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The Death of Conservative Ireland? The 2018 Abortion Referendum

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The outcomes of two recent Irish referendums - on marriage equality in 2015 and abortion in 2018 - have placed contemporary Irish voters in sharp contrast with their long-standing conservative Catholic reputation. These referendums also stand out internationally because of an associated deliberative innovation. This paper aims to explain the watershed abortion vote drawing on theories of generational change, issue-voting, cue-taking and deliberative democracy, using data from an exit poll at the 2018 abortion referendum. We show that cleavage and age effects are key to understanding the referendum outcome. These results offer insight into how societal processes such as rapid secularisation, generational replacement and democratic innovations shape politics. Moreover, voters who were aware of the deliberative innovation were more likely to support the liberal referendum option. To increase willingness to deviate from the status quo, engaging citizens actively in the debate is a fruitful approach.

Keywords: referendums, voting behaviour, abortion, generational effects, deliberative democracy, Ireland

Introduction

In a remarkably short time period Irish society has changed fundamentally as reflected in the large number of referendums aimed at bringing the country's 1937 Constitution into the present day. Most recently, two referendums on marriage equality and abortion revealed a clear rupture with past values and behaviours: in 2015 and 2018 large majorities of Irish citizens voted in favour of the liberalization agenda. These referendums were preceded by another participatory practice: deliberative mini-publics of randomly selected citizens, who discussed and evaluated the key issues (Farrell et al. 2019; Suiter et al. 2016, 2018).

In this paper we aim to explain the outcome of the 2018 abortion referendum. We draw on theories of issue-voting, generational change, cue-taking, globalisation and deliberative democracy to develop expectations to explain vote choice in the 2018 abortion referendum. On the one hand, this cross-sectional study allows us to gain insight into the drivers of support for the abortion vote. On the other hand, by studying the relationship between vote choice and age, support for the Catholic church and traditional political parties (which have both experienced declining support), and support for the new democratic institutions, we also shed some light onto the rapid societal transformation which has taken place.

To test our expectations, we designed an exit poll survey carried out at polling stations on the day of the referendum. These data allow us to develop a comprehensive understanding of the positions separating yes voters from no voters, and thus isolate and explain the main drivers of the strong yes vote. We find that a range of factors played a role, most significant of which were church attendance rates and age, the latter revealing a stark generation gap in vote choice. Moreover, we find significant effects of the pre-referendum deliberative phase: voters who were aware of a government-sponsored Citizens' Assembly that preceded the abortion vote were more willing to support a liberal position. This suggests that deliberative practices can be effectively incorporated into referendum voting and when they are, voters are more willing to deviate from the status quo. It also suggests that Ireland's recent experiments in deliberative democracy have had a genuine impact on policy outcomes (see also Elkink et al., 2017).

Before we turn to the statistical analysis, we outline our theoretical expectations in the next section. We then review the historical background to referendums on moral and social issues. There is now a longstanding tradition in Ireland of moral-social referendums, and indeed the issue

of the legality of abortion was considered by Irish voters in a sequence of difficult referendum debates in 1983, 1992 and 2002. The abortion referendum campaign of 2018 is discussed in section three and this is followed by the analysis of the vote in section four. The article concludes with a discussion of declining religiosity and generational change as drivers of value evolution. Some insights into the design of future referendum processes are also provided.

Referendum voting: Theoretical insights

Explanations of vote choice in referendums have their roots in the general literature on referendum voting (Nai, 2015; Garry et al., 2005; LeDuc, 2002) and sociological analysis of the evolution of attitudes over time (Franklin et al., 1995). These baseline theories interrogate the salience of the referendum issue being addressed (Hobolt, 2005), the role of political parties (Gallagher, 2013) and leaders (Pammett & LeDuc, 2001) and campaign dynamics (de Vreese, 2004; Suiter & Reidy, 2013) as explanations of vote choice. More recently, the integration of deliberative fora into referendum processes has emerged as an important innovation in the conduct of referendums (Farrell et al., 2019; Fournier et al., 2011). Drawing from this work, we address five propositions. Each of these propositions provides an alternative explanation for the vote in the 2018 referendum. Since our data are based on an exit poll, we focus our explanation on the decision between a yes vote - support for liberalisation of abortion laws in Ireland - and a no vote - preserving the status quo that includes a constitutional prohibition on abortion.

The departure point for this analysis is that the vote is driven by the underlying attitude towards the referendum subject. This is referred to as the issue-voting model, which quite simply states that the best explanation of vote choice in a referendum is the attitudes voters have towards the issue at hand (Garry et al., 2005). Voters who favour the proposition will support it and those opposed will vote against, also referred to as correct voting (Lau & Redlawsk, 1997). This is consistent with the spatial model of voting, where voters are expected to maximize their utility by minimizing the distance between their own ideal point and that of the referendum outcome (Downs, 1957; Enelow & Hinich, 1990), which is also a standard assumption in formal models of referendum votes (Hobolt, 2009).

The key question here, therefore, is simply whether voters who have more positive attitudes towards the liberalisation of abortion are more likely to vote yes. In essence, is there congruence

between attitude and vote? Our first hypothesis addresses this baseline assumption of the referendum literature, the default case when there are no alternate explanations.

H1:   Voters who have more liberal values towards abortion were more likely to vote yes.

Turning to socio-demographic antecedents of the vote, age, sex, class, religiosity and urban-rural location have all been found to be significant factors in shaping voting behaviour especially in the case of social-moral referendums (Gravelle & Carson, 2017; McAllister & Snagovsky, 2017; Elkink et al., 2017). Religion has been especially notable in shaping attitudes to abortion in Ireland (Sinnott, 1995). If we take religion as a coherent set of beliefs an adherent subscribes to, then we would expect those identifying as religious to be more opposed to the liberalisation of abortion. This brings us to the second set of hypotheses we investigate in this paper, and which we expect to be at the core of understanding this particular referendum.

Irish society has seen radical change in the past few decades with the growth of a broad middle class which has been coupled with rapid secularisation. Attending mass at least once a week has declined from 90% in 1973 to 48% in 2001 (Kitchin & Bartley, 2007), and in our survey at the time of the referendum this was down to 30%. In the same time period, trust in the church as an institution reduced from just over 50% in 1981 to just over 20% in 2008. More importantly, the relationship between religiosity and moral political decision-making is in decline (Breen & Reynolds, 2011). This decline is primarily one of the church as an institution, however, with belief in God only declining marginally from 97% in 1981 to 92% in 2008, and association with a religious denomination going down only slightly faster (Breen & Reynolds, 2011). In other words, the number of people identifying as Catholic and believing in God has reduced just a little, but church attendance and trust in the church as a guide on social and family matters have declined dramatically since the early 1980s.

This evolution of Irish society is likely to have a significant impact on the values different age groups hold. An individual socialised into Irish politics during the 1970s, when the Catholic Church had a dominant role is likely to hold strongly conservative values on issues such as homosexuality, abortion, divorce or euthanasia. On the other hand, someone who grew up in the early 2000s, in a society where the Catholic Church had largely lost its institutional dominance and moral authority, is much more likely to be affected by the international trend towards liberal values. Indeed, we see dramatic shifts in opinion on these moral issues, with more liberal values

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over time for both church-goers and non-church-goers, but the latter far more liberal than the former (Breen & Reynolds, 2011). This effect is exacerbated by the strong correlation between church attendance and age. In our survey data, among those aged 75 or older, 81% regularly attend church, while among those younger than 30, only 11% do. While this is in part a decline in institutionalised religion, as opposed to religious values per se (Breen & Reynolds, 2011), it does reflect a strong correlation between age and religion.

In the empirical literature on age effects, there exists a perpetual challenge of assessing the difference between period, life-cycle, and generation effects. Due to the simple equation that year (period) minus age (life-cycle) equals birth year (generation), these three can never be fully separated, especially not in cross-sectional studies such as ours (Stoker, 2014: 386). When we observe that younger people are less likely to vote no, this can be because of the generation - younger people socialized into politics in a different time period - or the life-cycle - younger people tend to be more liberal than older people, turning more conservative as they grow older. We expect both to be true: voters do tend to become more conservative as they grow older (Tilley & Evans, 2014), and younger voters grew up in a very different social, political, and economic environment than older generations, especially given the dramatic social changes in Ireland since the 1980. This discussion leads to the following:

H2a: Younger voters were more likely to vote yes than older voters.
H2b: Non-religious voters were more likely to vote yes than religious voters.

