Exploring the Irish vote on Lisbon

Cees van der Eijk
(University of Nottingham)

and

Michael Marsh
(Trinity College Dublin)

This paper reports work in progress, in case of citation, please consult the authors for updated versions

Paper prepared for presentation at the meeting of the Elections, Public Opinion and Parties Group of the Political Studies Association, Glasgow, August 28-30, 2009.

Referendums on EU treaties can have an importance far beyond the boundaries of the state holding the vote. And when a second vote is called on the same treaty, as the Danes did on Maastricht, and the Irish did on Nice, the substantive significance is enormous. With a second vote due on the Lisbon Treaty in Ireland in October, the merits of understanding the reasons for the electorate to reject that treaty in 2008 need little justification. The growing numbers of referendums on EU matters now has its own literature as part of the wider study of referendum and plebiscite voting in particular and of electoral behaviour more generally, and a number of research questions characterise that field (see e.g. Hobolt 2009). Several of these seem relevant to the first Irish vote on Lisbon. First is the question of how far the vote was linked to substantive issues related to the treaty, and if so, what were they? Certainly a number of issues dominated the campaign, and, after the referendum ended in a rejection of the treaty, the government acted as if these issues were decisive by seeking the support of other EU governments to declare such concerns as misplaced. A second question is how referendum voting relates to other political orientations. The low levels of knowledge typically displayed by electors about the substance of referendums lead many to argue that most voters rely more on general orientations to political matters when it comes to such votes, than on the ostensible topic of the referendum (Franklin et al 1994, Lupia 1994, Bowler 1998). There are several such orientations, including diffuse support for the EU in general, political identity, the views of 'their' parties and even views about the government and its performance, all matters unrelated to the treaty itself. There was some surprise at the no vote, given that Irish support for the EU as measured by Eurobarometer data is relatively high (e.g. Eurobarometer 2008: 31-33), not least because of the obvious economic benefits of EU membership. Did diffuse support for the EU therefore not play a role, and if not, why not? Several recent studies have argued that explanations emphasising utilitarian underpinnings for such diffuse support are at best partial, and that the matter of 'identity' is vital (a clear general statement is McLaren 2004). On the European Union Treaty Lubbers (2008) argues the strongest driver behind

the Dutch rejection of the that treaty in 2005 was a perceived threat to Dutch cultural identity. The question thus arises whether Irish voters turned against Lisbon because of issues of identity, issues that overrode the effects of material benefits which had flowed, or which would continue to flow from membership? Another reason some were surprised at the result is because most parties called and campaigned for a yes vote. Fianna Fáil, Fine Gael and Labour between them won eight out of every ten votes cast in the 2007 election, but could persuade less than five out of every ten voters to say yes to Lisbon. How important then were party loyalties, and what might account for the apparent weakness of party messages in this referendum? The government at the time was a coalition of three parties, but dominated by the Fianna Fáil party, which won 78 of the government's 86 seats in the 2007 election, and Bertie Ahern, prime minister (Taoiseach) and leader of Fianna Fáil resigned in April 2008 following prolonged investigation of his financial affairs by a Tribunal of Inquiry. There were also signs that the long period of economic boom was coming to an end (although the referendum took place several months before the crisis became widely apparent with the collapse of Lehman Brothers in the US.) Could the record of the government and Ahern's resignation have influenced voters to vote no as a protest against the government?

These research questions underlie many explorations of EU referendum votes, and will be explored further here. However, we want to address a further question, about the nature of the relationships between the various drivers of support for or opposition to Lisbon (and by extension, other such matters). Are people's objections to the Treaty complementary, or not? If they are, then we can explore the importance of the various factors on the basis of an assumption that the electorate is homogeneous in terms of causal effects, using a simple additive model. But if they are not complementary, then we need an approach that requires the causal heterogeneity of the electorate to be taken into account. In other words, if some people vote no because they don't like the EU, while others vote no because they don't like the government and yet different groups because they have concerns about particular features of the treaty, then a straightforward additive model is inappropriate. We will address this question by adopting two different analytic

approaches and then assess which approach is more helpful in answering our questions about the Lisbon vote.

Data

The data we use here comes from a telephone survey carried out almost immediately after the vote on Thursday June 12th by RED C for the *Sunday Business Post* and the research team.[1] RED C interviewed a random sample of 1002 adults aged 18+ between Monday 16th and Wednesday 18th June 2008. Interviews were conducted across the country. The survey asked several sorts of questions (see Appendix 1 for the questionnaire) including some on the content and significance of the Lisbon Treaty, some on past and future general election voting behaviour, voting in the referendum and a number of items tapping attitudes to issues that came up in the campaign or were otherwise relevant to the vote, such attitudes to the EU. The survey differs from other surveys on the same vote, such as the Flash Eurobarometer (2008) poll carried out at much the same time and the Millward Brown IMS research commissioned by the government and conducted in July (Millward Brown 2008; this is also analysed in Sinnott et al., 2009). Both of these rely heavily on voters' own explanations for their choices, either by asking the open-ended question 'Why did you vote No?' or by asking respondents to indicate for a pre-formulated series of putative motivations 'How important was ---- in your decision to vote No?'. Alvarez and Nagler (2000, 61) express in a related context severe doubts about the validity of such self-reported motivations: "researchers using these survey questions do not appear to have seriously considered the quality of the survey responses obtained from questions asking for justifications of reported political behavior." They doubt particularly whether respondents are always able to cognize and verbalize reasons for their behavior. One can equally doubt whether the context of a mass-survey allows them to express *all* the reasons they may have in

