RESEARCH

the tipping point between stability and decline: trends in voter turnout, 1950–1980–2012

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Abstract

There is a consensus in recent literature on electoral research that voter turnout rates are declining significantly. We know less, however, about when this decline started and how significant it is. In this paper, we analyse trends in electoral turnout, as reported in the IDEA dataset for 20 stable democracies over the period between 1950 and 2012, which covers 349 elections. The results show that turnout levels were stable until approximately 1980. A significant linear decline can be observed from 1980 onward. Various institutional elements related to turnout levels – such as the closeness of elections, or the effective number of parties – do not explain this spline or the particular curve of the decline. We close with a number of suggestions for future research that may ascertain this relation in more depth.

Keywords voter turnout; trends, civic duty; electoral behaviour; institutions

INTRODUCTION

Something remarkable has happened in the field of electoral research during the past decades. In 1995, there was still a clear consensus that – allowing for some temporary fluctuations – voter turnout levels were mostly

stable. In his seminal work *Citizens and the State,* Topf (1995, p. 40) confidently concluded that not much had happened in the area of voter turnout since the end of the Second World War. He summarised his review of the available data by noting a 'remarkable stability in turnout throughout the post war period'. He did observe that turnout declined with three percentage points on average during the second half of the 1980s, but given the evidence available at that time, he interpreted this to be no more than a temporary fluctuation. Two decades later, a remarkable consensus can be observed within the literature that voter turnout is actually declining, even quite rapidly so (Cox, 2015). What exactly has happened in the field of electoral research, and why was there a shift toward the hypothesis about turnout decline? We argue that more accurate information about the timing and the characteristics of turnout decline is needed before the determinants of this decline can be investigated in a comprehensive manner.

It is by now generally accepted that a strong and significant trend can be observed in voter turnout levels in liberal democracies (Blais and Rubenson, 2013; Hooghe, 2014). From a normative point of view, this is an alarming trend as high levels of voter turnout not only express the legitimacy of a political system, they also ensure that a substantial proportion of the population at least has had the opportunity to hold political decision makers accountable for the policies they pursued (Mahler *et al,* 2014; Verba *et al,* 1995). While older literature on voter turnout saw voter turnout levels as a rather stable characteristic of political systems in (Jackman and Miller, 1995; McDonald and Popkin, 2001), more recent studies depart from the assumption of a decline in turnout levels (Capolare and Poitras, 2014; Franklin, 2004; Geys, 2006; Leighley and Nagler, 2013). This change in the literature is quite striking: electoral researchers apparently became convinced at one point that turnout levels were declining. A decade ago, a debate still raged on the question if the alleged decline was indeed empirically founded (Stolle and Hooghe, 2005), but today this debate seems to have been resolved in favour of the more pessimistic argument. A tipping point was apparently reached at one point, after which it became undeniable that we are witnessing a structural trend toward declining voter turnout.

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More precise information on the occurrence of that tipping point might also help us determine in a more precise manner the possible determinants of decline. Some have suggested that turnout may be influenced by institutional and context effects, demographic changes and shifting social norms (Blais and Rubenson, 2013; Geys, 2006).

Firstly, some scholars argue that turnout levels are to a large extent determined by structural supply-side elements such as the number of parties and competitive races. This would suggest that turnout levels do not decline in a linear manner, but instead respond to specific changes in the electoral or party system. This in turn implies that declining trends in turnout over time may largely be explained by changes with regard to the number of parties or the competitiveness of elections. Secondly, some authors highlight the role of demographic changes; they assume that mostly young age groups refrain from voting because they are far less interested in the electoral process than older citizens (Blais and

Rubenson, 2013; Franklin, 2004). As generational replacement is a process that develops in a steady manner, a gradual decline in voter turnout is likely in this theoretical framework. Thirdly, it has been argued that voter turnout is determined by social norms such as a sense of civic duty and especially social pressures reinforcing these norms. Taking the social nature of these norms into account makes it possible to investigate not just determinants of voter turnout at the individual level, but also aggregate-level indicators (Blais, 2000; Panagopoulos *et al,* 2014). One might expect turnout levels to rapidly decline in line with this trend if voting is no longer seen as a civic duty.

This paper investigates voter turnout trends since the Second World War in 20 established democracies. We rely on real-life data about voter turnout as these figures are far more reliable than reported voting behaviour from survey research (Karp and Brockington, 2005). This also allows us to cover more countries over a longer period of time than previous studies (Blais and Rubenson, 2013). Our use of aggregate figures does imply however that the analysis will need to remain limited to determinants that can be operationalised in a valid manner at the same aggregate level across the included countries, which means that individual-level determinants cannot be included.