Berger (2001) refers to this secularization trend as 'Euro-secularization', whereby secularization comes as a by-product of Europe's political and economic integration, as an element of a cross-national European culture. Indeed, he points out how these high levels of secularization are relatively unique to Europe and not much witnessed elsewhere in the world. If we make the argument that younger generations will have been socialized into politics during very different social and economic circumstances, and different levels of European integration, and that this in turn has affected their political beliefs with regards to moral issues such as abortion, then we also need to consider the fact that how an individual experiences their changing times depends on their position in society (Stoker, 2014: 379). Socialization is a localized phenomenon. An important feature of contemporary democratic politics is the dynamic between winners and losers of globalisation. Populist parties on both the left and right are creating a people versus elites discourse (Kriesi, 2014; Mudde & Kaltwasser, 2017), and support for anti-immigration, nativist

policies is on the rise in most of Europe (O'Malley, 2008). The argument here is that globalisation and international integration has generated opportunities for a young, educated, relatively wealthy segment of the population, who can work and study internationally and enjoy the benefits of free international movement and the global product chain. By contrast, older, manual workers, with lower incomes, are unable to enjoy these benefits, and experience more competition on the labour market due to low skilled immigration (Kriesi et al., 2006). Given the severe impact of the economic and financial crisis in Ireland post-2008, one would expect this dimension to play a key role in Irish politics (Costello, 2017; Reidy & Suiter, 2017). If liberal moral values are primarily associated with the increased alignment of Irish values with pan-European liberalism (Berger, 2001), and the experience of such European integration varies significantly depending on one's socio-economic status (Kriesi, 2014), then the socialization into those more liberal values will also likely depend on one's position in society (Stoker, 2014). In other words, we can expect the key demographic factors that underlie the new cleavage of globalisation politics to also affect attitudes towards abortion. As with age effects, there is a strong multicollinearity between these demographic trends and religion, as 'the most religious within Ireland are still older, less educated, not unemployed, rural and female' (Breen & Healy, 2014: 124). This leads to our third cluster of hypotheses:

H3a: Lower social classes were less likely to vote yes than middle and upper social classes.
H3b: Less educated voters were less likely to vote yes than more educated voters.
H3c: Rural voters were less likely to vote yes than urban voters.

In the literature on political knowledge, the argument is made that a rational voter does not necessarily need to invest in knowledge to be able to make a rationally optimal choice. If a voter knows that certain elite actors are similar to them in terms of political preferences, it can be rational to avoid the cost of investing in knowledge and instead follow the cues of these elites - a heuristic to, in all likelihood, make the same choice as one would have made with more knowledge (Lupia, 1994). The elites in the context here are primarily the church and the political parties.

None of the political parties that hold seats in parliament in Ireland was explicitly opposed to the abortion referendum proposal. In that sense, party support cannot be expected to be a strong predictor of vote choice. However, some parties had a clear message in favour of the liberalisation of abortion provision, such as the Labour Party, Sinn Féin and many of the smaller left groups. Other parties struggled to achieve a united position. Fianna Fáil and Fine Gael, the two centre-

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right parties in the Irish political system, gave their TDs (MPs) a free vote. The main government party, Fine Gael, had a history of internal divisions on abortion. In 2013 the previous Fine Gael led government put forward legislation proposing very limited abortion provision to deal with a 1992 Supreme Court decision. But even this minimal change led to a number of TDs resigning and setting up a rival political party. However, Fine Gael was the party which brought the referendum proposal forward in 2018 and although some internal division remained, senior members of the party were particularly active in the campaign. Fianna Fáil was considerably more divided. The party leader was a supporter of the proposed reforms, but he was in a minority in his party most of whom campaigned openly against the reform proposal. For a voter with a lower level of understanding of the potential implications of the referendum vote, or who has greater difficulty making a moral judgment on the topic, we might expect party preference to contribute to their decision. We therefore expect small left-party voters to be supportive of reform along with Fine Gael voters but Fianna Fáil voters to be less likely to vote yes.

The second institution where we might expect cue-taking (De Vreese & Semetko, 2004) to take place is the church. Here the perspective discussed earlier of significant institutional secularization but still persistent high levels of belief in God and religious affiliation becomes relevant. We would expect those who remain loyal to the church as an institution to vote against the liberalisation of abortion, taking cues from the church, while those who identify as religious but do not attend church to have a weaker anti-abortion stance. Weekly attendance at church services is considered to be an important requirement for observant Catholics and in Ireland, weekly attendance has dropped from 90% in 1973 to just 30% in the exit poll data. Therefore, we use weekly attendance as a means of separating those who remain loyal to the Catholic Church from those who are less so. We therefore derive the following two additional hypotheses to capture cue-taking behaviour among the electorate.

H4a: Voters of parties with a clearer pro-choice message in the abortion referendum were more likely to vote yes than voters of parties with more ambiguous signals.
H4b: Those who never go to church or attend less than once a week were more likely to vote yes than church-going respondents.

It is not just the radical social transformation that preceded the abortion vote which made the referendum remarkable, the abortion vote (like the marriage referendum in 2015) was also grounded in an unusual deliberative context. What stood out about the marriage equality and

abortion referendums compared to earlier referendums in Ireland and internationally was that both followed the outcomes of deliberation in mini-publics (the 2012-14 Constitutional Convention and the 2016-18 Citizens' Assembly, respectively) established by the Irish government. These were based on similar experiments in Canada (in British Columbia and Ontario), but the distinctive feature of the Irish cases is that, unlike in Canada, the referendums were successful (on the Canadian cases, see Fournier et al., 2011). Our interest here is in the Citizens' Assembly, which heard experts on both sides of the debate on abortion and then, in small groups, deliberated on the issue. The final resolution was a vote recommending that a referendum be held (Farrell et al., 2019).

It is important to explore the extent to which knowledge of, or trust in, the Citizens' Assembly affected voting behaviour. Were voters who were aware of, and trusted these deliberative roots to the process, more inclined to vote yes? If this is the case, it would suggest that a careful deliberative design prior to major social-moral decisions such as the liberalisation of abortion can have an impact on the potential outcomes. The exit poll used in this study included three objective knowledge questions on the composition and work of the Citizens' Assembly and voters' personal trust in the Citizens' Assembly. This leads to the final set of hypotheses:

H5a: Voters who show greater knowledge of the Citizens' Assembly were more likely to vote yes than those with lower levels of knowledge.
H5b: Voters who had greater trust in the Citizens' Assembly were more likely to vote yes than those with lower levels of trust.

By testing these five sets of expectations we aim to get a better understanding of the 2018 abortion vote as well as vote choice in referendums more generally. They could also help us understand the long-term change in public opinion the various abortion referendums outcomes have made apparent.

Abortion referendums in Ireland

Referendums have a long history in Ireland, not least because of the detailed social policy clauses included in the 1937 constitution which can only be changed by referendum.[1] The social policy

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[1] Since a High Court ruling of 1987, in the *Crotty v An Taoiseach* case, it is well established that all constitutional changes have to be approved by referendum (Qvortrup 2018, p. 35).

provisions dated quickly. Social modernisation and value evolution led to more frequent use of referendums from the 1980s onwards as efforts were made to reform the constitution to more accurately reflect contemporary social mores (cf. Reidy et al. 2019).

The abortion referendums in Ireland are connected to global changes in the provision of abortion rights. In 1973 the US Supreme Court legislated for abortion in the landmark judgment Roe vs. Wade. Although abortion was illegal under Irish law, conservatives nervous about the possibility of future judicial intervention in this area mounted a campaign to insert an anti-abortion clause into the constitution (O'Leary & Hesketh, 1988) thereby copper-fastening the prohibition on abortion. In 1981, at a time of political turmoil, the two major parties agreed to insert such a clause into the Constitution and two years later the referendum was initiated with a campaign that was seen as one of the most divisive and acrimonious in history (O'Carroll, 1991; Sinnott, 2002). This eighth amendment to the constitution, or pro-life amendment as it became known, passed by 66.9% to 33.1% on a turnout of 53.7%, suggesting a two thirds conservative majority in Irish society at the time.