[1] The study was directed by Cees van der Eijk, John Garry and Michael Marsh, with funding from the University of Nottingham, Queen's University Belfast and Trinity College Dublin and from the *Sunday Business Post.*

mind. A related, but somewhat different problem is whether we can assume that what people see as the reasons for their own behavior can be equated with the reasons that a researcher would see. In the words of Abraham Kaplan (1964, 32): "(...) it is of crucial importance that we distinguish between the meaning of the act to the actor (…) and its meaning to us as scientists, taking the action as subject-matter. I call these, respectively, *act meaning* and *action meaning*". He emphasizes that the two will in general be quite different. Self-reported reasons for how one voted in the referendum may be useful for describing act meaning, although even that claim may be contested (see Alvarez and Nagler, above). But relying on these responses as the reasons ('causes') for choices that would be satisfactory from a researcher's perspective, naively assumes that act meaning and action meaning coincide. Worse, reliance on self-reported motivations makes it impossible to arrive at falsifiable accounts for respondents' behavior, as it leaves no room for falsifying the reasons given by respondents. The RED C survey that we analyse in this paper does not ask respondents to report the motivations for their choice. As a result, any explanatory model will be based on the observed relationships between a series of potentially motivating factors on the one hand, and referendum vote on the other.

The key variables for the analysis below are as follows:

- Vote choice; in the 2007 parliamentary elections; in a hypothetical general election 'if it were to be held tomorrow', and in the referendum.
- Attitudes to major issues: neutrality, immigration, abortion and taxation.
- Attitudes to actors and institutions: trust in party leaders and support for the EU as well as a question about political identity.[2]
- Expectations about the consequences of a yes vote: on Ireland's neutrality, the practice of abortion, tax on businesses, Ireland's influence on EU decisions, protection of workers' rights, unemployment, Ireland's European Commissioner and decision-making in the EU.

[2] The support for integration variable originally contained missing values for 18% of cases because it was erroneously not asked of all respondents. We imputed missing values (using AMELIA, see King et al 2001) where data was missing,

- Economic conditions and expectations: past and future benefits of EU membership and retrospective personal economic evaluations.
- Demographics.

It appeared that responses to some questionnaire items derive from common, underlying orientations. This allowed us to construct two composite measures: a party leader trust scale and a negative treaty consequences scale. The first is comprised of four items on trust in 'your' party leader to do the right thing on the economy, health, Europe and moral issues; these items formed a very strong unidimensional cumulative scale. The second consists of five items tapping people's expectation that the treaty would have 'bad' consequences – at least the no campaign saw these as bad – in terms of neutrality, abortion, corporation taxes, unemployment, and Irish influence on EU decision-making.[3] The finding that a set of items is unidimensional is not only of importance in a measurement sense (allowing a composite measure to be used in lieu of a set of separate items), but also in terms of the substantive interpretation of what the constituent items reflect. The very diversity of the nature of the consequences, and the absence of any substantive linkage between them suggests that the responses to these items are not rooted in specific ideas or expectations about how the treaty would affect policy in each of these issue domains. Rather, they reflect the degree to which people hold a diffuse and generalized expectation that the treaty will bring negative consequences. This will express itself in whatever policy domain is probed in terms of potential negative consequences. In other words, if asked whether consequences in other policy areas would be negative, people's responses would equally have reflected this generalized and diffuse feeling of apprehension.[4]

---

[3] The unidimensionality of these two sets of items was assessed using Mokken's procedure for stochastic cumulative scaling (Mokken, 1971; Niemöller and Van Schuur 1983; Van Schuur 2003). The strength of a Mokken scale is measured by the coefficient of homogeneity (H), which should exceed .30. The bad consequences Mokken scale has an H-coefficient of .47, and the trust scale of .68. For the purposes of these analyses each item was recoded into a dichotomy trust/ not trust and bad/not bad.

[4] This interpretation begs the question why three of the items of this battery of items about consequences could not be included in this uni-dimensional bad consequences scale. The item that the treaty would 'lead us to losing our EU Commissioner for some of the time' probably does not fit

A standard model

If the electorate can be considered to be homogeneous in terms of the effects of motivating factors on referendum choice, then straightforward additive regression modelling will be a most appropriate approach. In this section of the paper we will report such models, to be contrasted with the latent class approach reported in the next section. In view of the dichotomous nature of the dependent variable (voted yes vs. no) we use logistic regression model. As different kinds of explanatory variables can be hypothesised to differ in terms of causal 'distance' vs. proximity towards the dependent variable, we estimated a series of regression models in block-wise recursive fashion; these are reported in Table 1. We start with a demographics only model (Model A) and then successively add blocks of variables, first attitudinal variables and past political affiliations (model B), then evaluations of government (Model C) and lastly evaluations of the treaty itself and its possible consequences, which might be said to represent campaign influences (Model D). Finally we run a backwards-stepwise regression, using all of the independent variables included in Model D, which results in a reduced model (Model E). Both the full and the reduced model explain referendum choices quite well with McFadden's Pseudo R^2 (adjusted) values 0.45 and 85% of cases correctly classified. The surface under the ROC is 0.92 (cf. Zweig and Campbell 1993). Highly significant factors in model E include gender, views on neutrality and European integration, low trust in one's party leader and expectations that the treaty will have 'bad' consequences. However, before looking more closely at these and other factors we should examine the differences between the models.

