” turnout hypothesis.

What would be the observable implications of the common cause hypothesis? On the aggregate level, we would expect to see a high correlation between the percentage of voters participating in the 2001 election and in the 2003 referendum by county. While we know that these percentages generally went up, the common cause hypothesis predicts that they should increase in an almost uniform manner: those counties that had the highest participation rates in 2001 should continue to have the highest participation rates in 2003; the same should hold for those with the lowest participation rates. In almost no cases should we see a drop in participation from 2001 to 2003.

On the micro-level, first and foremost we should expect to see a positive and significant effect for turnout in the 2001 parliamentary election as a predictor of turnout in the 2003 referendum. Failure to find such an effect would completely falsify the hypothesis of turnout being related across the two votes. Additional evidence in support of the common cause hypothesis could be provided by regressing turnout in the parliamentary election and in the referendum on a standard set of explanatory variables and observing the degree of similarity across the results. If the same general factors were driving turnout in both 2001 and 2003, then we should expect to see similar sets of results from the two regressions.

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12 Although at least one cross-national study finds no evidence that keeping the polls open additional days increases turnout (see Franklin 1996, 227).
An alternative hypothesis is that turnout can best be explained by the strategic nature of voting in a referendum with a minimum turnout threshold (hereafter, the strategic turnout hypothesis).\textsuperscript{13} In this case, turnout would be affected by the fact that citizens who support membership have a clear strategy – participate and vote in favor of membership – while those opposed to membership face the conflicting options of staying to home to deny the referendum a 50\% turnout or participating in an attempt to defeat it at the polls by voting against it.\textsuperscript{14} It is important to note, though, that the leaders of the anti-EU forces did not actively promote such a “stay home” strategy, so most voters would have had to have come to this decision on their own.\textsuperscript{15} Thus we could consider this a “most difficult” case for the strategic hypothesis.

Absent a survey question asking voters about their motivation for not voting – which unfortunately was not asked – the clearest observable implication of the strategic hypothesis would be a positive aggregate level relationship between the percentage of votes in favor of membership and turnout. For if we assume that voters opposed to membership are following both strategies – some are deciding not to vote and some are deciding to show up and vote against EU membership – then as the proportion of voters opposing membership in a given region increases, both turnout and support for membership should decrease in that region.

In terms of micro-level evidence, we can take advantage of the fact that voters were given five categories of certainty to discuss their likelihood of voting in the referendum: very likely, rather likely, don’t know, rather unlikely and very unlikely. If those opposed to membership were in fact torn between abstaining and voting no, then these are exactly the people whom we

\textsuperscript{13} See Hug and Sciarini (2000) for a comparative study of the effect of mandatory vs. voluntary and legally binding vs. non-legally biding referenda on EU integration in nine West European countries.

\textsuperscript{14} Although he did not discuss it in terms of a strategic decision, Szczerbiak (2001, 121) concluded that the biggest threat to the coming referendum on Polish membership in the EU would not be the vote against EU membership, but rather low voter turnout.

\textsuperscript{15} This is not to say that there was no discussion of the strategy by public figures. The most notable example was Zygmunt Wrzodak of the LPR, but he received almost no support from other prominent politicians in the party.
would expect to answer that they weren’t likely to vote, but that if they did vote they would be voting against membership. Therefore, we would expect to see more opposition to EU membership amongst those unlikely to vote than among those likely to vote.

-- INSERT FIGURES 1 AND 2 ABOUT HERE --

Figure 1 presents clear support for the common cause hypothesis. There is obviously a strong relationship between turnout across the 2001 parliamentary elections and the 2003 referendum. Indeed, only 5 out of 370 counties recorded a decrease in turnout from 2001 to 2003. However, Figure 2 provides support for the strategic hypothesis. There is also a clear link between increased turnout and an increase in the proportion of votes in favor of membership by county, if not quite as strong as in Figure 1. Turning to the individual level data, we again find strong support for the strategic hypothesis in Table 1 (below). Here we find exactly what was predicted by the hypothesis: as we move across categories based upon likelihood of voting, we find drastic increases in the proportion of respondents in favor of membership. Indeed, the proportion of those supporting EU membership was two and a half times as large among those who were very likely to vote (85%) as those very likely not to vote (only 37% in favor).

-- INSERT TABLES 1 AND 2 ABOUT HERE --

Table 2 presents a simple model of determinants of turnout consisting of demographic characteristics and two political variables. It demonstrates somewhat mixed, although on balance positive, support for the common cause hypothesis. Crucially, there is a clear effect for having participated in the 2001 election on the likelihood of participating in the 2003 referendum (Version 3). All else being equal, having participated in the 2001 on election makes a respondent 21% more likely to participate in the 2003 referendum. Comparing the first and