We first briefly review the literature on turnout decline, before proceeding with an in-depth analysis of the declining figures. We subsequently explore the potential ability of these theories to help us explain the observed patterns in voter turnout decline.

LITERATURE

A decade ago, a debate still raged in electoral research literature on the correct identification of trends in turnout levels (McDonald and Popkin, 2001; Norris, 2002). McDonald and Popkin (2001, p. 963) for instance described the decline in voter participation in the United States as an 'illusion' created by researchers' reliance on voting age population as a denominator in the turnout ratio. Norris (2002) also considered the notion of eroding voting participation in post-industrial societies to be overstated. Norris (2002, p. 57) argued that 'the majority of these nations saw a long-term pattern of trendless fluctuation or stability in electoral participation' and she describes the decline in recent years as 'short-term fall'.

In contrast, a consensus exists in current literature that turnout levels are indeed systematically declining in most liberal democracies (Blais and Rubenson, 2013; Hooghe, 2014). This decline is well documented by now (Dalton, 2008a; Mair 2014; Wattenberg 2008). Such a clear tipping point in the literature suggests that either the older literature failed to note specific changes or, rather, that there was indeed such a tipping point in voter turnout over time.

Far less research exists on ways to explain the occurrence of such a tipping point. Three approaches can be distinguished in literature on voter turnout: some see the effects of the political system as a decisive factor, others emphasise demographic changes and still other authors point to normative, society-wide changes.

SYSTEMIC EXPLANATIONS

First, it is worth noting that turnout rates vary sharply from one political system to another, depending on for instance electoral rules and characteristics of the party system (Cox, 2015). The competitiveness of elections has been singled out as one of the major determinants of these fluctuations, as citizens are far more

likely to cast their vote if they believe the results of the election may depend on the smallest fluctuations (Simonovits, 2012). If the closeness of elections declines in liberal democracies, this may be one of the elements behind the decline in electoral turnout (Caporale and Poitras, 2014). The proportionality of the electoral system also tends to boost voter turnout as a larger part of the electorate in this instance feels represented in the results of the electoral process (Eggers, 2015). The effective number of parties has been shown to have an effect on turnout levels (Grofman and Selb, 2011), although discussion exists about how this relationship should be conceptualised. Some authors have argued that a large number of parties suggest that more options are available to potential voters, resulting in an increased willingness to vote (Karp *et al,* 2008). Others argue that an increased number of parties make the choice options too complex, with voters refraining from actually making a choice as a result (Blais and Dobrzynska, 1998). For the purpose of the current study, it suffices to state that we expect the effective number of parties to have an effect, ignoring for the time being the precise nature of the expected effect. Effectively enforced systems of compulsory voting furthermore have a positive influence on electoral turnout (Hooghe and Pelleriaux, 1998). A rapid succession of elections, on the other hand, can have a negative impact on turnout, with voters plagued by a level of fatigue vis-à-vis the political system (Blais, 2014). All these contextual elements have been documented to have an effect on the absolute level of voter turnout. Developments in these elements over the past decades may consequently offer an explanation for the observed decline in voter turnout. Negative trends could for instance partly be explained by the decreasing competitiveness of elections over time or by countries scrapping their compulsory voting system. This suggests that the statistical effect of time on voter turnout levels is significantly reduced when these elements are included in the analysis.

This brings us to our first hypothesis: the effect of time on voter turnout levels is sharply reduced when systemic characteristics of the electoral and party system are also considered.

DEMOGRAPHIC EXPLANATIONS

Other authors focus on demographic trends to explain declining voter turnout levels. They assume that most young people are no longer interested in the electoral process, as they prefer other participation forms to make their voices heard in political decision making (Bhatti and Hansen, 2012). Extending the right to vote to younger age groups could consequently have a negative impact on turnout levels (Franklin, 2004). If young voters do not pick up the habit of voting the first time they are eligible to vote, it is less likely that they will do so later on in their life and they are less likely to frequently cast their vote throughout their lifetime (Smets, 2012). In their comprehensive analysis of Canadian turnout figures, Blais and Rubenson (2013) show that differences between age groups largely explain the decline in turnout levels. The impact of this generational replacement process is so strong that it in itself largely explains the decline in turnout (Rubenson *et al,* 2004). The findings from this Canadian case study, however, cannot be generalised toward other societies. For Sweden, for instance, this mechanism of generational replacement did not explain trends over time (Persson *et al,* 2013). A tension exists, however, between the occurrence of a tipping point in turnout decline and these demographic explanations. Given the demographic stability of Western societies and declining fertility levels,