The 1983 vote was to be the first of six questions asked on abortion over the ensuing four decades, culminating ultimately in the decision to repeal the eighth amendment in 2018. By 1992 a Supreme Court ruling interpreting the 1983 amendment made abortion legal under restrictive circumstances (a threat to the life of the mother, including by suicide) and doubts were also raised about the legal position surrounding women travelling to other jurisdictions to avail of abortion services. The court judgment led to the holding of three simultaneous referendums: two confirming both a right to information on abortion and a right to travel outside the state to avail of abortion services and the third attempting to attach a conservative amendment to the 1983 decision, undoing the decision that the threat of suicide was grounds for a legal abortion in Ireland. The right to travel and to information were accepted by 62% and 60% respectively while the attempt to attach a conservative addendum to exclude suicide as a ground for termination was defeated by 65%. This suggests that even by 1992 there was some initial evidence of changes to the underlying liberal-conservative cleavage. Indeed Sinnott (2002) estimated that by the early 1990s Irish voters were fairly evenly split (30–30–30) into conservative, pragmatist and liberal camps on moral issues. In 2002, a further referendum was held in another attempt to exclude suicide as a ground for a legal abortion. This was again defeated, although marginally, and on the occasion of the 2002 abortion vote, it was a coalition of liberals and arch-anti-abortionists that defeated the proposal (see Kennedy, 2002).

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Abortion remained on the political agenda with the Supreme Court ruling of 1992 standing but with no legal framework to underpin it. Successive governments shied away from the issue but cases involving fatal foetal abnormalities, the death of a young women following denial of a life-saving abortion and the need for medical intervention to keep a brain dead woman alive to sustain pre-natal life meant that abortion was rarely far from the political agenda. Successive opinion polls pointed to important changes in attitudes but the political elite were slow to move in part because of the rancour and divisiveness which had been embedded in all previous votes on the issue. In 2013 the Fine Gael and Labour coalition moved the abortion issue forward a degree when they legislated for the Supreme Court judgment of 1992 but this generated significant internal division for Fine Gael.

Abortion returned to the political agenda during the government formation talks in 2016 and a referendum to undo the anti-abortion eighth amendment was a condition of at least one of the non-party parliamentarians (Katherine Zappone TD) who would join the new minority government. Perhaps encouraged by the success of the deliberative process in the Constitutional Convention for marriage equality, the government decided to follow a similar path and a new deliberative forum, the Citizens' Assembly was established with abortion as the main item on its agenda (Farrell et al., 2019). The establishment of the Citizens' Assembly marked the beginning of the long campaign of the 2018 abortion referendum.

The campaign dynamics

Campaigns are often important in shaping referendum outcomes (Suiter & Reidy, 2013; Qvortrup 2018). The campaign to repeal the eighth amendment to the constitution gained significant momentum following the introduction of very limited abortion legislation in 2013 and the 2015 passage of the marriage referendum. The result of the Citizens' Assembly's deliberations was a series of recommendations proposing a dramatic liberalization of Ireland's abortion laws (see, Farrell et al., 2019). Following receipt of the report from the Citizens' Assembly, the minority government referred the abortion issue to an all-party Oireachtas (Parliament) committee for further consideration and recommendations. The committee also advocated a liberal position. Their report was considered by government and a referendum was scheduled for May 2018.

The deliberations of the Citizens' Assembly and the All Party Oireachtas Committee provided the long lead into the abortion referendum. The campaign proper began in early 2018 and the protagonists broke down along familiar lines, albeit with a significant shift in the balance of influence among the groups involved (Field, 2018). In 1983, the conservative pro-life campaign dominated debates and adopted an absolutist anti-abortion position. Evolution in citizen attitudes, a much stronger pro-choice movement and significant changes in the regulation of referendum campaigns delivered a campaign discourse focused on women's rights and healthcare and characterised by attention to the voices of women affected by the abortion prohibition (Field, 2018; Reidy, 2019). There were a series of radio and television debates, widespread news coverage, an extensive ground canvass and nationwide postering. In a new development for abortion campaigns, social media provided a major communication channel. All of the campaign groups and political parties used social media accounts to disseminate their message, although Twitter refused to publish ads from the outset and in the midst of the campaign Facebook and Google limited online advertising.

Several polls were carried out in 2018 and Figure 1 shows that there was a small degree of movement in opinion over that time. Using data from the polling company RED C, in collaboration with the *Sunday Business Post*, the average Yes vote recorded in 2018 polls was 70% of those expressing a clear vote intention and the final result was 66%.[2]

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[2] RED C and the *Sunday Business Post* (2018), "General Election Opinion Poll", May 2018. https://redcresearch.ie/wp-content/uploads/2018/05/SBP-May-2018-Poll-Report-8th-Referendum-GE-Vote-Intention.pdf, accessed 14 February 2019.
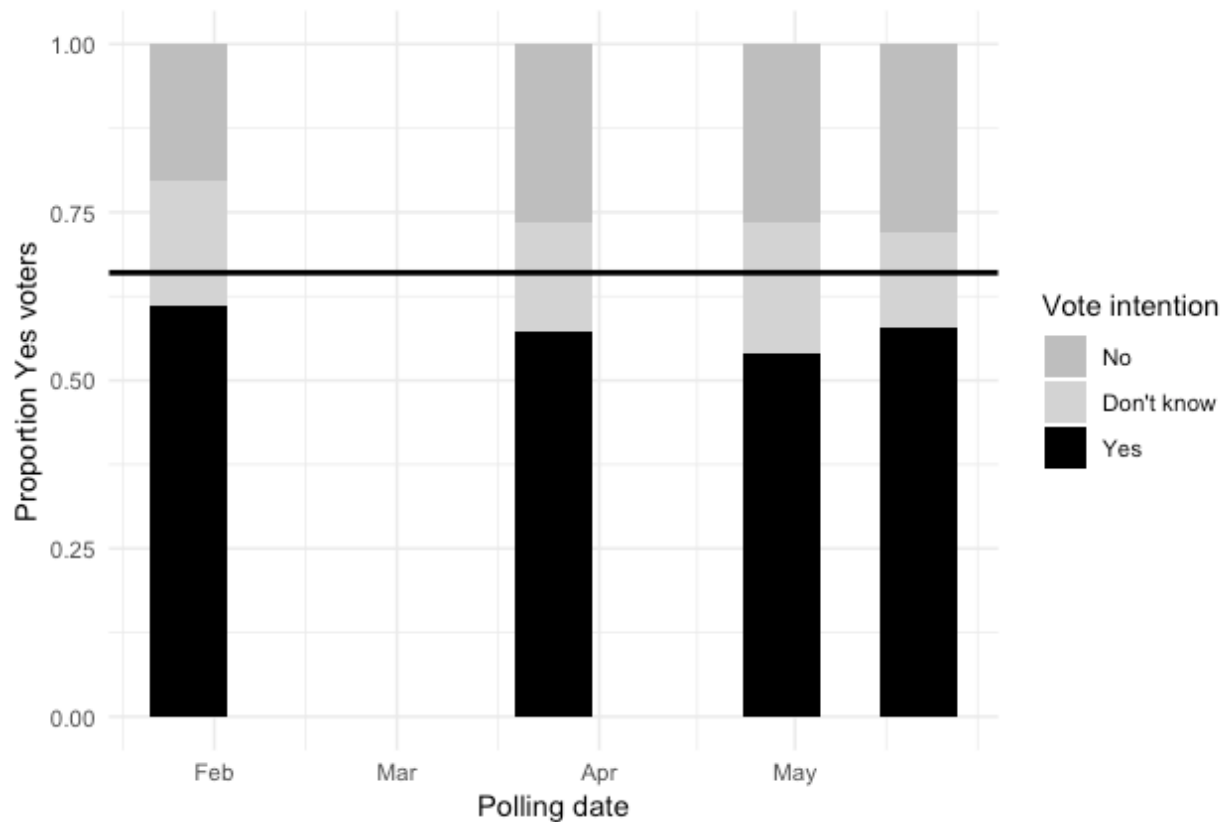
Figure 1. Proportion of yes votes in opinion polls. Solid line represents the referendum outcome. Source: Red C Polls.

An empirical analysis of exit poll results

The data for this analysis are taken from a face-to-face exit poll conducted on the day of the referendum.[3] The interviews were completed as voters were leaving the polling station and were carried out by the Behaviour & Attitudes polling company. The exit poll was the result of a collaboration between RTÉ (the state broadcaster) and four universities.[4] The sample size was

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[3] Of course, as this was an exit poll non-voters were not included in the sample. This is due to lack of funding for a full random sample face-to-face election survey as common in other countries. Our random sample of voters, however, still allows us to get a thorough understanding of the main drivers of the yes and no vote.