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16 Bielski and Hajnowski counties of Podlaskie region, Buski and Kazimierski counties of Świętokrzyskie region, and Lipski county of Mazowieckie region.
second columns of the table, however, presents a complicated picture. Recall that the common cause hypothesis predicts similar results across these two columns. To a certain extent, we find such a pattern: education, gender, religion, and interest in politics have very similar effects on turnout in 2001 and 2003. However, the effects of the three other variables seem to change their direction. The starkest example of this is elderly citizens, who were clearly less likely than younger citizens to participate in the referendum but more likely than younger citizens to participate in the 2001 election.\(^{17}\) A similar pattern can be found for ideological self-placement, although without the same levels of statistical confidence. Finally, residence has a clear effect in 2003, with urban voters more likely to participate, while it has no significant effect in 2001.\(^{18}\)

Overall, there is empirical evidence in support of both hypotheses, suggesting both effects were at work. On the one hand, there are people who were simply more likely to participate regardless of their opposition or support for EU membership. At the same time, though, it is difficult to reject the claim that some Polish citizens opposed to EU membership were affected by the strategic dimension of the referendum. As the hypotheses are not mutually exclusive, this seems to be a reasonable conclusion that once again illustrates the importance of assessing multiple explanations for political behavior.

Moreover, despite the criticism of Polish law leveled in the run up to the election for the required 50% turnout – many other countries do not have similar requirements – the requirement may actually improved the results from the perspective of the supporters of EU membership. Without such a requirement, the voters opposed to membership who chose to stay home for

\(^{17}\) Interestingly, it was not the oldest voters whose patterns changed across the elections, but rather the youngest voters. 65.2% of elderly respondents reported participating in the 2001 parliamentary elections, as opposed to 69.5% in the referendum. For respondents 31 and under, however, only 31.5% reported participating in the 2001 parliamentary elections, as opposed to 83.9% in the referendum.

\(^{18}\) In the 1993 and 1997 parliamentary elections, however, place of residence had a significant impact on the turnout: lowest in rural areas, slightly higher in mid-size towns and cities and definitely higher in big metropolitan areas.
strategic reasons might have had no reason to do so, which in turn could have resulted in a higher proportion of votes against EU membership. While it is doubtful that this would have caused the referendum to fail, it might well have yielded a less positive message.¹⁹

**Explaining the Vote: Hypotheses**

In this section, we present four sets of hypotheses to explain why people either opposed or supported EU membership based on the following themes: demographic characteristics, economic conditions, vote choice in the 2001 parliamentary elections, and political factors.

In examining demographic determinants of the vote, we follow the lead of the exit polls in testing the effect of sex, age, residence, and education; in addition we also consider church attendance. Based on the exit polls, we expect to find more educated and more urban voters supporting EU membership, with no effect for gender. The exit polls also suggested that age had no effect on the vote, although this contradicts previous research suggesting that older voters might be more likely to oppose membership than younger voters (Szczerbiak 2001, 116; Mach et al. 1998, 81) Church attendance is also appropriate to examine in Poland, as about 95% percent of the population declares themselves Catholic and most of them frequently attend Church (for details see Grabowska 2002, 102-103). While Nelsen et al. (2001) found that in Western Europe increased church attendance was positively correlated with greater support for European integration, the situation in Poland was complicated by the fact that a major source of opposition to EU membership came from Radio Maryja, a fairly successful religious-nationalist broadcast with over a million regular listeners. At the same time, the Pope and the Polish Episcopate sent a

¹⁹ Had the close to 4 million voters opposed to membership stayed home, though, there would only have been about a 45% turnout, and the measure would have failed to clear the threshold.
clear message to support EU membership.\textsuperscript{20} However, the Polish Church – quite contrary to the Western view – is not as disciplined as one would expect from a hierarchically organized institution. Many priests, clerics and bishops were more or less openly opposed to the integration, although they were clearly in the minority.\textsuperscript{21} Therefore, our \textit{a priori} expectation for church attendance in Poland is mixed, but on balance we expect that it would have a positive effect on the likelihood of supporting integration.

In our analysis of economic factors, we build off of work by Tucker et al. (2002) that found in a ten-country study of prospective post-communist members of the EU that economic “winners” were more likely to support membership than economic “losers”. We examine measures of both income and unemployment, with the \textit{a priori} expectation that higher income will lead to more support for membership, while unemployment will lead to more opposition. On the macro level, therefore, regions with higher average incomes and lower levels of unemployment should have a higher proportion of voters supporting membership, while on the micro-level those with higher incomes and those who are not unemployed should be more likely to vote for membership.\textsuperscript{22}

The third type of hypothesis concerns the relationship between party vote in the 2001 parliamentary election and the vote for or against membership in the 2003 referendum. It is important to note that although this is ultimately a causal hypothesis, for now we are saying

\textsuperscript{20} John Paul II had made it clear prior to the referendum that "Poland belongs to Europe" and that he personally encouraged Poles to take part in the referendum. Although he had not explicitly encouraged Poles to vote "yes", he clearly indicated what he expected from his compatriots. In addition, the Polish Catholic Church was in principle supporting integration as early as several months prior to the referendum.

\textsuperscript{21} There were some indications that in a small number parishes an official letter from the Episcopate urging participation and a vote in favor of membership was either not delivered at all or was censored.