demographic changes cannot but lead to a gradual and steady decline in turnout levels, as the proportion of the population entering voting age every year has remained roughly stable for some decades now (Lesthaeghe, 2010). This line of the literature consequently brings us to our second hypothesis: turnout levels gradually decline over time, simultaneously with the mechanism of generational replacement.

NORMATIVE EXPLANATIONS

Third, some have underlined that normative considerations are important determinants of willingness to vote (Gerber *et al,* 2008). Blais (2000) in particular has made the argument that citizens show up to elections, motivated not by some instrumental reason but by an internalised feeling of civic duty. This sense of duty motivates people to vote without considering whether their individual vote will actually influence the electoral outcome. Blais (2000, p. 93) offers a very succinct definition of this concept: 'A sense of duty entails adherence to a norm that establishes that voting is right and not voting is wrong'. Blais (2000) suggests two reasons that cause citizens to perceive voting as a civic obligation. First, many voters believe that they should vote because they believe in democracy and realise that a democratic political system can only function if citizens cast their votes. Second, many citizens see voting as a moral obligation because they feel attached to the community they live in. They regard it as their duty to vote because it allows them to demonstrate that they care about their community. These two factors may explain why people have internalised the norm that citizens should vote (Gerber *et al,* 2008). It should be noted that these weakened social norms may be tied to demographic changes as older age groups seemingly respond to social pressure more and see voting as a civic duty (Panagopoulos and Abrajano, 2014; Wattenberg, 2008).

The work of Blais as well as that of other researchers does not always fully explain what the origins of this sense of civic duty are, as they mostly focus on the individual level. Recent experimental studies, however, have revealed that the norm of civic duty is to a large extent dependent on the social norms and expectations in a community or interaction context (Panagopoulos *et al,* 2014). We consequently believe that research into civic duty as a motivating factor for voter turnout should also take into account these social mechanisms. Norms develop against the backdrop of a 'moral horizon' of value patterns supported and reinforced by society as a whole (Taylor, 1989; Panagopoulos, 2010). The development of individual norms cannot be considered independently from the norms upheld by society, with society-wide support and legitimacy. Voting as part of a norm, following this argument, is socially enforced by an individual's social network (Posner and Rasmusen, 1999). Experimental research on possible interventions to raise voter turnout has demonstrated that social pressure is a very powerful tool to boost voter turnout. As Panagopoulos *et al* (2014, p. 452) conclude: 'Voting appears to be ''contagious'' among members of a household (…) when one household member is mobilised by a get-out-the-vote (GOTV) campaign, other household members also become more likely to vote'. This influence of social pressure on willingness to vote has been documented across various population groups (Panagopoulos, 2013).

The occurrence of a tipping point is not inherently problematic when relying on social norms to explain voter turnout. When this norm is upheld in a social network, this can first act as a buffer that ensures that members of the network continue to vote, even if this is only the

result of social pressure. When the norm is no longer socially supported or enforced, however, a sharp decline can occur. The contagion effect crucial in this approach implies that rather than just one actor, everyone is affected when social pressure disappears. Taking this mechanism into account, we hypothesise that there is a 'social multiplier' effect (Glaeser *et al,* 2003). Voter turnout levels could drop rapidly when citizens no longer experience social pressure to vote. Gerber *et al* (2008, p. 40) predict just such a development: 'The activation and enforcement of social norms, as many scholars have observed, is potentially subject to 'tipping points' or 'cascades' (Schelling 1978). When norm-compliant behaviour drops off or norm-enforcing behaviour dissipates, the equilibrium level of compliance may quickly deteriorate'. In line with this reasoning, we hypothesise that voter turnout can 'quickly deteriorate' after a period of apparent stability, to use the words of Gerber *et al*. The consideration that the decline can be self-reinforcing contributes to this process: Gerber and Rogers (2009) provide evidence that when voters receive information about low or declining turnout levels in their communities, this erodes their motivation to cast their ballot, thus reinforcing the already existing trend. This has been labelled a 'descriptive norm': because citizens receive information about other citizens, they are likely to adjust their behaviour to this information (Huijts *et al,* 2013). Following this logic, one might expect the decline in voter turnout to be a self-reinforcing process, one falling sharply following the occurrence of a tipping point. This line of the literature leads to the third hypothesis: turnout levels decline after weakened support for voting as a civic duty reaches a particular tipping point.