[4] (funding acknowledgement to be inserted here)

3,779 voters and 175 polling stations were sampled, across all 40 constituencies.[5] To increase the range of questions asked a split sample approach was taken with three versions of the survey administered. A common core to the questionnaire was asked of each respondent, with questions about the vote, attitudes towards abortion, religion, and demographics. Splits then focused on specific themes. The analysis in this paper is drawn from the first split of the survey, which contains most common explanatory variables of referendum votes and the questions related to the Citizens' Assembly. Summary statistics for all variables used in the analysis are available in Table 2 in the appendix.

We perform two types of multivariate analysis to explain the outcome of the referendum. Our dependent variable in both analyses is binary: whether the voter voted yes or no to liberalise abortion provision. Multivariate analysis allows us to ensure that we do not zoom in on spurious relationships. The first approach, based on conventional regression analysis, is best suited for the purposes of causal inference. It allows us to evaluate the impact of relevant explanatory variables, controlling for potential confounding factors by inserting those as additional variables in the regression. The second approach, tree-based methods, is taken from the machine learning literature, and is better suited to understand what the key variables are on which the yes voters differ from the no voters (e.g. Becker et al., 2017). This leads to easily interpretable results that give a clear picture of the relative importance of different variables, but it does not have the same ability to uncover the magnitude of the impact of each variable.

How much does each explanation influence vote choice?

The overall distribution of attitudes towards abortion liberalisation is presented in Figure 2. The analysis shows a significant effect that those who are more favourable towards liberalisation of abortion are more likely to have voted yes. The relevant survey question asks respondents to put themselves on a scale from 0 'There should be a total ban on abortion in Ireland' to 10 'Abortion should be freely available in Ireland to any woman who wants to have one'. The expected

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[5] In our sample, 69.4% of respondents voted yes, while the referendum outcome is 66.4% yes; 56.0% of respondents are female, compared to 50.6 % in the 2016 census; in the age groups 15-29, 30-44, 45-59, 60-74, and 75+, the survey proportions are 20.3, 31.0, 26.1, 18.0, and 4.6 %, respectively, and those in the 2016 census 23.3, 29.5, 23.9, 16.3, and 7.0, this is slightly biased by the fact that under 18 years olds are not in the exit poll survey due to their ineligibility to vote.

association elaborated in H1 is therefore supported. It is also clear that there is considerable variation within each group and this requires further explanation.
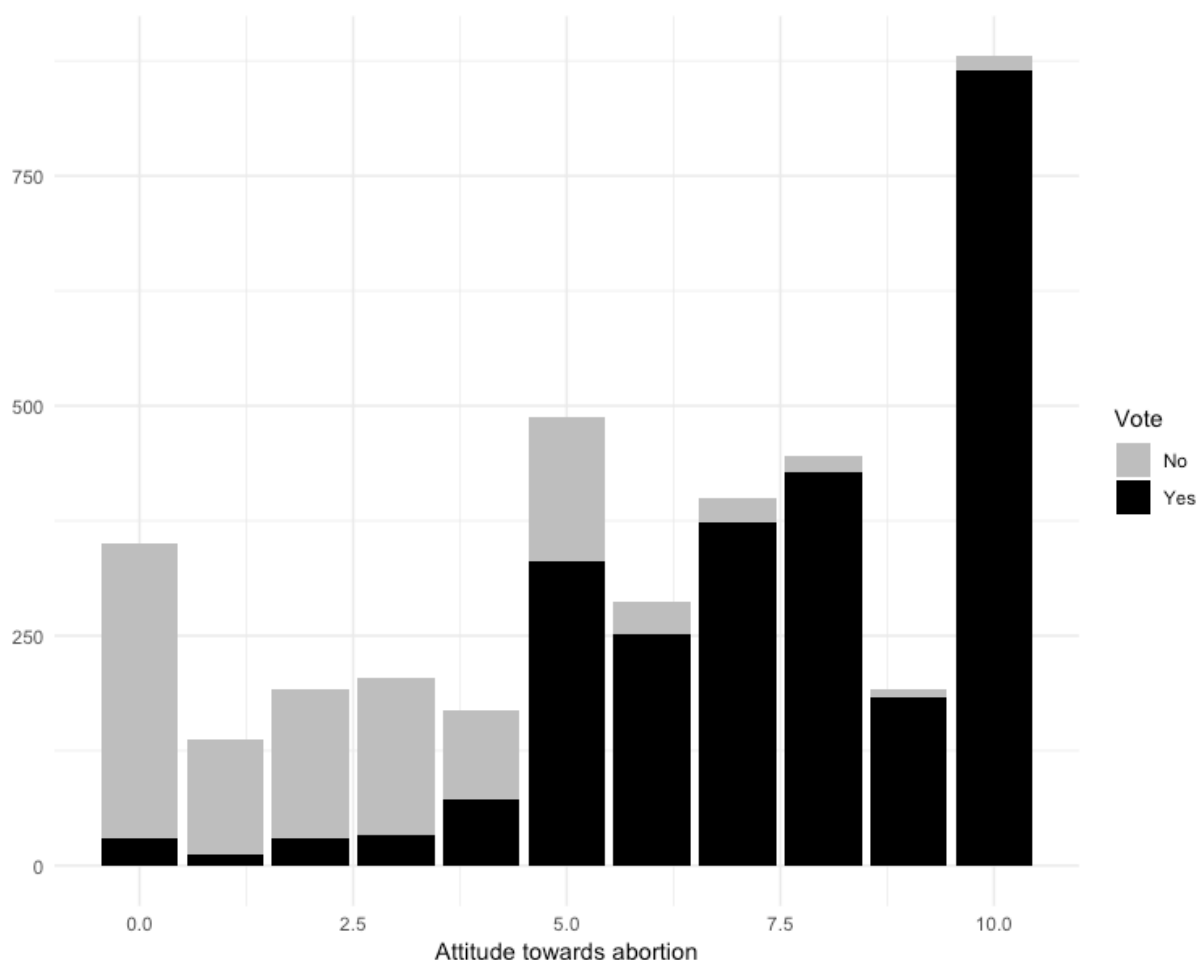

Figure 2. Distribution of the attitude towards the liberalisation of abortion and associated vote choices.

Turning to the logistic regressions where the dependent variable is the yes vote in the referendum, to ensure that we have the appropriate set of control variables for each theoretical argument we run a set of different models, each time adding only those variables that are potentially confounding to the causal argument we focus on. The results of the logistic regressions are presented in Table 1.[6]

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[6] Note that the variables added to Model 5 are only present in one split of the questionnaire, thus are asked to only a third of the respondents, while all other variables are available for the full sample.

Table 1: Logistic regression models explaining the yes vote in the abortion referendum

EXPLANATORY VARIABLES	(MODEL 1) SOCIO-DEMOGRAPHICS	(MODEL 2) ISSUES/ BELIEFS	(MODEL 3) ISSUES/ BELIEFS	(MODEL 4) CUES	(MODEL 5) DEMOCRATIC INNOVATION
Socio-demographics					
Age	-0.043***	-0.025***	-0.013**	-0.015**	-0.033***
	(0.004)	(0.004)	(0.006)	(0.006)	(0.015)
Social class (relative to upper and middle class)					
Working class	-0.254***	-0.098	-0.276**	-0.257*	-0.413
	(0.094)	(0.102)	(0.139)	(0.140)	(0.324)
Farmer	-0.523***	-0.054	0.101	0.117	-0.632
	(0.190)	(0.204)	(0.273)	(0.274)	(0.609)
Education (relative to those who finished 3rd level)					
Did not finish 2nd level	-0.473***	-0.421***	-0.248	-0.200	-0.878
	(0.149)	(0.163)	(0.229)	(0.231)	(0.634)
2nd level	-0.137	-0.150	-0.050	-0.002	0.214
	(0.099)	(0.108)	(0.146)	(0.148)	(0.340)
Current student	-0.472*	-0.465*	-0.533	-0.593	-0.690
	(0.252)	(0.278)	(0.396)	(0.402)	(1.144)
Employment sector (relative to unemployed and retired)					
Private sector	0.350	0.761**	0.171	0.180	0.036
	(0.314)	(0.350)	(0.474)	(0.476)	(1.163)
Public sector	0.178	0.670*	0.210	0.227	0.044
	(0.323)	(0.359)	(0.484)	(0.487)	(1.175)
Employment (relative to full-time employed)					
Full-time student	0.441	0.837*	0.315	0.357	1.057