\textsuperscript{22} To measure income, we use a subjective measure ("Jak Pan(i) ocenia obecne warunki materialne swojego gospodarswta domowego?" What is your opinion of the material situation of your household?) that allows respondents to answer on a five point scale from rather bad to rather good. We use this measure because prior research with Polish survey data has shown that irrespectively of how well the interviewers are trained and how detailed questions are on incomes and other benefits a household receives, the responses are still often inaccurate.
nothing about the direction of the arrows. Any evidence of a link between party vote in 2001 and vote for or against membership in 2003 could be a result of either of the following two causal stories. First, voters may have selected a preferred party in 2001 and then followed that party’s lead in casting their ballot in the 2003 referendum. Equally, if not more, likely is the possibility that voters approached the 2001 parliamentary elections with an understanding of their sentiments about EU membership and selected parties that were in agreement on the subject. More specifically, it is our suspicion that the sudden rise of LPR and Samoobrona in 2001 was in part due to their offering EU voters opposed to EU membership the option to vote for anti-EU parties in the election; recall that none of the parties in the 1997-2001 parliament were explicitly opposed to EU membership.23

Regardless of the direction of causality, we can still test to see if there is in fact a link between party vote in 2001 and referendum vote in 2003. Much of the literature on parties in post-communist countries would lead us to be skeptical of finding such a link, especially after controlling for socio-economic factors. Nevertheless, our expectation is to find a link between voting for parties in 2001 that were avowedly pro-EU membership and voting in favor of EU membership in 2003, a link between voting for parties in 2001 that were anti-EU membership and in voting against membership in 2003, and no relationship between voting for parties in 2001 that were neither clearly opposed to nor in favor of EU membership and voting for or against membership in 2003; we can test for the presence of these links at both the aggregate and micro-

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23 The question of the direction of these causal arrows is a fascinating one that we intend to return to in the future, but it requires a serious treatment in its own right beyond the scope of the current analysis.
level. We break down the parties in this manner: PO, SLD, UW and AWS are coded as pro-EU; Samoobrona and LPR are anti-EU; and PSL and PiS are unclear/neutral.\textsuperscript{24}

Our final set of hypotheses concerns three political factors: support for the government, ideological self-placement, and interest in politics. First, we check to see whether or not support for the EU is to some extent a function of support for the current government, as has been suggested in the Western European context (Franklin, van der Eijk and Marsh 1995; Hug and Sciarini 2000). An important caveat is in order, though: we do not mean to suggest that a positive finding in this regard should be interpreted as a vote of confidence in the Polish government.\textsuperscript{25} Even before conducting any analysis, we know that while close to 80% of the electorate voted in favor of EU membership, only 0.5% of the respondents felt that the current government was doing a very good job and only 14.7% thought that it was doing a good job. Nevertheless, we can still test to see if having a relatively better opinion of the government led to a greater likelihood of voting in favor of membership.

Although Gabel (2000) has found that there is no consistent relationship between left-right placement and attitude towards the European Union in Western Europe (see esp. Table 2, p.59), we suspect that in Poland we may find that rightists are more likely to oppose

\textsuperscript{24} The first two groups should not raise any serious doubts as to their classification (see Slomczynski & Shabad 2003; McManus-Czubinska et al. 2003; Taggart & Szczerbiak 2000; Markowski 2002) The latter group does as depending on what we observe (party programs, voters' stances, elite stances, media appearances of their leaders, etc) we might arrive at a different conclusion. Consider first the PSL. Their political leaders never openly rejected the very idea of joining EU, but they were permanently critical of the agreements made between Poland and the EU leading up to the referendum. Some of their "backbenchers" were also fairly skeptical about the whole idea, but this may also have been due to the internal factional games within the party. The leadership of PiS – a conservative party – made it clear that it not only wanted to join the EU, but that indeed Poland had already belonged to Europe for ten centuries. Their criticisms of integration resulted from their fundamental distaste of the Polish post-communists (SLD) as the main actors of the integration process. PiS on many occasions was very critical thus of both the peculiarities of Polish negotiations, and also felt strongly that the SLD – the direct heir of the communists that kept Poland out of Europe for half a century - should not be allowed to monopolize the whole enterprise.

\textsuperscript{25} Not surprisingly, though, the government seems to have wanted the voters to interpret the referendum in exactly this manner. Immediately following the referendum, Leszek Miller, the prime minister, called a vote of confidence in his minority government for the end of the week; the vote passed by a larger than expected margin. The move
membership than leftists because of the peculiar dynamics of Polish politics at the time of the referendum. The primary left wing party in Polish politics, the SLD, controlled the government and was highly invested in seeing the referendum pass. The opposition, on the other hand, was being led by two “populist” parties: Samoobrona and LPR. LPR also clearly espoused a right wing cultural message (pro-Church, pro-national interests, anti-abortion, etc.)

Finally, we explore whether or not general interest in politics is related to support for EU membership. Given the fact that the government ran a pro-EU campaign in the months leading up to the election, we might expect that those that were more interested in politics would be more likely to be aware of this campaign, and, consequently to vote yes. Additionally, we might expect that lack of interest in politics generally could trigger a kind of “checking out” of the political process that might manifest itself in negative reactions to government sponsored referenda, or even to measures that seem generally to continue the pattern of transition begun in the late 1980s. That being said, confirming that relationship between interest in politics and EU vote actually reflected these sentiments would require further analysis; for now we confine ourselves to the simpler task of seeing if such a relationship exists.