The three theoretical approaches discussed above thus lead to different expectations pertaining to the timing of the decline and the shape of the curve. Systematic approaches would be compatible with a sharply reduced effect of time; demographic trends might explain a smooth and gradual decline, and the normative framework is compatible with the occurrence of tipping points and discontinuities.

DATA, METHOD AND MEASUREMENT

For the dependent variable, i.e. aggregate levels of voter turnout, the Institute for Democracy and Electoral Assistance's (IDEA) data are used, while data from the Parliament and Government Composition Database (ParlGov) (Döring and Manow 2012) are used for the measures assessing systematic characteristics of the electoral and party system. We furthermore use demographic data from the United Nations (United Nations, Department of Economic and Social Affairs, Population Division 2013). As we are interested in long-term trends of voter turnout, we only included those countries in the analysis that have held democratic parliamentary elections since at least 1945, and while IDEA now covers elections around the world, this need for time series reduces the sample to mainly stable European democracies. IDEA data on voter turnout are available up to the year 2015 (see Table A1 in Appendix). Combining the three datasets offers data on 349 elections in the following 20 countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Japan, Luxembourg, Malta, the Netherlands, New Zealand, Norway, Sweden, Switzerland and the UK.[1] With the exception of Japan, Canada, Australia and New Zealand, these are all stable European democracies. We restrict our analysis to results from 1945 onward as we are interested in societal changes in stable democracies and the pre-1945 turnout levels are presumably affected by the First and Second World. The main advantage of these data is that

they are highly reliable: the dataset is based on official government figures and we can therefore be reasonably confident that it captures real-life trends in voter behaviour. In light of our particular research interest, this kind of real-life data is also preferable over survey research sources. It has been well documented that survey respondents have a very strong tendency to overreport their electoral participation and it cannot simply be assumed that this effect of social desirability is stable over time (Bernstein *et al,* 2001). Because the demographic data are only available from 1950 onward and the ParlGov dataset only runs until 2012, we restrict our main analysis to this period.

Because elections are clustered within countries, this analysis presented us with nested data. One method to analyse these data is to apply a multilevel modelling technique. The advantage of this technique is that it can process repeated measures collected at varying occasions, and that it does not require balanced data. Both of these advantages make this modelling technique suited to this study, as elections in different countries do not take place at fixed occasions and the data are not balanced (see Table A1 in Appendix). A multilevel analysis for change is therefore performed. Before proceeding with the development of these models, a description of the variables included in the analysis is offered below.

DEPENDENT VARIABLE: AGGREGATE LEVELS OF VOTER TURNOUT

We investigate trends in aggregate levels of voter turnout between 1950 and 2012. The dependent variable is the proportion of voters compared to all registered voters. This operationalisation is robust since the figures are comparable over time, and they are not influenced by a growing proportion of the voting age population in these democracies not having full citizenship rights, including the right to vote, due to immigration flows (Aarts and Wessels, 2005; Blais and Dobrzynska, 1998). According to Aarts and Wessel (2005, p. 66), the percentage of registered voters that voted 'best captures the power of an electoral system to mobilize its voters' (Aarts and Wessels, 2005, p. 66). As a control measure, we also used the percentage of voters as part of the voting age population as a dependent variable in a separate analysis, which confirmed a result that was similar to that of this paper's main analysis (see Table A2 in Appendix).

INDEPENDENT VARIABLES

A first important variable for this analysis is evidently the election year as we assume voter turnout to decline over time. A first step is consequently to first add a time variable operationalised as the number of years since 1950 (range 0 to 62 in 2012).