	(0.399)	(0.441)	(0.622)	(0.628)	(1.711)
Housekeeper	-0.309	0.276	-0.241	-0.255	0.040
	(0.334)	(0.370)	(0.507)	(0.509)	(1.252)
Part-time employed	-0.088	-0.095	-0.135	-0.135	-0.319
	(0.144)	(0.156)	(0.213)	(0.216)	(0.486)
Permanently unemployed	-0.634	-0.463	-0.707	-0.831	-2.090
	(0.430)	(0.469)	(0.616)	(0.621)	(1.577)
Retired	0.295	0.785**	0.378	0.412	1.141
	(0.334)	(0.372)	(0.505)	(0.508)	(1.201)
Self-employed	0.238	0.230	0.468	0.443	0.678
	(0.219)	(0.245)	(0.316)	(0.315)	(0.682)

Issue voting and beliefs

Religion (relative to non-religion)

Catholic		-1.063***	-0.623***	-0.631***	-0.551
		(0.159)	(0.206)	(0.209)	(0.475)
Protestant		-0.547**	-0.495	-0.555	-0.634
		(0.270)	(0.347)	(0.351)	(0.725)
Other religion		-1.490***	-1.587***	-1.655***	-0.742
		(0.290)	(0.383)	(0.385)	(1.124)
No regular church attendance		1.593***	1.100***	1.088***	0.866***
(relative to once a week or more)		(0.094)	(0.130)	(0.132)	(0.301)
In favour of liberalisation of abortion			0.702***	0.699***	0.786***
			(0.026)	(0.027)	(0.069)

Cue-taking: party preference

Parties (relative to Fianna Fail)

Fine Gael				0.588***	0.577
				(0.176)	(0.367)
Labour				0.752**	1.291*
				(0.341)	(0.784)

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	(1)	(2)	(3)	(4)	(5)
Sinn Fein				0.296	0.091
				(0.219)	(0.471)
Independent				0.559**	0.847
				(0.247)	(0.604)
Other party				0.943***	2.113***
				(0.299)	(0.687)
No party choice				0.162	0.428
				(0.173)	(0.402)

Democratic innovation:

Citizen Assembly

	(1)	(2)	(3)	(4)	(5)
Objective knowledge of CA					0.347***
					(0.129)
Trust in CA					0.026
					(0.079)

Other socio-demographic characteristics:

	(1)	(2)	(3)	(4)	(5)
Male	-0.322***	-0.444***	-0.299**	-0.312**	0.608**
	(0.086)	(0.094)	(0.126)	(0.127)	(0.300)
Single	-0.201*	-0.133	0.047	0.061	-0.212
	(0.118)	(0.130)	(0.176)	(0.177)	(0.426)
Any dependent children	-0.117	-0.076	0.058	0.059	-0.075
	(0.093)	(0.102)	(0.139)	(0.139)	(0.328)
Rural	-0.391***	-0.173*	-0.236*	-0.218*	-0.105
	(0.084)	(0.092)	(0.123)	(0.124)	(0.296)
Intercept	3.342***	1.770***	-2.060***	-2.332***	-3.077*
	(0.383)	(0.458)	(0.640)	(0.658)	(1.746)
Observations	3,640	3,566	3,535	3,535	771
AUC	0.73	0.81	0.94	0.94	0.95

Source: RTÉ-Universities Abortion Referendum Exit Poll. Note: * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

Model 1 in Table 1 explains the yes vote by examining only socio-demographic variables. Since these tend to precede attitudes, religious values, and party choice, there are few relevant control variables when evaluating their impact in a regression analysis, but they function as crucial controls in subsequent models. This model offers a first insight into the relevance of the age variable, as well as the somewhat related globalisation cleavage. We find that younger voters are significantly more likely to vote yes as set out in (H2a). We also find strong support for the three hypotheses related to the globalisation dimension (H3), which so clearly changed political dynamics throughout Europe and the United States. We find that those of lower social class (H3a), lower levels of education (H3b), and rural dwellers (H3c), who are the categories typically classified as the 'losers' of globalisation, indeed are less likely to vote yes.

We turn to Model 2 to understand the specific aspects of these relationships. The results reveal that when controlling for religious variables, religious identity and institutional loyalty to the church, the age effect clearly holds - despite the strong correlation between age and religion - and some of the globalisation variables become less relevant.[7] The effect of urbanisation significantly reduces, and social class becomes largely irrelevant, leaving education as an important explanation. This suggests that the results for H3 are less related to globalisation, and more to secularisation, with rural and lower class voters more likely to be religious.

It should be noted that while we separate generation-, age-, church-, and religiosity-effects, these are all closely intertwined, and we cannot isolate these effects completely. Rather, we show that most of these effects played a significant role, which together generate an enormous difference in levels of support for the liberalisation of abortion between the different age groups. Indeed, of those aged below 25, 87% voted yes, while of those over 75 years, only 30% did. All the above explanations jointly lead to this radical difference.

As discussed, we expect that the process of secularization should have two distinct effects. The first relates to attitudes towards abortion, where respondents might have pro-life values that are part of their religious beliefs and thus in this context form part of the issue-voting model of referendum voting behaviour. The second relates to the cue-taking model of referendums, where we assume voters make shortcuts in their decision-making by following the cues from institutions

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[7] Note that despite the correlation between some of the explanatory variables, even in our full model specification the highest variance inflation factor is 2.88 (for the age variable), indicating that we have no technical problems due to multicollinearity.

they trust - parties, churches, unions, etc. - to avoid having to form their own views. Here, secularisation would lead to less cue-taking from the church as an institution. Model 2 helps us tease out the religious dimension in both respects. We can evaluate the impact of religious identity on the vote (issue-model) and we can look at the effect of church loyalty (or religious service attendance) on the vote (cue-taking). We find strong statistical effects for both: those identifying as belonging to a religious group are significantly less likely to vote yes (H2b), as are those who regularly attend church (H4b). The fact that age independently continues to have a significant impact is of particular interest.

In Model 3 we further evaluate the issue-model by studying the congruence between attitude and vote, controlling for demographics and religious values. The latter are expected to precede one's position-taking on moral issues such as abortion. As Figure 2 already revealed there is a strong relationship between attitude and vote thus indicating that the abortion vote choice should not be interpreted as a second order referendum vote.

In addition to cue-taking from the church, voters can also take party cues. We do not expect strong effects, since most parties were generally supportive of the liberalisation of abortion. The referendum proposal was brought forward by the Fine Gael minority government and supported strongly by Labour, Sinn Féin, many non-party TDs but only a minority of Fianna Fáil TDs. Model 4 investigates party effects using a survey question on future general election vote. The results reveal Fine Gael and Labour voters were significantly more likely to vote yes, but strikingly so also were voters for the smaller left parties and non-party voters. Fianna Fáil is the clear outlier. Consistent with expectations, its voters exhibit far lower levels of support for the referendum. Interestingly, there are just small differences between Sinn Féin and Fianna Fáil voters, perhaps reflecting the fact that even though Sinn Féin favoured the referendum and campaigned strongly in favour of it, there were some amongst its parliamentarians who were opposed.[8]

The fifth set of hypotheses refer to the role of the Citizens' Assembly in determining the vote. Were voters more likely to vote yes when aware of, and trusting of, the Citizens Assembly? We find that indeed they were: even when controlling for demographics, attitudes, religion, and party choice, including attitude towards abortion itself, knowledge of the Citizens' Assembly made one

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[8] It is debatable whether the attitude to abortion is an appropriate control when investigating party cue-taking. When the attitudinal variable is excluded from the model, the discrepancy between Fianna Fáil and all other parties is stronger, with also Sinn Féin a significantly higher likelihood of voting yes. Fine Gael and Labour stand out even more strongly as the yes voters.

significantly more likely to vote yes, thereby supporting H5(a). Here, respondents were asked three factual questions about the Citizens' Assembly and the total number of correct answers is inserted in the regression as an explanatory variable.[9] Voters' levels of personal trust in the Citizens' Assembly,[10] however, did not affect the vote choice as outlined in H5(b).[11]

Which explanation has the greatest influence on vote choice?

While the logistic regressions provide the appropriate quantitative test of these various explanations on voting behaviour, they lack insight into what were the most important driving forces of the referendum choice. We can assess which variables matter, but not how much each of them was key to the outcome, taking all variables into account. A machine learning model that is generally designed for predictive modelling as opposed to causal inference is ideally suited to create a better picture of the relative importance of variables. We perform two analyses that are closely related to each other, but each provide slightly different perspectives on the results.