Gender is the only demographic factor of not significant initially, as class – social grade – and age are linked to vote choice, but the weight of this variable increases

---

because it is almost universally subscribed to, irrespective of one's opinion about the merits of the treaty. The other two items that were not part of the scale were that the treaty would 'have strengthened the protection of workers' rights' and 'have simplified decision-making in the EU'. The difference between these and the scaled items is that these items are cast in positive evaluative terminology, whereas the scale items are formulated in negative terms (see Q14/15 of the questionnaire, which is included in the appendix of this paper).

once other variables enter the equation, and in particular once variables tapping consequences are taken into account. While slightly more women than men voted no, once other factors are included the effect reverses: other things being equal men were more likely to vote no. Working class voters (C2, DE) were also more likely to vote no, but the effect weakens considerably once the last set of factors are included. This suggests that the reason this group was more likely to believe the warnings of the no campaign than the reassurances of the yes side. The same, even more clearly, is true of age: younger voters were much more likely to vote no, because they were much more likely to believe the no side's version of the Treaty (as is demonstrated by the sharp decline in the age coefficient between Model C and Model D).
The effects various attitudinal variables also prove somewhat unstable as additional factors are included in the equation, although views on integration and to a lesser extent neutrality remain highly significant whatever is included. In contrast, views on corporation tax become significant only in a more fully specified model. Party choice seems to be linked to the Lisbon vote, but these effects are much reduced once the perceived consequences are allowed for. Moreover, voting for a Yes opposition party (as opposed to voting independent or not voting, the effective reference category here) is no longer significant once these expectations are taken into account. It seems that FG and Labour voters voted yes only to the extent they believed the Yes campaign. Voting for the government is absent from the reduced model, and even if all three vote dummies are included they do not add significantly to the R^2. Satisfaction with the government, however, is consistently strong.

It is worth remarking on the factors that seem to be unrelated to the referendum vote, in particular, attitudes to abortion and foreigners and the loss of a Commissioner. There was a strong element of the no campaign highlighting the dangers of the treaty in bringing the day closer when abortion would become legal in Ireland, but while it is clear that there is a connection between thinking this was true and voting no (as demonstrated by the effect of the consequences of treaty scale), there is no connection between views on abortion per se and voting no. This runs somewhat counter to the findings of the government backed study carried out

by Millward Brown which did conclude abortion was a salient factor, both because people said so in focus groups and because people reported in the quantitative survey that abortion was very important in the decision (Millward Brown 2008; also Sinnott et al 2009). There is a striking contrast here with views on the desirability of neutrality, which is consistently important, regardless it seems of the respondent's views on the substance of the treaty. A second important negative finding here is the nature of the link between views on immigration and the no vote. Commentary around the vote did point to anecdotal evidence that this was an important factor and the Millward Brown study gave further support to this view. This is also confirmed in Model B, but the relationship is much weakened in later models, particularly when we control additionally for expected consequences of the treaty. Apprehensions about immigration are correlated with the vote, but also with expectations about negative consequences. If there is an effect of concerns about immigration then, it seems to be an indirect one. The third is that the perception that Ireland would lose a Commissioner was also unrelated to the vote. This is in stark contrast to the conclusions of Millward Brown 2008 and Sinnott et al 2009. Perhaps this is because most people accepted that this would be the case, but even so it is puzzling that the link is so weak; it suggests that the presence of Ireland's 'own' commissioner was not so important to most voters, although it was a widely known consequence that could be voiced by those being asked for a reason to vote no. Finally, it seems that the identity factor (considering oneself exclusively Irish, instead of European or mixed) was at best a weak factor in vote choice. While it is significant in Model B, it is not so in the full model (Model D) and only at .10 in the reduced model.

[TABLE 1 ABOUT HERE]

Table 2 shows the differential probabilities associated with the coefficients in a reduced form model limited to just those factors significant at .05 in the stepwise model. Government dissatisfaction is a most powerful factor, with those dissatisfied being .37 more likely to vote no than those who were satisfied. The perception of

adverse consequences has the largest effect (changing the probability of a no by .72) but this is a 5-point scale, and this probability difference relates to the contrast between those scoring 0 and those scoring 4 on the scale. Otherwise the effects are similar in terms of differential probabilities, with the exception of gender, which has the weakest impact on the probability of a no vote and perception that the EU did not benefit Ireland, which looks very strong. [5] However, that variable is very skewed in its distribution and only a very small minority took this view.

[TABLE 2 ABOUT HERE]

This is a fairly satisfactory model with quite a good fit, McFadden's pseudo-R^2 being 0.45 with 85% of cases correctly classified and the surface under the ROC 0.92 (cf. Zweig and Campbell 1993*)*. The story of the vote suggested in this model is also an interesting one, suggesting that the no vote was due to a combination of diffuse concerns about the consequences of the treaty as conveyed by the campaign – and more general political attitudes, while there were also some signs of a protest vote. These findings conflict somewhat with the 'official' interpretation constructed by the government from the campaign and to some degree reinforced by the Millward Brown study (Millward Brown 2008). Our findings also reveal that issues of corporation tax – perhaps a somewhat specialised concern – and abortion were far less significant than the Millward Brown research suggested (Millward Brown 2008: 19, 38). In any case the government has moved to obtain EU support for its argument that the Lisbon Treaty does not pose a threat either to Ireland's abortion regime or to its low levels of corporation tax. Our findings also show that fears about losing the Commissioner were not important (again, c.f Millward Brown 2008: 19, 38) although the Flash Eurobarometer also noted that few no voters mentioned this as a 'reason' (2008: 19). Even so, the government has ensured that an Irish Commissioner will remain if Lisbon is ratified. Our analyses do reinforce the

[5] Party vote is not included here, given the low levels of significance. Alternative specifications using vote for yes/no parties did prove significant but had little effect on the other variables, other than to reduce the weight of the trust indicator, although this remained significant.

importance of concerns over neutrality, which have also been addressed by the government, just as they were for the re-run of Nice in 2003. Our findings also support other research in underlining the importance of the campaign in conveying different interpretations of the treaty itself. Sinnott et al [2009] conclude that

> the failure to convince or reassure people that the issues of corporate taxation, of abortion and of conscription were not in the Lisbon Treaty played a substantial role in the defeat of the ratification proposal.