In order to test the hypothesis on systemic determinants of voter turnout, multiple characteristics of elections and political systems need to be included. We include two types of variables that affect turnout – variables that capture characteristics of a country's institutional setting and variables related to a country's party system. First, we include compulsory voting because, in line with previous studies (Franklin, 1999, 2004; Jackman, 1987; Powell, 1986; Quintelier *et al,* 2011), we expect voter turnout to be significantly higher in those countries where electoral participation is compulsory. Second, we include the type of electoral system because we assume turnout to be higher in systems with proportional representation (Jackman, 1987). Furthermore, the number of parties is usually higher in PR systems, which presumably increases citizens' choices. Finally, elections in PR systems are more

competitive due to their multi-member districts (Blais and Carty, 1990; Blais and Dobrzynska, 1998). We use three measures that we obtained from the ParlGov dataset (Döring and Manow, 2012) to control for the potential effects of systems with proportional representation. First, we control for system disproportionality using the disproportionality index (Gallagher, 1991) and for the effective number of parties measured by the level of votes (Laaksu and Taagepera, 1979). A high degree of disproportionality is expected to be associated with low levels of turnout because the benefits for supporters of small parties are comparatively small, given that those parties are unlikely to obtain seats in parliament (Blais and Carty, 1990). The high effective number of parties is expected to boost turnout as it increases the likelihood that voters will find parties that represent their interests (Bühlmann and Freitag, 2006). Third, as a measure of competitiveness, we include the margin of victory, calculated as the difference between the vote share of the first- and second-placed parties (Smets and Neundorf, 2014).

Finally, we control for the degree of polarisation in a party system. It is assumed that voters are more likely to find a political party that represents their attitudes and positions in highly polarised systems (Smets and Neundorf, 2014). Moreover, as Franklin (2004) argues, parties that advocate more extreme attitudes are more likely to stimulate turnout among both their supporters and their opponents. We consequently expect polarisation to stimulate turnout. The index on polarisation was also drawn from the ParlGov dataset (Döring and Manow, 2012) and calculated based on the formula provided by Dalton (2008b). Evidently, these variables are all specific to a particular election year, so they vary over time in the analysis.

In order to test the hypothesis that generational replacement causes the decline in turnout, we include the percentage of young adults in the countries in the analysis. Young adults are defined as individuals between 20 and 29 years old. As voter turnout tends to be lower among younger age groups, we expect this variable to have a negative effect.

A major question in our analysis is whether a tipping point in turnout decline can be observed, and if so, in what precise period. Mair detected a change in turnout patterns in long-established democracies in Western Europe 'that may well prove to be a major shift in the pattern' (2014, p. 311): relative stability in turnout in the post-war period, followed by a small decline in voter turnout in the 1980s that turned into a more drastic decline in the 1990s. Based on these results, we expect turnout trends to have shifted at one point during the observation period. We model such a potential turning point by relying on a spline regression model, which allows us to model the relationship between time as a continuous explanatory variable defined over specific periods of time and voter turnout as a dependent variable (Marsh and Cormier, 2002). In doing so, we can model voter turnout as a continuous function of time over all periods of time but with different slopes in each of the different periods. As there are various expectations about when exactly this discontinuity may have occurred, we test for various spline knots in the regression analysis.

RESULTS

First, we present a descriptive analysis of the trends (Figure 1). As the below figure illustrates, there is indeed a considerable level of variation between observation points, but a declining trend can also be observed, with the highest turnout levels occurring in the period between the 1950s and 1980s. Very low levels were recorded in recent years with for instance a very low turnout of 55 per cent in France in 2012.

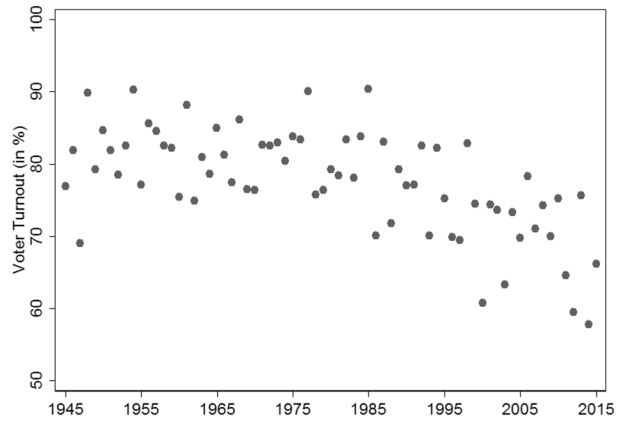

Figure 1 Average voter turnout per year. *Note*: Average voter turnout of all the elections in the sample in a given year with voter turnout defined as the percentage of registered voters who cast a ballot. Weights are used to adjust for different numbers of registered voters.
Source: IDEA dataset (2014).