**Explaining the Vote: Empirical Analysis**

-- INSERT TABLES 3 AND 4 ABOUT HERE –

For the sake of clarity of presentation and conservation of space, we present all of our empirical findings regarding the vote for or against EU membership concisely in Table 3 (aggregate level) and Table 4 (individual level).²⁶

²⁶Regarding these tables, please note first that in both tables we have grouped the party vote into categories of parties. As the average vote for the pro, anti, and neutral EU parties combined in the aggregate analysis is 98.8%,
Turning first to demographic variables at the aggregate level, we find strong empirical support suggesting a relationship between both the percentage of urban residence in a county (greater percentage of votes in favor of membership) and the percentage of elderly citizens (smaller percentage of votes in favor of membership). These relationships hold even controlling for both economic and electoral variables.

The individual level analyses also confirm the pattern regarding residence: the more urban an area one lives in, the more likely one is to support EU membership. We do not, however, find similar patterns regarding age. Confirming the exit polls, we find that older voters individually were no more likely to vote against EU membership than anyone else. So we have the interesting observation that counties with greater concentrations of elderly voters produce higher proportions of votes against the EU, but no evidence that elderly voters themselves are responsible for this pattern.

The individual level analysis also reveals that more educated voters were more likely to support EU membership, which too is in accordance with the exit polls. Interestingly, this effect begins to disappear when controlling for income and party preference in 2001; when both factors are included in the analysis (Version 5), our confidence in the variable drops below conventional levels of statistical significance, as the coefficient is barely as large as its standard error. This

---

27 This result for age remains the same using either a continuous variable or a series of dummy variables.

28 While determining exactly why this is the case would require extensive additional analysis, we can speculate as to the cause. Powiats with high proportions of elderly citizens often have acute problems with assuring reasonable health services, suffer financial problems, and even have trouble providing basic services, precisely because of their large elderly populations. Consequently, the problems of the elderly become problems of the younger as well. This is exacerbated by the fact that much of Poland, especially in the rural areas, remains a fairly traditional society, with multigenerational and extended family still in place.
suggests that the effect of education on the vote for EU membership works through both income 
and party choice.29

In accordance with the exit polls, we also find no effect at all for gender. Somewhat 
surprisingly, we find the same for church attendance: in no specification of our model does 
increased church attendance appear to have any effect at all upon the vote in favor of 
membership.30

Turning to economic factors, we find a consistent story regarding income. At both the 
macro and micro level, more income leads to more support for the EU. Although the size of this 
effect drops off in both cases as we include additional control variables, it is clear that counties 
with higher average incomes had higher vote proportions in favor of EU membership and that 
the more satisfied individuals were with their household income, the more likely they were to 
vote in favor of EU membership. Thus the evidence from both aggregate income levels and 
individual satisfaction with income is supportive of the economic winners and losers hypothesis.

Unemployment presents a different picture. The micro-level analysis remains consistent 
with the economic winners and losers hypothesis: 80.7% of respondents that were not 
unemployed supported EU membership, while only 70.2% of unemployed respondents supported 
EU membership (Pearson $\chi^2 < .01$). This relationship appears to hold up in the multivariate 
analysis: in both Versions 2 and 5 of Table 4, the coefficient on unemployment is negative, 
although the relatively high standard errors in both cases cast some doubt on our confidence in 
these effects. At the aggregate level, however, we find the opposite results: a higher 
unemployment rate led to a higher percentage of votes in favor of EU membership. Thus while

---

29 In the overall sample, education and income correlate at a .24 level, and education and a pro-EU vote correlate at 
a .23 level.
the unemployed themselves were less likely to vote for EU membership than their non-
unemployed counterparts, regions of the country with greater numbers of unemployed workers
enjoyed higher support for EU membership.31

This finding is an interesting subject for future research. For now, let us suggest the
following possible explanations. First, the highest proportion of unemployed in Poland is to be
found in the counties of the north-east (Warminsko-Mazurskie region), a place where locals
experience the seasonal influx of tourism and border the Kaliningrad area. In both instances
employed and unemployed are aware of what proximity to foreigners and tourism means, even if
only temporarily during the summer.32 Second, citizens in areas of the country with high
unemployment may have lost their confidence that their lot can be improved by any Polish
government. Perhaps their hopes now have been transferred to Brussels. Finally, in both
northern regions (former German territories) many Germans are present there either as new
owners of land and property or just frequent tourists. Many of the predominantly poor rural
people from these regions have assets only in the form of (uncultivated) land, which might be
more easily sold to foreigners once Poland joins the EU. Although not necessarily in line with
the “winners” and “losers” hypothesis, all three of these admittedly ad hoc explanations could
provide some leverage towards explaining why greater concentrations of unemployed citizens
leads to more aggregate level support for EU membership even though the unemployed
themselves are more likely to oppose membership.33