Our own analysis, however, suggests that the particular elements identified by Sinnott et al were less important than the general perception spread by the no campaign that Lisbon meant change, and change for the worse.

However, as we pointed out in the introduction to this paper, this regression model does assume that the effects are the same for everyone, that the electorate is homogeneous in terms of the causal effects exerted by the respective explanatory variables. It does not allow for the possibility that some voters may be motivated by concerns about abortion, others by concerns about neutrality; that some may simply be protesting while others are voting on the issues.[6] We could address this possibility by elaborating the model, for instance by introducing interaction effects that might, for example, specify more sophisticated voters being motivated by neutrality and less sophisticated voters being prone to protest. Such an approach is fine in the presence of specific hypotheses concerning heterogeneity. In the absence of such theoretical guidance, such an approach risks either to be of a hit-and-miss character, or to degenerate into a grand fishing expedition, with all concomitant risks of capitalising on chance. An alternative, which is chosen here, is to identify inductively, using Latent Class Analysis, groups across which the effects of explanatory variables might vary.

[6] Moreover the regression models reported only estimate direct effects. The block-recursive sequence of models helps in generating hypotheses about indirect effects, but explicit distinction between direct and indirect effects requires structural equation modelling. We will report such models elsewhere.

Latent Class analysis

The possibility that different groups of people would be motivated to vote no by different factors can only be tested empirically if one knows –or at least suspects– what these groups are. What is required, therefore, is a relevant typology of voters in terms of different 'mixes' of motivational factors. Relevant implies, in this context, that the classes of the typology differ strongly in terms of their referendum choices. Latent Class Analysis (LCA) provides an empirical and model-driven approach to define such a typology.

LCA is a form of latent variable analysis; it shares with other forms such as factor analysis and item-response theory (IRT) the assumption that manifest indicators (here, responses to survey items) are manifestations of an underlying (latent) variable. In contrast to factor analysis and IRT models, however, the latent variable is assumed to be a *nominal-level* classification (i.e., a distinction between different *types* of people). As in other latent variable models, latent class should account for all association between the manifest indicators (assumption of local independence).

There are two possible approaches to the use of LCA here. The first is to select relevant factors that are related to referendum choices, perform a latent class analysis, identify classes, and assess the relationship of these classes with referendum choice. A second way of conducting the analysis is to integrate the latent-class and regression analyses in a joint latent class regression model, which identifies the segments that differ in the importance attached to each of the motivational factors during in conjunction with the regression. We restrict ourselves in this paper to the first of these approaches. Our object here is to detect latent classes (also referred to as clusters) that are defined in terms of combinations of relevant attitudes and opinions and that are very strongly related to yes/no voting in the referendum. We started out by including all of the indicators in Table 1,

with no-voting as a covariate.[7] We then successively deleted indicators on the basis of inspection of the strength of the relationship between the latent clusters and the indicators[8] and of the residuals[9], dropping indicators poorly 'explained' by the clusters or resulting in large residuals, until we arrived at a model consisting of 4 latent classes which generate the responses on 5 manifest indicators. These indicators jointly cover 144 different possible combinations of responses, which can adequately be described in terms of a fourfold latent classification, leaving no significant residual association between the indicators (i.e., the model has an excellent fit).[10] The model comprises only 5 indicators out of 16 that were considered during the process, which is the result of our strategy to weed out indicators that turned out to be at best weakly related to the latent classification.[11]

[TABLE 3 ABOUT HERE]

The four latent classes have a very strong relationship with referendum choice: class 1 voted 87% against, class 2 only 1% against, for class 3 it is 10% and for class 4 the no vote is 98%![12] Yet, this does not imply that classes 1 and 4 could be combined, or

[7] We used the Latent Gold (4.0) software to conduct our analysis. Because of multicollinearity between the dummies for voting for the government and voting for the opposition (in the most recent general elections) we included only the first of these.
[8] These magnitudes are similar to the communalities in factor analysis, and indicate the extent to which values of each manifest indicator are 'explained' by the values on the four clusters.
[9] Residuals are the bivariate associations remaining once the effects of clusters are controlled. Ideally, residuals should be close to zero; if they are not, they indicate a degree of association between the manifest indicators that is not accounted for by the latent classes (which, therefore, constitute violations of the assumption of local independence).
[10] Model fit can be described in a number of ways. Three measures of discrepancy between model-implications and observations are Chi square, L^2 and the Cressie-Read index, which should not reach significant values. Their values are, respectively 286.29, 205.45 and 230.69 with df255 yielding p-values of 0.09, 0.99 and 0.86 respectively. Other kinds of fit measures such as the proportion of classification errors also indicate that this is an excellently fitting model.
[11] Including additional indicators did not increase the distinctiveness of the classes in terms of their indicator-profile or in terms of their relationship with referendum vote. Additionally, we found that models with fewer or with more latent classes did not perform better in terms of model fit, distinctiveness of indicator profiles or explanatory power with respect to vote.
[12] LCA allows latent class-membership to be estimated as individual-level variables, either in a probabilistic form (probability of belonging to each of the classes, these probabilities obviously sum to 1) or in the form of an exclusive class membership (membership determined by highest probability). Using these estimated class memberships as independent variables in a logistic regression yields the following in terms of fit and explanatory power: for the probabilistic class

classes 2 and 3, as each has its own unique and distinctive profile of motivational factors, as is shown in Table 4.