After this brief presentation of the trends, we proceed with the analysis of the turnout figures (Table 1). First, both general and country-specific intercepts are estimated in the null model that does not contain any explanatory variables. This model can serve as a benchmark with which the following models that do contain explanatory variables can be compared. In those following models, we include the number of years since 1950 as a variable of interest and the characteristics of elections and political systems as well as the percentage of young adults as the control variables. We include a spline knot at a different point in time in each of these models. Based on the literature that indicates that trends started to shift in the 1980s (Mair, 2014), we covered the period from 1975 to 1995 in five-year intervals in order to investigate when exactly this tipping point may have occurred. All these models reveal a negative time trend *after* the spline knot. In this respect, our analysis confirms earlier studies that indicate that turnout has started to decline only in recent years (Blais and Rubenson, 2013). However, the models reveal interesting information about the trends that become visible before the spline knots. Models I and II are similar in this respect: no significant time trend can be detected *before* the respective spline knot, which means that turnout levels seem to have been stable until 1980, which confirms the findings of Topf (1995). However, as Models III, IV and V show, when the tipping point is shifted further toward 1985, 1990 and 1995, the time trend before those years also becomes negative, which indicates that the change in turnout trends must have taken place in the early 1980s. This analysis consequently confirms that the decline in turnout is a rather recent phenomenon. It accordingly does not seem surprising that there was still a lively scholarly discussion about the alleged decline in turnout trends in the 1990s. The sharp contrast between 'for' and 'after' time coefficients in Model II (with spline knot in 1980) suggests that the tipping point occurred during that era. Electoral scholars working two decades ago consequently were actually right at that time: not enough statistical evidence existed in the early 1990s to substantiate the claim of declining turnout levels.

As far as the characteristics of the electoral and political system were concerned, unsurprisingly, turnout levels are

Table 1: Effect of Time on Turnout Using Spline Knots at Different Points in Time

Spline Knots	Model 0 None	Model I 1975	Model II 1980	Model III 1985	Model IV 1990	Model V 1995	Model VI 1980
Intercept	81.713*** (2.270)	75.203*** (3.374)	76.432*** (3.400)	77.227*** (3.440)	77.088*** (3.492)	76.024*** (3.505)	72.924*** (2.627)
$Time_{before\ knot}$		−0.013 (0.034)	−0.042 (0.029)	−0.068** (0.025)	−0.099*** (0.022)	−0.126*** (0.020)	−0.030 (0.021)
$Time_{after\ knot}$		−0.238*** (0.024)	−0.268*** (0.029)	−0.299*** (0.036)	−0.308*** (0.047)	−0.292*** (0.065)	−0.269*** (0.022)
Compulsory Voting		9.278*** (1.155)	9.301*** (1.155)	9.295*** (1.158)	9.280*** (1.170)	9.263*** (1.182)	9.604*** (1.113)
Margin of Victory		−0.110** (0.036)	−0.113** (0.036)	−0.114** (0.036)	−0.114** (0.036)	−0.110** (0.036)	
Polarisation		−0.459 (2.886)	−0.102 (2.879)	0.181 (2.886)	0.343 (2.917)	0.405 (2.946)	
Disproportionality		−0.174* (0.068)	−0.173* (0.068)	−0.173* (0.068)	−0.174* (0.069)	−0.170* (0.070)	
Effective Number of Parties		−0.145 (0.257)	−0.136 (0.257)	−0.151 (0.257)	−0.186 (0.260)	−0.194 (0.263)	
Percentage of Young Adults		0.053 (0.135)	−0.016 (0.140)	−0.042 (0.145)	0.015 (0.149)	0.124 (0.147)	
Variance Components							
Level 1: Within Country	28.672	13.223	13.196	13.273	13.565	13.843	14.873
Level 2: In Initial Turnout	101.352	85.994	86.441	86.529	86.390	86.514	89.556

Goodness-of-fit								
Deviance	2244	1986	1985	1987	1994	2001	2311
AIC	2250	2008	2007	2009	2016	2023	2323
BIC	2262	2050	2050	2052	2059	2066	2347
$N_{elections}$	349	349	349	349	349	349	400
$N_{countries}$	20	20	20	20	20	20	20