The first is a tree algorithm. A classification tree is an iterative algorithm, whereby in each iteration, the respondents are divided into two groups, based on the value of one of the independent variables, that differ as much as possible in terms of the outcome variable - in this case the probability of a yes vote. The variables that are included are the same as in the fifth regression model. The focus in this analysis is on finding the key drivers of the vote. Unlike in Model 5, we do not include the attitude towards the liberalization of abortion as a separate independent variable in the tree analysis. This is for the same reason that it was not included in models 1 and 2 of the regression analysis – it is an inappropriate control variable for more socio-demographic

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[9] The factual statements were: 'Randomly selected Irish citizens discussed the topic of abortion in the Citizens' Assembly', 'Only citizens that were in favour of a repeal of the 8th were represented in the Irish Citizens' Assembly', and 'Experts were invited to inform the discussion of the Citizens' Assembly'.The regression is based on the set of respondents who answers all three factual questions. When those who did not answered are counted as incorrect answers, the overall regression results remain the same, but the effect of objective knowledge of the Citizens' Assembly is slightly weakened, with a slope coefficient of 0.179 (0.060), statistically significant at $p < 0.05$.

[10] Measured with the survey question: 'How much do you personally trust each of the following on a scale from 0 to 10 where 0 means you do not trust at all, and 10 means you have complete trust?' Respondents were then asked about 'most politicians', 'most people', and subsequently 'the Citizens' Assembly', each scored on an 11-point scale from 'Do not trust at all' to 'Have complete trust'.

[11] Controlling for satisfaction with the government and political knowledge was not possible, due to the fact that these questions were in different splits of the exit poll sample. Since the variables related to the Citizens' Assembly are only asked in one split of the survey, the number of respondents drops considerably, which affects the level of significance for the party cue-taking effects. When the attitude towards abortion is excluded from this model, party-effects remain statistical significance, while Citizens' Assembly-effects are near-identical to what is reported here.

explanations and too closely correlated with the vote. When investigating the impact of knowledge, such as in Model 5 above, it is relevant to control for attitude, but not when testing relative importance in a model that also includes socio-demographics.[12]

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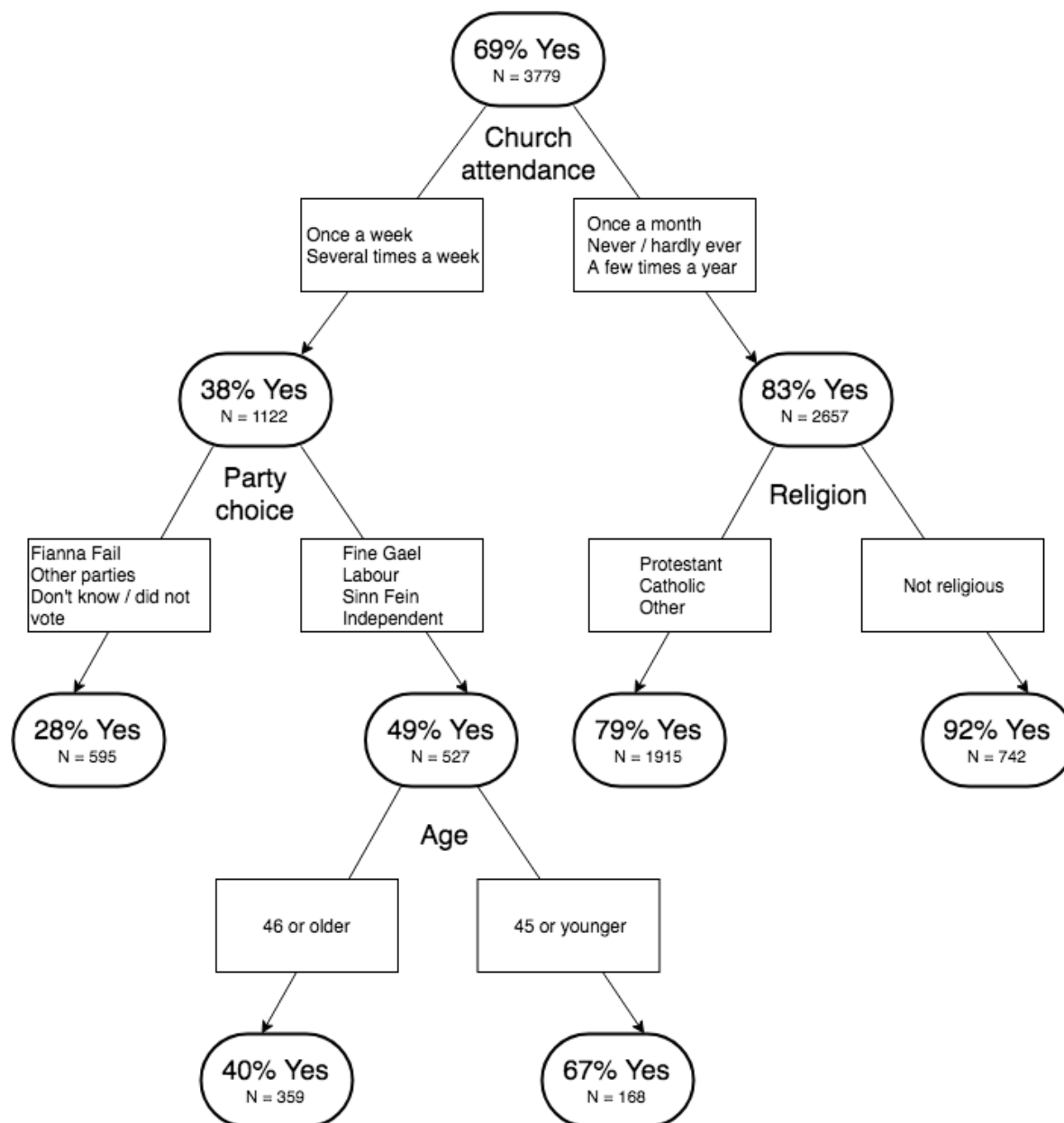
[12] Indeed, performing the same analysis with attitude towards abortion included only picks out this variable as relevant. This does not provide any useful insight for understanding the referendum outcome.

Figure 3. Output from regression tree analysis explaining the `yes' vote. Percentages refer to the 'yes' voters in the split, while N refers to the size of the sample in this particular split.

The results are presented in Figure 3.[13] We see that the first variable selected by the algorithm to divide the voters is church attendance. Splitting the sample based on church attendance shows the largest variation in outcome: of those attending church at least once a week, 38% voted yes, while of those who attend church less, 83% voted yes. It is clear religion is the main driver of the referendum outcome. The overwhelming yes vote in 2018 can be interpreted as a result of the strong secularisation in Ireland over recent decades.[14]

Even among those who do not attend church regularly, there is still a divide based on religion: of those associating with Protestant, Catholic or other religions 79% voted yes, whereas among the others - primarily agnostics and atheists - 92% voted yes. Among the group of regular church attendees the main variable that divides yes from no voters are party preference and age. In particular, Fianna Fáil voters, but also those who do not vote or vote for marginal parties (those not listed in the regression table), are more likely to vote against liberalisation of abortion (72% voting no). For supporters of the other parties, their vote depends highly on their age. In particular, older voters - those over 45 years old - voted 40% in favour of liberalisation, while younger voters voted 67% for liberalisation. In sum, even among the regular church attendees, a large number of young voters voted yes. While the regression analysis is the appropriate method for establishing whether different explanations did or did not play a role, if one wants a clear depiction

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[13] It will be noted that the sample size is larger than in the regression analysis. The handling of missing data is different from the regression analyses. While in the latter, list-wise deletion of missing data is applied, in the tree analysis, splits on variables that contain missing data are applied to those observations where the variable is missing using a predicted split, based on the remaining independent variables (Therneau and Atkinson 2019, pp. 18-19).