[TABLE 4 ABOUT HERE]

It is striking that the identity variable appears as part of the solution here, as it did not appear significant earlier. As we will see, there is a complex relationship between this and the other variables that define the four classes which perhaps accounts for the difference. Most of the relationships between clusters and indicators are in line with what we would expect from our earlier analysis. Most clearly, in Clusters 1 and 4 – where most voted no – people tend to see the treaty as having adverse consequences, while in clusters 2 and 3 – where most voted yes – they do not: mean scores on this indicator are 3.2 and 3.8 for clusters 1 and 4 respectively as opposed to 0.8 and 1.8 for clusters 2 and 3. The same is true of the workers' rights indicator. A very different pattern is apparent with respect to the indicator for Irish identity. In only one of the two anti-Lisbon clusters (Cluster 4) do people tend to have an Irish-only identity, and in only one of the two pro-Lisbon clusters do they have a mixed or European identity (Cluster 2). This result suggests that while identity did not matter for some (i.e., the members of clusters 1 and 3), it did for others. The other indication of non-homogeneous effects is the attitude to European integration. One of the puzzling features of the referendum result was the fact that support for integration is quite high in Ireland, suggesting that many people who were 'pro European' voted no nevertheless. We see this most clearly as characteristic of cluster 1, where 40% are in favour of *more* integration. This group also tends to claim Irish/European or European only identity. The no vote here thus seems to have been due to the campaign itself rather than to more general attitudes, and concerns about the consequences of Lisbon. In contrast, 86% of respondents in cluster 4 were against further integration. This suggests that a significant group of no voters (Cluster 1) were cross-pressured, being broadly pro European, but at the same time sceptical about the advantages of this particular treaty. It is also notable

---

memberships Nagelkerke Pseudo R^2=0.95, surface under the ROC 0.98, correct predictions 98%; for the exclusive class membership Nagelkerke Pseudo R^2=0.90, surface under the ROC 0.97, correct prediction 97%

that only in Cluster 4 – what we might call the solid no voters – is there much doubt about the fact that the EU brought economic benefits to Ireland. It is harder to distinguish the two yes groups though most of those in Cluster 3 think of themselves as Irish only and this group is a little less homogeneous in terms of support for more integration.

On the basis of the profiles reported in Table 4 we can think of the 4 clusters in the following way:

- Cluster 1: EU-ambivalent, not subscribing to an exclusive Irish identity, negative expectations about effects of treaty: ambivalent no-voters
- Cluster 2: strong pro EU orientations, rejects exclusive Irish identity, hard-core yes voters
- Cluster 3: muted pro-EU orientations with more exclusive Irish identity, ambivalent yes voters
- Cluster 4: strongly EU-sceptic, exclusive Irish identity, hard-core no-voters

It is of some relevance to note (see also first row of Table 4) the relative size of these clusters. Clusters 1 and 2 each comprise some 30% of the electorate, clusters 3 and 4 each approximately 20%. The number of ambivalent no-voters seems thus to have been larger than that of ambivalent yes-voters, which seems to hold at least some hope for the government's decision to seek popular approval of the treaty in a second referendum. In order for a new referendum to yield a 'yes' result, the people in Cluster 1 have to be reassured concerning their apprehensions about the consequences of the treaty. The no camp can, in principle, gain support from the ambivalent yes voters (Cluster 3) by appealing to their Irish identity and reinforcing their existing fears over negative consequences of the treaty.

The particular combinations of characteristics that define each of the clusters demonstrate that important interactions are at work which effectuate that high (or conversely, low) scores on any of the items used in the latent class analysis do not uniformly affect the likelihood of a no (or of a yes) vote. Subscribing to an exclusive Irish identity, for example, sometimes contributes to voting no (cluster 4), but

sometimes not (cluster 3). Obviously, once it is known which set of items defines the latent classes, one can define their various interactions and include them in a 'standard' regression equation.[13] It is by including these interactions that our LCA model acquires its explanatory strength. However, LCA does not provide a full-blown causal model, particularly not when considering sets of independent variables that are of unequal causal antecedence with respect to the dependent variable. It shares this limitation with the regression analyses reported in Tables 1 and 2 (see footnote 6). The absence in the model of, e.g., social structural characteristics does therefore not imply that those are irrelevant, but it does suggest that their importance may be indirect, mediated by membership in the latent classes. Without full causal modelling, it is therefore still relevant to assess the relationship between such background characteristics and the latent typology provided by the LCA. Table 5 provides the relevant descriptive information.