Note: Entries are the result of a multilevel analysis for change with spline knots introduced at different points in time (Model I–V). In Models I–VI, the effects of time differ significantly before and after the spline knot. Standard errors in parentheses. Models 0–V include 349 elections on the first level and 20 countries on the second level. Model VI includes 400 elections on the first level and 20 countries on the second level. * $p<0.05$, ** $p<0.01$, *** $p<0.001$. *Source:* IDEA dataset (2014)

significantly higher in countries with compulsory voting, independent of the location of the spline knot. In terms of the characteristics of PR systems, the analysis reveals ambiguous results: while turnout levels are significantly lower in disproportional systems, no effect can be found with respect to the effective number of parties. These effects also hold for Models I to V and thus are independent of the location of the spline knot. While these systematic characteristics have an impact on turnout, they do not render the effect of time insignificant. Electoral competitiveness, operationalised as the margin of victory, furthermore significantly affects turnout levels: larger margins are associated with lower levels of turnout. An electoral system's degree of polarisation and the number of years since the last election do not affect turnout levels.[2]

To test the demographic explanation of turnout decline, we also added the percentage of young adults in a country to the models. However, as Models I to V show, the relative size of this group does not seem to affect voter turnout. While authors like Blais and Rubenson (2013) and Franklin (2004) assume that young people are especially responsible for the decline in voter turnout, we do not find any substantiation for this position in our analysis.

Our hypothesis, however, was that institutional and demographic explanations would help us explain the trend over time. We therefore repeat Model II (with a spline knot in 1980), but this time without the characteristics of the specific elections and the electoral system. In this model, we can include elections up to 2015. As can be noted from Model VI, the coefficients do not substantially change compared to Model II. While each of these characteristics of the political and electoral systems is related to turnout levels, they do not help explain trends in turnout over time. We can consequently conclude that there is indeed a significant time trend, and that specific characteristics of the electoral system and

'... There is indeed a significant time trend, and specific characteristics of the electoral system do not help to explain this trend.'

the percentage of young adults in a country do not help explain this trend, in contrast to our first hypothesis. It should be noted that no recent figures were available in the ParlGov dataset for the 2013, 2014 and 2015 elections; by definition, these elections can thus only be included in a model without control variables. The same is true for the elections that took place between 1945 and 1950. In an analysis that includes the percentage of young adults, these elections cannot be accounted for because the demographic data are lacking. However, Model VI does not include this variable either, which suggests that we can include those early elections as well. Even including these very first elections and the most recent ones confirms our initial finding that the tipping point occurred around 1980. In Models I to VI, the effects of time differ significantly before and after the spline knot. Moreover, as Models I and II show, turnout levels were stable up to 1980. If turnout levels had declined gradually, we would have expected this decline to have started earlier. Our findings therefore are hard to reconcile with systematic (Hypothesis 1) or generational replacement (Hypothesis 2) explanations for the decline in electoral turnout.

It should be noted that we have information on just 20 countries, with sufficiently long and reliable time series. In light of the low number of observations, we have to be aware of the risk that one or more potential outliers may be responsible for the main results. As was clear from the results in Table 1, the theoretically most relevant model was the one with the spline knot situated in 1980. This same model was subsequently tested by eliminating the 20 countries as potential outliers one by one. The results show that the same time trends can be detected when we each country is eliminated separately. The models remain robust for controls for 18 potential outliers. Only when Denmark and Sweden are excluded, the results indicate that the tipping point might be situated a few years earlier. As an additional robustness check, we also ran a model excluding the two countries with a stable compulsory voting system (Belgium and Australia). This, too, did not change the general results: the tipping point clearly needs to be situated in 1980.

CONCLUSION

Not too long ago, a debate existed in the literature concerning the question whether there was really a decline in voter turnout levels in liberal democracies (McDonald and Popkin, 2001; Topf, 1995). This debate today seems to be closed, with the current consensus in the literature that observed turnout levels show a significant and general decline. The present analysis suggests that those researchers who were optimistic two decades ago were not wrong in their assessment of the data available at that time: only from the early 1980s onward was there a clear evolution toward lower turnout levels. For the entire 1950–1980 period, we do indeed observe stable turnout levels, exactly like Topf (1995) wrote based on the figures available at that time.

The occurrence of this tipping point helps explain why it has taken so long for political scientists to notice this trend: up to the 1980s, there was no decline whatsoever and we only observe a structural and significant decline from roughly 1980 onward. All in all, it therefore seems that systematic turnout decline is a rather recent phenomenon. Accordingly, we join

Blais and Rubenson (2013, p. 96) in their conclusion that: 'Although there are differences in the rate and starting point of this decline, the negative trend is remarkably uniform even among countries whose electoral systems and other political and social institutions are manifestly distinct'. Here, we have to acknowledge the main limitation of this research: we only have access to country-level turnout averages. This allows us to investigate the changes over time in a comprehensive manner, but it inevitably also limits our analysis to country-level variables. Still, we opted for this level of analysis because it offers insights on trends in 349 elections over a 62-year period. Not a single individual-level dataset exists that even approaches this comprehensive scope. It might prove highly relevant to ascertain similar trends with individual-level data in the future – even if covering only a limited number of countries – for a more limited period of time.