30 Simple cross tabulations reveal the same finding. Splitting respondents into categories of never attending church,
attending at least once a year, at least once a month, and then at least once a week yields proportions of 78%, 82%,
79%, and 79% in favor of membership, respectively.
31 The relationship holds even without control variables; unemployment and the percentage of yes votes correlates at
a .35 level.
32 Other regions with high unemployment can be found near borders, in the north-west (Zachodniopomorskie
region) and the remote south-eastern part of Podkarpackie region, especially Bieszczadzki county.
33 An alternative explanation could be that perhaps the unemployed are more likely to stay home than other
employed “losers”. If that is the case, then regions with similar percentages of losers should actually have higher

- 19 -
Moving on to the political factors, the evidence concerning the relationship between the vote for political parties in the 2001 parliamentary election and the vote for or against EU membership in the 2003 referendum is both strong and consistent across the micro and macro level tests. At the aggregate level, an increase in the vote for pro-EU parties in 2001 corresponds with an increase in the percentage of yes vote in 2003, while the opposite is the case for the vote for anti-EU parties. The micro-level findings are identical: voting for a pro-EU party in 2001 makes one more likely to have supported EU membership in 2003 while voting for an anti-EU party in 2001 makes one more likely to have opposed EU membership. Indeed, all else equal switching from having supported an anti-EU party to a pro-EU party would lead to a respondent being over 22% more likely to have voted in favor of membership in the EU.

There is also empirical support for the three remaining political hypotheses. Although we were unable to test these hypotheses at the aggregate level, Table 4 (Versions 3 and 5) presents micro-level evidence. Self-identifying right wing voters were more likely to oppose EU membership than left-wing voters. Not surprisingly, our confidence in this variable drops once we control for vote choice in the 2001 election, but interestingly only to a level of $p \leq 0.052$. Moreover, even when controlling for vote choice, shifting a voter’s self identification from left wing to ring wing results in a 7% decrease in the likelihood of voting for EU membership, all else being equal. Still, we hesitate to claim this as a general point, and instead suspect that it is a feature of the Polish political landscape.

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34 Including parties individually produces similar results. Of the four pro-EU parties, there is a clear positive relationship for three (UW, PO, and SLD), but no evidence of any relationship for the fourth (AWS). Both of the anti-EU parties have clear negative relationships, as does, somewhat surprisingly, one of the neutral-EU parties (AWS); the remaining neutral party (PiS) has, as expected, no real relationship. Results are available from the authors upon request.
Interest in politics, as hypothesized, led to an increase in the likelihood of supporting EU membership, although, as discussed above, there could be multiple explanations as for why this was the case.

Finally, not only did satisfaction with the job of the government have an effect on one’s likelihood of supporting EU membership, but the variable appears to have had by far the largest effect of any of the variables included in our analysis. Shifting from thinking the government is doing a very bad job to thinking the government is doing a very good job while holding all else equal increases one’s likelihood of supporting EU membership by 25%. Moreover, the effect of this variable is hardly diminished by controlling for economic factors and past voting behavior (note the similarity between the coefficients and standard errors for the variable in Versions 3 and 5).36

Taken together, the political effects clearly seem to matter. Intriguingly, they seem to be both more important than traditional demographic variables and maintain most of their punch even when controlling for demographic factors.

Conclusions and Directions for Future Research

The goal of this paper was to conduct a preliminary investigation of both the turnout and vote in the 2003 Polish Referendum on joining the European Union. Regarding turnout, we find evidence to support two hypotheses. On the one hand, it seems clear that there is a core set of

35 This first difference was calculated by setting all variables at their mean except vote for anti-EU parties, which was switched from yes to no, vote for pro-EU parties, which was switched from no to yes, and vote for neutral EU parties, which was fixed at no. As in the tables, the reported value is the mean of 1000 simulated first differences.
36 As noted above, only a tiny proportion of the survey respondents (< 0.5%) actually gave the government the highest of the four available rankings. Nevertheless, when we recalculate the substantive effect of shifting from thinking the government was doing a very bad job to only a rather good job, we find that it still increases the likelihood of supporting EU membership by close to 22%. Similarly, rerunning the analysis without the six respondents that were very satisfied with the government has practically no effect on either the coefficient or standard error of the variable; in fact, the size of the coefficient actually increased slightly.
voters that turn out in national votes, be it a parliamentary election or a referendum. At the same
time, there is evidence to support the contention that the strategic dilemma posed for opponents
of EU membership may have had an effect upon turnout.

In terms of the vote itself, we find a minimal effect at the individual level for
demographic characteristics with the exception of residence, where more urban voters were more
likely to support EU membership, and, to a limited extent, education. By comparison, economic
and political factors seem to have had a strong and consistent effect upon voting outcomes, with
people who enjoyed greater economic success, approved of the government, had an interest in
politics, self-identified as a leftist, and voted for a pro-EU party in 2001 being more likely to
support EU membership. Most of the tests that we could replicate at the aggregate level confirm
these findings, with two notable exceptions. While we find no micro level evidence that younger
voters or unemployed voters were more likely to support EU membership – indeed, we find
evidence to suggest the opposite in the case of unemployed voters – we do find aggregate level
evidence suggesting that greater concentrations of younger and unemployed voters led to greater
support for EU membership in those areas.