[TABLE 5 ABOUT HERE]

Table 5 illustrates that a number of background variables are significantly related to latent class membership, thus exerting an indirect effect on the referendum vote. Higher social grades are clearly over-represented in the hard-yes group (Cluster 2) and under-represented in the hard-no group (Cluster 4). The two ambivalent groups are less well defined in terms of social grade and very similar to one another. The situation with gender is more complex. Women tend to be hard no voters, and soft yes voters, and men are the reverse, although again the ambivalent categories are slightly less well defined. The age profiles of the hard yes and no clusters differ, with older people tending to be in the yes cluster and younger ones in the no group. The ambivalent clusters are again not so clearly defined. All three demographic characteristics show the biggest differences between the hard yes and hard no

[13] The LCA model based on 5 items implies the presence of 31 effects: 5 main effects (which are also present in the regression analyses of the kind reported in Tables 1 and 2), 10 2nd order interactions, 10 3rd order interactions, 5 4th order interaction, and 1 5th order interaction. It is unlikely that all of these are required for replicating the explanatory power of the LCA model in a logistic regression analysis, but the exploration of which are and which are not falls beyond the scope of this paper.

groups and less, sometimes much less, between the two ambivalent ones. In terms of political preferences we distinguished between stable supporters of various parties –expressing the same choice of party in the last general elections and in a hypothetical election that 'would be held tomorrow'– and everyone else. Stable SF supporters and people with changing choices (who are therefore included in the 'else' category) are most prone to be member of the hard-core no group (Cluster 4), while the hard yes group (Cluster 2) is more likely to be drawn from supporters of government parties (FF and Green) or FG. It is likely that stable party supporters are most likely to be influenced by the cues given by their respective parties, and we see that clearly reflected. However, SF apart, party differences are absent in the ambivalent yes group and are generally muted in the ambivalent no group, the modal cluster for Labour voters. Voters with unstable party preferences (the 'else' group) are not over-represented in the two ambivalent clusters (clusters 1 and 3), but rather in the two no Clusters. However, it should be emphasised that, even when they are statistically significant, none of the relationships displayed in Table 5 are particularly strong.[14]

Conclusions

This paper set out to provide some explanations for the vote on the Lisbon Treaty in Ireland, using data from a survey conducted just after the referendum and before the public debate on the causes of the results had taken hold. It has done so by using two rather different techniques, regression analysis and LCA to establish not just what the key factors seemed to be, but also how far voters were all driven by the same logic. As far as explanatory factors are concerned our findings contrast somewhat with those of other research in many of the details about voters concerns, but do reinforce other work in highlighting the importance of concerns about the effects of the treaty, concerns that we argue were rather diffuse. The Flash Eurobarometer survey carried out immediately after the vote found people believed

[14] In a different fashion, this is also reflected in the weak effects of background characteristics in the regression models (see Table 1, Model A).

the no side had fought a better campaign and our results underline that judgement. We do find evidence that people's general orientations towards the EU did play a significant role, so 'issues' mattered, but we also find that dissatisfaction with the government played a part: there was a protest vote. However, we also found in the second part of our analysis that the electorate was somewhat heterogeneous, and that for some general concerns about identity were significant. The inter-relationships between identity, support for more integration and concerns about this particular treaty produced cross pressures on many voters, many of whom responded by voting no.

The next stage of this work will be to combine these two parts of the analysis by creating a better specified causal model, incorporating the insights from the LCA as well as the regression analysis.

References

Alvarez and J. Nagler 2000. A New Approach for Modelling Strategic Voting in Multiparty Elections, *British Journal of Political Science* 30, 57-75.

Eurobarometer 2008. *Eurobarometer 70: Public Opinion in the European Union: First results.* Brussels: European Commission.

Franklin, Mark, Michael Marsh and Lauren McLaren. 1994. Uncorking the Bottle: Popular Opposition to European Unification in the Wake of Maastricht, *Journal of Common Market Studies*, 33, 455 – 72

Hobolt, Sara Binzer. 2009. *Europe in Question. Referendums on European Integration*. Oxford: Oxford University Press.

Ivaldi, G. 2006. Beyond France's 2005 referendum on the European Constitutional Treaty: Second-order model, anti-establishment attitudes and the end of the alternative European utopia, *West European Politics* 29, 47-69

Kaplan, Abraham. 1964. *The Conduct of Inquiry. Methodology for Behavioral Science*. Scranton: Chandler.

King, Gary James Honaker, Anne Joseph, and Kenneth Scheve. 2001. Analyzing Incomplete Political Science Data: An Alternative Algorithm for Multiple Imputation, *American Political Science Review*, 95, 49-69

Lubbers, Marcel. 2008. Regarding the Dutch 'Nee' to the European constitution - A test of the identity, utilitarian and political approaches to voting 'no', *European Union Politics* 9, 59-66

Lupia, A. 1994. Shortcuts Versus Encyclopedias - Information And Voting-Behavior In California Insurance Reform Election, *American Political Science Review* 88, 63-76

McLaren, LM. 2004. Opposition to European integration and fear of loss of national identity: Debunking a basic assumption regarding hostility to the integration project, *European Journal Of Political Research* 6, 895-911

Millward Brown 2008. Flash Eurobarometer 2008. *Post-referendum Survey in Ireland: Analytical Report.* Brussels: European Commission, Flash EB Series #245.

Mokken, R. J. (1971). *A Theory and Procedure of Scale Analysis. With Applications in Political Research*. New York/Berlin: De Gruyter-Mouton

Mokken, R. J. and Lewis, C. (1982). A nonparametric approach to the analysis of dichotomous item responses. *Applied psychological measurement, 6*, 417-430

Niemöller, B. and W.H. van Schuur. 1983. Stochastic models for unidimensional scaling – Mokken and Rasch. In: *Data Analysis and the Social Sciences*, eds. D. McKay, N. Schofield and P. Whiteley. London: Francis Pinter pp. 120-170

Schuur, W.H. van. 2003. Mokken Scale Analysis: between the Guttman Scale and Parametric Item Response Theory, *Political Analysis* 11: 139-163

Sinnott, Richard, Johan A. Elkink , Kevin O'Rourke and James McBride. 2009. *Attitudes and Behaviour in the Referendum on the Treaty of Lisbon: Report prepared for the Department of Foreign Affairs.* Geary Institute, University College Dublin.