[14] To assess the robustness of the tree analysis, we also estimate the tree model on a training sample of 80% of the observations (N=3,047). Subsequently, we use the model resulting from this training sample to predict the outcomes for the remaining 20% of observations, the test sample (N=732). The model on the training sample leads to near-identical results as presented in Figure 3. More importantly, the predicting quality of this model on the test sample is high. In particular, the endpoint nodes of the decision tree in Figure 3 (i.e. 28%, 41%, 68%, 80%, and 93%) are identical when using the training sample model to do prediction on the test sample. We can furthermore measure the predictive quality of the model using the Area Under Curve (AUC) statistic, which measures the space under the Receiver-Operating Characteristic curve (Zou et al. 2007). The AUC for the full data set is 0.78, indicating a high model fit. When separating the sample in an 80% training sample and a 20% test sample, we obtain an AUC of 0.75 on the test sample for the model estimated using the training sample.

or summary of the 2018 vote on abortion, Figure 3 tells a clear story of secularisation and generational replacement.

While regression or classification trees lead to easily interpretable output, such as that depicted in Figure 3, there is one main disadvantage of the tree method, which is its high sensitivity to the amount of variation in each of the independent variables. Items that have a greater variance are more likely to be picked out as important in the analysis. In order to address this problem, the tree analysis has been expanded to random forests. As the name suggests, a random forest contains a lot of classification trees and combines them into a single analysis. In each of the many random iterations, one randomly selected variable is left out of the analysis, to assess whether this variable is dominating the tree analysis results and hiding other important variables. These results are then averaged across all trees to assess the relative importance of each variable. It is not possible to visually depict an 'average tree', however, and therefore the results are, while more robust, not as easy to interpret as those in Figure 3.

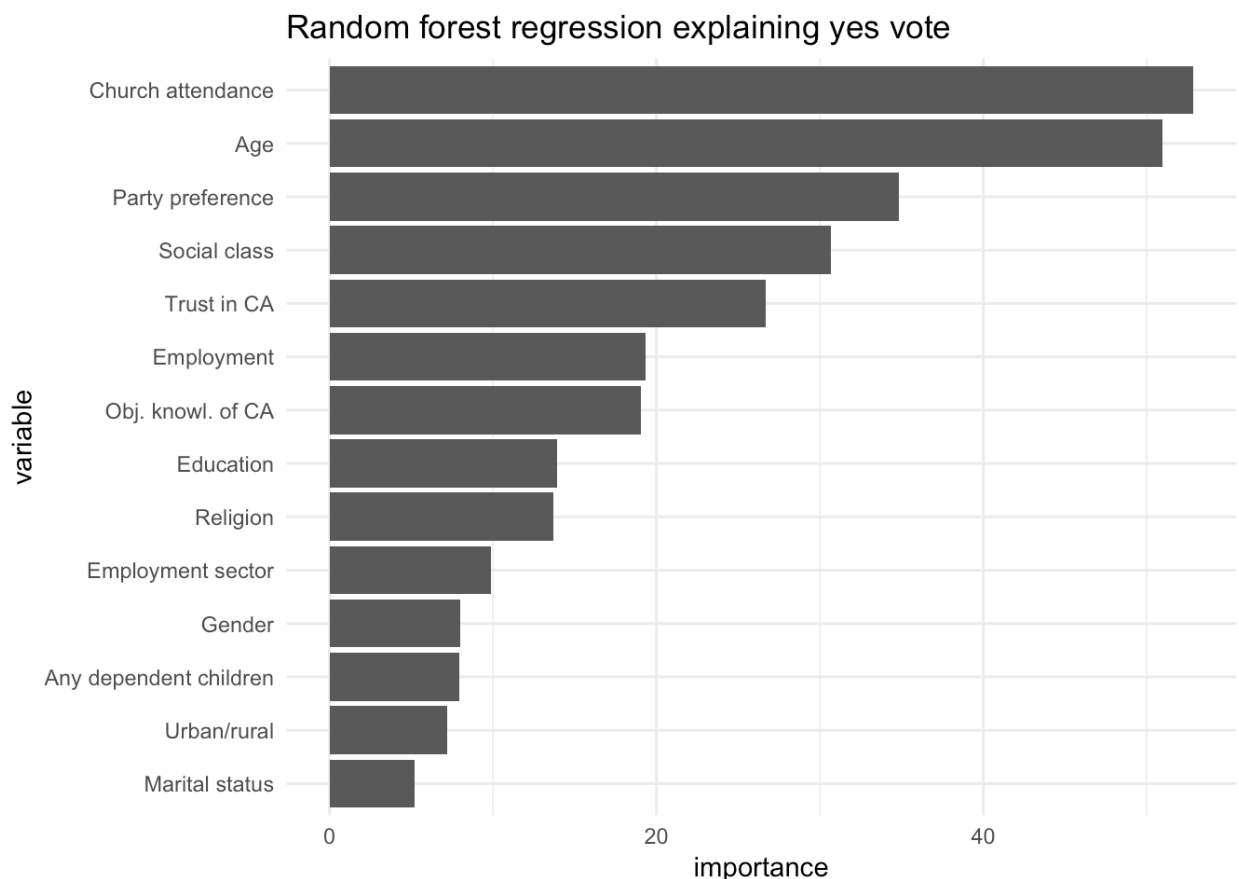## Random forest regression explaining yes vote

Figure 4. Relative importance of variables in the random forest analysis.

The random forest analysis finds that the single most important variable in explaining the outcome is church attendance but followed closely by age. The results are presented in Figure 4.[15] Church attendance and age are closely correlated: those who never go to church are on average 39 years old, those who go more than once a week on average 64 - and therefore the fact that results vary slightly in terms of the relative priority of the two variables is understandable. The difference in importance is marginal indeed, as is clearly visible in Figure 4. Party preference is of much less importance, followed by social class, employment status, and education. In sum, to explain this referendum outcome, church attendance and age - not just religious identity - are critical, again underlining our generational argument.

Conclusion

The aim of this study was to explain the key drivers of vote choice in the 2018 abortion referendum in Ireland. The empirical results reveal a set of fascinating insights. Voters' issue positions on abortion were fundamental to their voting decision. A large proportion of voters supported the liberalisation of abortion and they voted accordingly. Abortion falls on the liberal-conservative fault line in politics in Ireland, and globally, and the evidence presented here suggests that referendums on this issue are driven by voters' value disposition on abortion. It is an issue which leads to first order voting.

Both conventional regression techniques and machine learning approaches show that church attendance and age are key drivers of the result. Thus, the results align significantly with existing research which has shown that religion and socio-demographic variables are central forces shaping voter behaviour at referendums on social-moral issues (Gravelle & Carson, 2017; McAllister & Snagovsky, 2017; Elkink et al., 2017). Church attendance matters a great deal. There is a large difference in the yes vote between those who attend church regularly (at least weekly)

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[15] The AUC for the full data set is 0.80, indicating a high model fit. When separating the sample in an 80% training sample and a 20% test sample, we obtain an AUC of 0.79 on the test sample for a model estimated using the training sample.

and those who do not. The magnitude of the church attendance effect is similar only to the age comparison between the youngest and oldest age groups. Irish voters have become more liberal since the early referendum votes on abortion but young voters are most liberal. This is clearly indicative of a cohort effect, where one generation is replacing a previous generation of voters, thereby delivering structural change in Irish society. The cross-sectional design of the survey, however, renders a full separation of generational, cohort, and life-cycle effects impossible: we can only observe that younger voters voted considerably more liberally and that this difference in age groups in the abortion referendum was one of the main drivers of the results. Similarly, the random forest analysis suggests that the high correlation between church attendance and age make it difficult to fully separate generational from church cue-taking effects without long-term longitudinal data. Combined, their effect is clear, however: younger people are less likely to attend church and were less likely to vote conservatively in the referendum. In essence, the results support our key argument that conservative Ireland is fading.

Perhaps more so than any other issue, abortion has bedevilled politics in Ireland. The insertion of the anti-abortion clause into the constitution in 1983 led to a series of scandals in the medical care of pregnant women, which had been predicted but ignored in the original referendum campaign. Five further referendum questions would be required before the anti-abortion clause was finally removed. Although attitudes to abortion began to shift soon after the 1983 referendum, the animosity generated by the issue led to successive governments trying their utmost to avoid the issue. The Citizens' Assembly convened to deliberate on abortion provision voted in favour of very significant liberalisation. This vote was greeted with scepticism at the time and questions were posed about how representative of the general population the Assembly actually was. Similar surprise greeted the liberal recommendations of the Oireachtas committee but as the referendum result showed, these two fora were quite representative of voters. Social conservatism had wilted in Irish politics for some time before it was fully understood or recognised by political and media elites. Large referendum voters in favour of introducing marriage equality (2015) repealing a blasphemy provision (2018) and further liberalizing divorce (2019) all reinforce this point.