In view of these finding, we would like to suggest the following three lines of inquiry for
future research. First, the research above – as is the case with any single election analysis – is
static, looking only at behavior at a particular moment in time. However, due to the presence of
questions about potential EU membership in surveys for years, it is possible to trace the
evolution of Polish public opinion on the matter over time. It will be interesting to see whether
the patterns identified above remained constant in the years preceding the vote, or if they were
more a function of circumstances at the time of the vote. In particular, is the left-right distinction
present while both leftist and rightist governments are in power? More generally, such an
analysis would offer the possibility to see if there are differences in the between merely forming an opinion on a topic (e.g., am I for or against EU membership?) and actually casting a vote in favor of or opposed to that proposition following an election campaign.

Second, we have explicitly noted throughout this manuscript that it is impossible for a static study to sort out whether the causal arrows flowed from party support to preference over EU membership or in the opposite direction. As noted in the text, our suspicion is that voters may have chosen to vote for Samoobrona or LPR in the 2001 parliamentary election precisely because of their stance on EU membership, which would suggest the latter is the case. In order to test these hypotheses, we will need to explore patterns over time, as well as more detailed elections studies from the 2001 election. In addition to settling empirical debates, such a study would be valuable because of its ability to speak to questions of political representation in Poland. Were the elites that comprised the anti-EU parties responding to societal pressure for anti-EU political movements? Or were these elites trying to enflame anti-EU sentiments in an effort to build support for their parties? Or perhaps voters were attracted to these parties from reasons that had nothing to do with EU membership, but then came to adopt the views of party leaders on the subject of EU membership.

Finally, the question of the strategic nature of referenda with minimal turnout thresholds warrants analysis beyond the Polish context. Much attention has been paid in political science to the question of whether electoral rules can induce certain forms of strategic voting when electing candidates; our research suggests similar dynamics may be at work in voting on referenda as well. Our counter-intuitive claim that a minimal threshold may actually have increased the winning margin of the vote seems well suited for cross-national comparative analysis.
Overall, the question of why citizens come to form opinions on important matters of public policy in new democracies – and why they vote the way they do in referenda on these topics – will continue to be a crucial piece of the puzzle in understanding politics in new democracies. Our hope is that this article can play a role in this larger task by providing empirical assessments of a set of hypotheses from one particular case, the 2003 Polish EU Referendum, but also by raising important questions to explore across a wider range of cases in the future.
Appendix: Descriptive Statistics of Independent Variables

Table A1: Descriptive Statistics of Macro-Level Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Turnout in Referendum</td>
<td>56.1</td>
<td>5.8</td>
</tr>
<tr>
<td>% Yes Vote in Referendum</td>
<td>74.3</td>
<td>10.3</td>
</tr>
<tr>
<td>% Unemployment</td>
<td>20.8</td>
<td>7.3</td>
</tr>
<tr>
<td>Ave. Income (100s of zł)</td>
<td>19.7</td>
<td>3.1</td>
</tr>
<tr>
<td>% Elderly (women ≥ 60, men ≥ 65)</td>
<td>14.3</td>
<td>2.4</td>
</tr>
<tr>
<td>% Urban</td>
<td>51.4</td>
<td>27.7</td>
</tr>
<tr>
<td>% Vote Pro-EU</td>
<td>59.5</td>
<td>11.8</td>
</tr>
<tr>
<td>% Vote Anti-EU</td>
<td>20.2</td>
<td>6.3</td>
</tr>
<tr>
<td>% Vote SLD in 2001</td>
<td>41.1</td>
<td>10.4</td>
</tr>
<tr>
<td>% Vote Samoobrana in 2001</td>
<td>12.6</td>
<td>5.3</td>
</tr>
<tr>
<td>% Vote PSL in 2001</td>
<td>11.8</td>
<td>8.5</td>
</tr>
<tr>
<td>% Vote LPR in 2001</td>
<td>7.6</td>
<td>3.5</td>
</tr>
<tr>
<td>% Vote AWS in 2001</td>
<td>5.3</td>
<td>3.3</td>
</tr>
<tr>
<td>% Vote UW in 2001</td>
<td>2.4</td>
<td>1.3</td>
</tr>
<tr>
<td>% Vote PO in 2001</td>
<td>10.6</td>
<td>5.4</td>
</tr>
<tr>
<td>% Vote PiS in 2001</td>
<td>7.2</td>
<td>3.8</td>
</tr>
</tbody>
</table>