Zweig, M.H. and G. Campbell (1993). "Receiver-operating characteristic (ROC) plots: a fundamental evaluation tool in clinical medicine". *Clinical chemistry* 39 (8), 561–577

Table 1 Logistic regression models of referendum choice

[entries are regression coefficients (top) and standard errors (bottom)]

	Model A	Model B	Model C	Model D	Model E
Age	-0.24***	-0.17***	-0.24***	-0.12	
	(0.05)	(0.06)	(0.07)	(0.08)	
	0.16	-0.36*	-0.33*	-0.64***	-0.64***
Female					
	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
	0.24***	0.19***	0.20***	0.13*	
(lower) Social grade [AB, C1, C2, DE)					
	(0.05)	(0.06)	(0.06)	(0.07)	
Ireland should [NOT] accept limitations on its neutrality		0.53***	0.48***	0.29***	0.28***
		(0.08)	(0.08)	(0.1)	(0.10)
Corporate tax levels in the countries in the EU should [NOT] be more similar		0.094	0.14*	0.20**	0.23**
		(0.08)	(0.08)	(0.1)	(0.10)
There should [not] be much stricter limits on the number of foreigners		-0.21***	-0.19**	0.053	
		(0.08)	(0.08)	(0.1)	
		-0.033	-0.041	-0.057	
Abortion should never be allowed in Ireland [Disagree]					
		(0.08)	(0.08)	(0.10)	
		-1.32***	-1.24***	-0.91***	-0.93***
For more integration with EU					
		(0.2)	(0.2)	(0.2)	(0.2)
EU has [not] benefitted Ireland		1.04**	0.98**	0.84*	1.02**
		(0.4)	(0.4)	(0.4)	(0.4)
		0.46**	0.54**	0.32	
Irish identity rather than mixed/European					
		(0.2)	(0.2)	(0.3)	
		-1.55***	-1.15***	-0.72**	
Voted for government party					
		(0.2)	(0.3)	(0.3)	
		-0.75***	-0.88***	-0.47	
Voted for FG or Labour					
		(0.2)	(0.3)	(0.4)	
		-0.40	-0.45	-0.24	
Voted SF					
		(0.8)	(0.8)	(1.1)	
Dissatisfied with government			0.57***	0.49***	0.54***
			-0.10	-0.10	-0.10
			0.30**	0.25	
Personal finances better or worse					
			-0.10	-0.20	
				-0.14	-0.25***
Party leader trust scale					
				(0.09)	(0.07)
				0.68***	0.72***
Consequences of treaty scale					
				(0.08)	(0.08)
				-1.27***	-1.24***
Treaty will simplify decision-making in the EU					
				(0.3)	(0.3)
				-1.29***	-1.33***
Treaty will strengthen the protection of workers' rights					
				(0.3)	(0.2)
Treaty will lead to us losing our European Commissioner for some of the time				0.04	
				-0.30	
Constant	-0.14	0.70	-1.32*	-2.72***	-2.64***
	0.30	0.60	0.70	0.90	0.70
Observations	710	710	710	710	710
McFadden's Pseudo R Squared (adjusted)	0.03	0.23	0.27	0.44	0.45

*** P<0.01, ** p<0.05, * p<0.10

Table 2 Reduced model: Impact of factors on No vote

	Impact on probability of No vote of moving from minimum to maximum value
Female (2/1)	-0.16
Disagree Ireland should accept limitations on its neutrality (1/0)	0.20
Disagree Corporate tax levels in the countries in the EU should be more similar (1/0)	0.17
Against more integration with EU (1/0)	0.22
Disagree EU has benefitted Ireland (1/0)	0.50
Dissatisfied with government (1/0)	0.38
Party leader trust scale (3/0)	-0.25
(Bad) consequences of treaty scale (4/0)	0.72
Treaty will simplify decision-making in the EU (1/0)	-0.30
Treaty will strengthen the protection of workers' rights (1/0)	-0.32

Model includes only factors significant at .05 level. Model correctly predicts choice of 85% of cases.

Table 3 Latent class analysis for 5 indicators with referendum vote as covariate*

	Loadings (R)	R squared
Consequences of treaty scale	0.6804	0.4629
Irish rather than mixed or European identity	0.6919	0.4788
EU benefitted Ireland	0.4851	0.2353
Treaty will protect workers rights	0.4878	0.2380
Pro EU integration	0.5875	0.3452

* cell entries are correlations (first column) and squared correlations (second column) between cluster-classification and indicator

Table 4 Cluster Indicator profile*

	Cluster1	Cluster2	Cluster3	Cluster4
Cluster Size	0.3079	0.3045	0.1969	0.1907
Indicators				
badscale				
0	0.0472	0.4997	0.2371	0.0112
1	0.0867	0.2646	0.2264	0.0310
2	0.1698	0.1494	0.2305	0.0913
3	0.2555	0.0648	0.1802	0.2065
4	0.2377	0.0174	0.0871	0.2888
5	0.2032	0.0043	0.0387	0.3711
Mean	3.1593	0.8484	1.7698	3.8439
irish				
0	0.8081	0.9817	0.3816	0.1166
1	0.1919	0.0183	0.6184	0.8834
Mean	0.1919	0.0183	0.6184	0.8834
benefit				
0	0.0279	0.0002	0.0166	0.3436
1	0.9721	0.9998	0.9834	0.6564
Mean	0.9721	0.9998	0.9834	0.6564
w_rights				
yes	0.2996	0.7013	0.6309	0.1308
1.5	0.1288	0.1125	0.1227	0.0988
no	0.5716	0.1862	0.2464	0.7704
Mean	1.6360	1.2425	1.3078	1.8198
q07new1				
1	0.5926	0.9374	0.7671	0.1371
2	0.4074	0.0626	0.2329	0.8629
Mean	1.4074	1.0626	1.2329	1.8629