The results also reveal the importance of the deliberative mini-public preceding the abortion referendum. Voters who were aware of the Citizens' Assembly were more likely to vote yes. This is an important finding and has implications for the development of referendum processes. Abortion was a particularly intractable issue in Ireland and the deliberative pre-referendum phase

undoubtedly enhanced the information environment at the vote and contributed to the decisive outcome. It is quite possible that awareness of the Citizens' Assembly will also have impacted on turnout, thus generating an even stronger impact on the referendum outcome than what we find here - but this will be left for future research.

Bibliography

Becker, S.A., Fetzer, T. & Novy, D. (2017). Who Voted for Brexit? A Comprehensive District-Level Analysis, *Economic Policy,* 601-651.

Berger, P. L. (2001). Reflections on the sociology of religion today. *Sociology of Religion*, 62(4), 443-454.

Breen, M., & Healy, A.E. (2014), Secularization in Ireland: Analyzing the Relationship between Religiosity and Demographic Variables in Ireland from the European Social Survey 2002-2012. *International Journal of Religion & Spirituality in Society.* 3(4), 113-125.

Breen, M. & Reynolds, C. (2011), The Rise of Secularism and the Decline of Religiosity in Ireland: The Pattern of Religious Change in Europe. *International Journal of Religion & Spirituality in Society.* 1.

Costello, R. (2017), The ideological space in Irish politics: comparing voters and parties. *Irish Political Studies*, 32 (3), 404-431.

De Vreese, C. H., and Semetko, H. A. (2004). *Political campaigning in referendums: Framing the referendum issue.* London: Routledge.

Downs, A. (1957). *An economic theory of voting.* NY: Harper and Row.

Elkink, J.A., Farrell, D.M., Reidy, T. and Suiter, J. (2017). Understanding the 2015 marriage referendum in Ireland: context, campaign, and conservative Ireland. *Irish Political Studies*, 32 (3), 361-381.

Enelow, J.M., and M.J. Hinich, eds. (1990), *Advances in the Spatial Theory of Voting.* Cambridge: Cambridge University Press.

Farrell, D. M., O'Malley, E., & Suiter, J. (2013). Deliberative democracy in action Irish-style: The 2011 We The Citizens pilot citizens' assembly. *Irish Political Studies*, *28* (1), 99-113.

Farrell, D. M. J. Suiter, and C. Harris (2019). 'Systematizing' constitutional deliberation: the 2016-18 Citizens' Assembly in Ireland, *Irish Political Studies*, 34 (1), 113-23*.

Field, L. (2018). The abortion referendum of 2018 and a timeline of abortion politics in Ireland to date. *Irish Political Studies*, 33 (4), 608-628.

Fournier, Patrick, Henk van der Kolk, Kenneth Carty, André Blais and Jonathan Rose (2011). *When Citizens Decide: Lessons from Citizen Assemblies on Electoral Reform.* Oxford: Oxford University Press.

Franklin, Mark N., Cees Van der Eijk, and Michael Marsh (1995) "Referendum outcomes and trust in government: Public support for Europe in the wake of Maastricht." *West European Politics* 18, no. 3: 101-117.

Gallagher, Michael (2011) "Parties and referendums in Ireland 1937–2011." *Irish Political Studies* 26 (4): 535-544.

Gravelle, Timothy B., and Andrea Carson (2019) "Explaining the Australian marriage equality vote: An aggregate-level analysis." Politics 39 (2): 186-201.

Garry, John, Marsh, Michael & Sinnott, Richard. (2005) 'Second-order' versus 'issue-voting' effects in EU referendums, *European Union Politics*, 6(2), pp. 201–221.

Hobolt, Sara Binzer (2005) "When Europe matters: The impact of political information on voting behaviour in EU referendums." Journal of elections, public opinion & parties 15 (1): 85-109.

Hobolt, Sara B. 2009. *Europe in Question: Referendums on European integration*. New York: Oxford University Press.

Kennedy, F. (2002). Report - Abortion Referendum 2002. *Irish Political Studies*, 17 (1), 114-128.

Kitchin, R. and Bartley, B. (2007) Ireland in the twenty-first century, in Bartley, B. and Kitchin, R., eds., *Understanding Contemporary Ireland*, London: Pluto Press, 1-26.

Kriesi, H., E. Grande, R. Lachat, M. Dolezal, S. Bornschier and T. Frey. 2006. "Globalization and the Transformation of the National Political Space: Six European countries compared." *European Journal of Political Research* 45 (6):921–956.

Kriesi, H. (2014), "The Populist Challenge", *West European Politics*, 37 (2), 361-378.

Lau, Richard R., and David P. Redlawsk. "Voting correctly." *American Political Science Review* 91, no. 3 (1997): 585-598.

Leduc, L. (2002), "Opinion change and voting behaviour in referendums", *European Journal of Political Research*, 41(6), 711-732.

Lupia, A. (1994), "Shortcuts versus Encyclopedias: Information and voting behavior in California insurance reform elections", *American Political Science Review*, 88 (1), 63-76.

McAllister, Ian, and Feodor Snagovsky (2018) "Explaining voting in the 2017 Australian same-sex marriage plebiscite." *Australian Journal of Political Science* 53 (4): 409-427.

Mudde, C., and Kaltwasser, C. R. (2017). *Populism: A very short introduction*. Oxford University Press.

Nai, Alessandro. "The maze and the mirror: Voting correctly in direct democracy." *Social Science Quarterly* 96, no. 2 (2015): 465-486.

O'Carroll, J.P. (1991). Bishops, knights — and Pawns? Traditional thought and the Irish abortion referendum debate of 1983. *Irish Political Studies*, 6 (1), 53-71.

O'Leary, C., and Hesketh, T. (1988). The Irish abortion and divorce referendum campaigns. *Irish Political Studies*, 3 (1), 43-62.

O'Malley, E. (2008), "Why is there no Radical Right Party in Ireland?", *West European Politics*, 31 (5), 960-977.

Pammett, Jon H., and Lawrence LeDuc (2001) "Sovereignty, leadership and voting in the Quebec referendums." Electoral studies 20 (2): 265-280.

Qvortrup, M. (2018), "Western Europe", in: M. Qvortrup (ed). *Referendums Around the World*. Cham: Palgrave Macmillan, 19-46.

Reidy, T. and Suiter, J. (2017). "Symposium 2016-2017: Globalisation, Inequality and the Rise of Populism: Who is the Populist Irish Voter?" *Journal of the Statistical and Social Inquiry Society of Ireland*, 46, 117-132.

Reidy, T. (2019) 'Liberal Frontier: Abortion Referendums in Ireland', in: S. Brunn and R. Kehrein (eds). *Handbook of the Changing World Language Map*. USA: Springer.

Sinnott, R. (1995). *Irish Voters Decide*. UK: Manchester University Press.

Sinnott, R. (2002). Cleavages, parties and referendums: Relationships between representative and direct democracy in the Republic of Ireland. *European Journal of Political Research*, *41*(6), 811-826.

Stoker, L. (2014), Reflections on the study of generations in politics. *Forum*, 12 (3), 377-396.

Suiter, J., D.M. Farrell, & C. Harris (2018). Ireland's Evolving Constitution In Blokker, P. (ed) *Constitutional Acceleration within the European Union and Beyond*. Routledge

Suiter, J., D.M. Farrell, & C. Harris (2016). The Irish constitutional convention: a case of 'high legitimacy', in: Min Reuchamps and Jane Suiter (eds), *Constitutional Deliberative Democracy in Europe*, Colchester: ECPR Press, 33-52.

Suiter, J. & T. Reidy (2013). It's the campaign learning stupid: an examination of a volatile Irish referendum. *Parliamentary Affairs*, *68* (1), 182-202.

Therneau, T.M. & E.J. Atkinson (2019). *An Introduction to Recursive Partitioning using the RPART Routines*. Mayo Foundation. https://cran.r-project.org/web/packages/rpart/vignettes/longintro.pdf

Tilley, J. & G. Evans (2014). Ageing and generational effects on vote choice: Combining cross-sectional and panel data to estimate APC effects. *Electoral Studies*, 33, 19-27.

Zou, K.H., A.J. O'Malley, and L. Mauri. 2007. "Receiver-Operating Characteristic Analysis for Evaluating Diagnostic Tests and Predictive Models," *Circulation*, 115, 654–657.

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