*Income is extrapolated from 2001 income figures; see text for details

Table A2: Descriptive Statistics of Micro-Level Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elderly (women ≥ 60, men ≥ 65)</td>
<td>.28</td>
<td>.45</td>
</tr>
<tr>
<td>Education (4 categories)</td>
<td>.45</td>
<td>.34</td>
</tr>
<tr>
<td>Gender (Male = 1)</td>
<td>.44</td>
<td>.50</td>
</tr>
<tr>
<td>Church Attendance (4 categories)</td>
<td>.71</td>
<td>.37</td>
</tr>
<tr>
<td>Residence (3 categories)</td>
<td>.54</td>
<td>.44</td>
</tr>
<tr>
<td>Subjective Income (5 categories)</td>
<td>.44</td>
<td>.28</td>
</tr>
<tr>
<td>Currently Unemployed</td>
<td>.10</td>
<td>.30</td>
</tr>
<tr>
<td>Left-Right Self-Placement (3 categories)</td>
<td>.52</td>
<td>.32</td>
</tr>
<tr>
<td>Satisfaction with Government (4 categories)</td>
<td>.28</td>
<td>.22</td>
</tr>
<tr>
<td>Interest in Politics (5 categories)</td>
<td>.42</td>
<td>.25</td>
</tr>
<tr>
<td>2001 Vote: Pro-EU Party#</td>
<td>.28</td>
<td>.45</td>
</tr>
<tr>
<td>2001 Vote: Anti-EU Party#</td>
<td>.06</td>
<td>.24</td>
</tr>
<tr>
<td>2001 Vote: Unclear/ Neutral-EU Party#</td>
<td>.10</td>
<td>.30</td>
</tr>
</tbody>
</table>

*Pro-EU = SLD, UW, PO, AWS; Anti-EU =, Samoobrona, LPR; Neutral: PSL, PiS
Works Cited


## Table 1. Opponents of EU Membership Were Less Likely to Participate in the Referendum

<table>
<thead>
<tr>
<th></th>
<th>Definitely Will Not Participate</th>
<th>Rather Unlikely to Participate</th>
<th>Don’t Know if Participate</th>
<th>Rather Likely to Participate</th>
<th>Definitely Will Participate</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Against Membership</td>
<td>63.4%</td>
<td>40%</td>
<td>38.5%</td>
<td>16.3%</td>
<td>15.1%</td>
<td>20.4%</td>
</tr>
<tr>
<td></td>
<td>(45)</td>
<td>(6)</td>
<td>(30)</td>
<td>(16)</td>
<td>(122)</td>
<td>(219)</td>
</tr>
<tr>
<td>For Membership</td>
<td>36.6%</td>
<td>60%</td>
<td>61.5%</td>
<td>83.7%</td>
<td>84.9%</td>
<td>79.6%</td>
</tr>
<tr>
<td></td>
<td>(26)</td>
<td>(9)</td>
<td>(48)</td>
<td>(82)</td>
<td>(688)</td>
<td>(853)</td>
</tr>
</tbody>
</table>

*Pearson $\chi^2 (4) = 115.08$, $p \leq 0.001$; number of respondents (N) in parentheses.*
Table 2: Logit Analysis of Turnout in 2003 and 2001: Coefficients and (Stnd. Errors)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Elderly</td>
<td>.52***</td>
<td>-.55***</td>
<td>-.78***</td>
</tr>
<tr>
<td></td>
<td>(.15)</td>
<td>(.17)</td>
<td>(.18)</td>
</tr>
<tr>
<td>Education</td>
<td>.83***</td>
<td>.94***</td>
<td>.72***</td>
</tr>
<tr>
<td></td>
<td>(.21)</td>
<td>(.26)</td>
<td>(.27)</td>
</tr>
<tr>
<td>Male</td>
<td>.34***</td>
<td>.45***</td>
<td>.36**</td>
</tr>
<tr>
<td></td>
<td>(.13)</td>
<td>(.17)</td>
<td>(.17)</td>
</tr>
<tr>
<td>Church Attendance</td>
<td>1.02***</td>
<td>.83***</td>
<td>.53**</td>
</tr>
<tr>
<td></td>
<td>(.18)</td>
<td>(.21)</td>
<td>(.22)</td>
</tr>
<tr>
<td>Residence</td>
<td>-.21</td>
<td>.35**</td>
<td>.43**</td>
</tr>
<tr>
<td></td>
<td>(.15)</td>
<td>(.18)</td>
<td>(.19)</td>
</tr>
<tr>
<td>Left-Right</td>
<td>-.38*</td>
<td>.35</td>
<td>.52**</td>
</tr>
<tr>
<td></td>
<td>(.20)</td>
<td>(.25)</td>
<td>(.27)</td>
</tr>
<tr>
<td>Interest in Politics</td>
<td>1.8***</td>
<td>1.40***</td>
<td>.90***</td>
</tr>
<tr>
<td></td>
<td>(.28)</td>
<td>(.33)</td>
<td>(.34)</td>
</tr>
<tr>
<td>Voted in 2001</td>
<td>1.46***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.17)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-1.2***</td>
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<td>-.73</td>
</tr>
<tr>
<td></td>
<td>(.23)</td>
<td>(.26)</td>
<td>(.29)</td>
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N 1257 1257 1257 1257 1257