*Cell-entries for each indicator are columnwise proportions of the respective values of that indicator; q07_1new is support for/opposition to more integration

Table 5 Relationship between background and cluster-membership

entries in the cluster columns are row-wise percentages

Variable	N	Cluster 2 Hard yes	Cluster 3 Ambivalent yes	Cluster 1 Ambivalent no	Cluster 4 Hard no
Social grade **					
A	307	43.6	14.3	30.9	11.1
C1	121	36.4	14.0	29.8	19.8
C2	123	25.2	14.6	30.1	30.1
D+E	159	28.9	11.9	31.4	27.7
Gender **					
Male	357	40.6	10.9	33.9	14.6
Female	353	31.2	16.7	27.5	24.6
Age **					
18-24	73	21.9	13.7	27.4	37.0
25-34	112	25.9	15.2	31.3	27.7
35-44	125	33.6	12.8	36.0	17.6
45-54	159	44.0	10.7	32.1	13.2
55-64	147	43.5	12.2	26.5	17.7
65+	94	36.2	21.3	29.8	12.8
Party preference**					
Stable Govt (FF/Gr)	231	46.3	19.5	23.8	10.4
Stable FG	126	46.8	10.3	30.2	12.7
Stable Labour	51	29.4	11.8	39.2	19.6
Stable SF	27	--	3.7	37.0	59.3
else	275	26.9	12.0	34.5	26.5

**** p<.01**

Appendix 1 – Questionnaire

Q2. Fianna Fáil, Fine Gael, Labour, Sinn Fein, Green, Progressive Democrat and Independent candidates (RANDOMISE ORDER OF PARTIES IN INTRO) will fight ***a general election*** in your area. If the ***general election*** was tomorrow which party or independent candidate do you think you would give your **first preference** vote?

FF
FG
Greens
Labour
PDs
Sinn Fein
Independent candidate

ASK ALL WHO RESPONSED TO Q3 WITH A PARTY, GO TO Q4a

ASK ALL WHO RESPONSED TO Q3WITH 'INDEPENDENT', GO TO Q4b

ALL WHO RESPONSED TO Q1 WITH DK OR WILL NOT VOTE GO TO Q5

Q4a Thinking about the party you would cast your first preference vote for if there were to be a general election tomorrow, on the whole would you trust that party to say and do the right thing in respect of:

Our economic policy	yes/no
Our health service	yes/no
Our relationship with the EU	yes/no
Our legislation on moral issues	yes/no

Q4b Thinking about the candidate you would cast your first preference vote for if there were to be a general election tomorrow, on the whole would you trust that candidate to say and do the right thing in respect of:

Our economic policy	yes/no
Our health service	yes/no
Our relationship with the EU	yes/no
Our legislation on moral issues	yes/no

Q5. Could you say for each of the following statements whether you agree with them or not?

- Ireland should accept limitations on its neutrality so that it can be more fully involved in EU co-operation on foreign and defence policy
- Corporate tax levels in the countries in the EU should be more similar than they are now
- There should be much stricter limits on the number of foreigners coming into Ireland
- Abortion should never be allowed in Ireland

Q6. Thinking about the current coalition government, how satisfied are you overall with the performance of the government? Are you:

Very satisfied
Quite satisfied
Quite unsatisfied
Very unsatisfied

Q7. As regards the European Union in general, which of the following comes closest to your view:

"Ireland should do all it can to unite fully with the European Union"

OR

"Ireland should do all it can to protect its independence from the European Union"

Q8 Generally speaking, do you see yourself as Irish only, Irish and European, or European only?

Irish only
Both Irish and European
European only

Q9 Taking everything into consideration, would you say that Ireland has on balance benefited or not from being a member of the EU?

Benefited
Not benefited

Q10 And what would you expect for the next few years, would you expect Ireland to benefit from being a member of the EU, or not?

Will Benefit
Will Not Benefit

Q11 How does the financial situation of your household compare now with what it ways 12 months ago? Has it

Got better
Stayed the same
Got worse

Q12 As you probably know, there was a referendum on June 12th on the European Union Reform Treaty (the Lisbon Treaty). Did you vote in the referendum?

Yes, I did vote
No, I did not vote

ASK ALL WHO VOTED – (YES AT Q11)
Q13. Did you vote Yes in favour of the Lisbon Treaty or did you vote No against the Treaty?

I voted Yes
I voted No

ASK ALL WHO DIDN'T VOTE – (NO AT Q11)
Q14. If you HAD voted, do you think that you would have voted Yes in favour of the Lisbon Treaty or No against the Treaty?

I would have voted Yes
I would have voted No

Q15 The campaign on the Lisbon treaty ran for some time. Can you tell us whether or not anyone from either the Yes campaign or the No campaign spoke to you in the last few weeks and tried to persuade you how to vote?

Someone from the Yes campaign
Someone from the No campaign
Nobody contacted me

Q16

A number of claims were made about what the Treaty would mean for Ireland. If the Treaty had been passed do you think it would have

...compromised Ireland's neutrality
...made the practice of abortion more likely in Ireland
...led to a change in tax on businesses
...reduced Ireland's influence on EU decisions

...strengthened the protection of workers' rights
...caused even more unemployment
...led to us losing our European Commissioner for some of the time
...simplified decision-making in the EU