*p<.10, **p<.05, ***p<.01; see footnote 11 for explanation of p-values in 4th column.
Table 3: Regression Analysis of % Vote in Favor of EU Membership by Powiat: 
Coefficients and (Stnd. Errors)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Version 1</th>
<th>Version 2</th>
<th>Version 3</th>
<th>Version 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Elderly</td>
<td>-1.33</td>
<td>-.77</td>
<td>-.45</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.16)</td>
<td>(.16)</td>
<td>(.13)</td>
<td></td>
</tr>
<tr>
<td>% Population Living in Urban Areas</td>
<td>.22</td>
<td>.19</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.01)</td>
<td></td>
</tr>
<tr>
<td>Average Income in Hundreds of Zlotys</td>
<td>.60</td>
<td></td>
<td>.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.13)</td>
<td></td>
<td>(.11)</td>
<td></td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td></td>
<td></td>
<td>.24</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(.01)</td>
<td></td>
</tr>
<tr>
<td>% Vote for Pro-EU Parties in 2001#</td>
<td></td>
<td>.62</td>
<td>.42</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.04)</td>
<td>(.04)</td>
<td></td>
</tr>
<tr>
<td>% Vote for Anti-EU Parties in 2001#</td>
<td></td>
<td>-.28</td>
<td>-.31</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.07)</td>
<td>(.07)</td>
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</tr>
<tr>
<td>Constant</td>
<td>82.3</td>
<td>54.3</td>
<td>42.6</td>
<td>49.2</td>
</tr>
<tr>
<td></td>
<td>(2.7)</td>
<td>(4.4)</td>
<td>(3.4)</td>
<td>(5.1)</td>
</tr>
<tr>
<td>Adj R-sq.</td>
<td>.54</td>
<td>.61</td>
<td>.72</td>
<td>.76</td>
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<tr>
<td>N</td>
<td>370</td>
<td>370</td>
<td>370</td>
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#Pro-EU = SLD, UW, PO, AWS; Anti-EU =, Samo, LPR; Unclear/Neutral: PSL, PiS
All coefficients are significant at p ≤ .001 except income in Version 3, where p ≤ .018
Table 4: Logit Analysis of Vote in Favor of EU Membership: Coefficients and (Stnd. Errors)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Ver 1</th>
<th>Ver 2</th>
<th>Ver 3</th>
<th>Ver 4</th>
<th>Ver 5</th>
<th>Sub Effect</th>
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<tbody>
<tr>
<td>Elderly</td>
<td>.02</td>
<td>-.12</td>
<td>.06</td>
<td>-.02</td>
<td>-.12</td>
<td>-.02</td>
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<tr>
<td>Education</td>
<td>.75***</td>
<td>.46*</td>
<td>.75***</td>
<td>.49*</td>
<td>.36</td>
<td>.05</td>
</tr>
<tr>
<td>Male</td>
<td>.14</td>
<td>.08</td>
<td>.12</td>
<td>.10</td>
<td>.04</td>
<td>.00</td>
</tr>
<tr>
<td>Church Attendance</td>
<td>.17</td>
<td>.04</td>
<td>.26</td>
<td>.29</td>
<td>.21</td>
<td>.03</td>
</tr>
<tr>
<td>Residence</td>
<td>.71***</td>
<td>.68***</td>
<td>.69***</td>
<td>.63***</td>
<td>.61***</td>
<td>.09***</td>
</tr>
<tr>
<td>Subjective Income</td>
<td>.1.07***</td>
<td>.66**</td>
<td>.09**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>-.36</td>
<td></td>
<td></td>
<td>-.46*</td>
<td></td>
<td>-.07**</td>
</tr>
<tr>
<td>Left-Right</td>
<td>-.79***</td>
<td>-.54*</td>
<td>-.07**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction with</td>
<td>2.6***</td>
<td>2.5***</td>
<td></td>
<td>.25***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>.92**</td>
<td>.84**</td>
<td></td>
<td>.11**</td>
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<td>Interest in Politics</td>
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<tr>
<td>2001 Vote: Pro-EU Party#</td>
<td>.95***</td>
<td>.74***</td>
<td>.09***</td>
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<tr>
<td>2001 Vote: Anti-EU Party#</td>
<td>-.87***</td>
<td>-.72**</td>
<td>-.12***</td>
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<tr>
<td>2001 Vote: Unclear/Neutral-EU Party#</td>
<td>-.27</td>
<td>-.19</td>
<td>-.03</td>
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<tr>
<td>Constant</td>
<td>.47*</td>
<td>.38</td>
<td>-.19</td>
<td>.46</td>
<td>-.24</td>
<td>-</td>
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</table>

N 1071 1071 1071 1071 1071 1071 1071

*p<.10, **p<.05, ***p<.01; see footnote 10 for an explanation of the p-values in the last column

Footnote 10: Pro-EU = SLD, UW, PO, AWS; Anti-EU = Samoobrona, LPR; Neutral: PSL, PiS
Figure 1: Correlation between Turnout in 2001 Sejm Election and 2003 EU Referendum by Powiat with Bi-variate Regression Line Plotted
Figure 2: Correlation between Turnout and Vote in Favor of Membership in 2003 EU Referendum by Powiat with Bi-Variate Regression Line Plotted

Percentage Valid Ballots 2003

Correlation: +.50

Percentage Yes Votes