The evident conclusion from the spline regression is that voter turnout only started to decline from 1980 onward. What can be inferred, then, from this finding about the validity of the three approaches we distinguished in the literature on turnout levels? First, it should be clear that institutional elements do not help account for this trend. Our analysis strongly suggests that the closeness of elections, the proportionality of the electoral system and the effective number of parties do not play a major role in the downward trend in voter turnout. Hypothesis 1 therefore does not receive support. Changes in the electoral or party system do not seem to represent a promising factor for future research on the decline in voter turnout. Demographic approaches fail to explain why a tipping point can be observed in 1980. Given the relative stability of fertility levels in Western societies, generational replacement is a gradual process. The existence of a clear tipping point in turnout decline appears to suggest that something specific happened with the generations that came of age after 1980. If generational replacement helps explain trends over time (Hypothesis 2), we have to investigate why this trend started around 1980 in particular and what type of generation-defining experience might be behind it. Our third hypothesis on the occurrence of a tipping point in social support for voting as a civic duty norm is not contradicted by our findings. Citizens of liberal democracies may indeed, from one point onward, have stopped believing that they have a civic duty to take part in elections. This does not answer the question of why this tipping point occurred around 1980 since the present analysis does offer any insights about this specific point in time. International relations underwent rapid changes in the period around 1980, which may have influenced support for electoral democracy in liberal democracies. The results of the current analysis suggest that the timing of this tipping point is crucially important if we wish to understand current trends in electoral turnout levels. If this tipping point cannot be explained by invoking characteristics of the electoral or party system, perhaps the explanation should be sought in changing characteristics of the electorate.

'... Voter turnout only started to decline from 1980 onward.'

'... The occurrence of a tipping point is not contradicted by our findings. Citizens of liberal democracies have stopped believing they have a civic duty to take part in elections.'

Notes

1 We included information on the entire territory of Germany where free elections were held. In light of the reunification of the country in 1990, the analysis was also conducted without the data for Germany, but this did not influence the results. For Malta, we only included elections that took place after Malta's independence in 1964.

2 Based on the assumption that 'the more often national elections are held, the greater is the voter fatigue' (Norris 2002, p.68), we also included a variable that captures the time since the previous parliamentary election in all models. We did not include this variable in the final analysis however because it did not significantly affect turnout levels in any of the models.

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APPENDIX

Table A1: Countries and Elections Included in the Analysis

Country	Time Period	Number of Elections	Lowest Turnout	Highest Turnout
Australia	1946–2013	27	93.2 (2010)	96.1 (1954)
Austria	1945–2013	21	74.9 (2013)	96.8 (1949)
Belgium	1946–2014	22	89.2 (2010)	95.1 (1977)
Canada	1945–2011	22	59.5 (2008)	80.6 (1958)
Denmark	1945–2011	25	80.8 (1953)	89.3 (1968)
Finland	1945–2015	20	65.0 (2007)	85.1 (1962)
France	1945–2012	18	55.4 (2012)	82.7 (1956)
Germany	1949–2013	18	70.8 (2009)	91.1 (1972)
Iceland	1946–2013	20	81.4 (2013)	92.1 (1956)
Ireland	1948–2011	18	62.6 (2002)	76.9 (1969)
Italy	1946–2013	18	75.2 (2013)	93.9 (1953)
Japan	1946–2014	26	52.7 (2014)	77.0 (1958)
Luxembourg	1948–2013	15	86.5 (1999)	92.7 (1954)
Malta	1966–2013	11	89.7 (1966)	97.2 (1996)
The Netherlands	1946–2012	21	73.2 (1998)	95.6 (1959)
New Zealand	1946–2014	24	74.2 (2011)	97.6 (1946)
Norway	1945–2013	18	75.5 (2001)	85.4 (1965)
Sweden	1948–2014	21	77.4 (1958)	91.8 (1976)
Switzerland	1947–2011	17	42.3 (1995)	71.7 (1947)
United Kingdom	1945–2015	18	59.4 (2001)	83.6 (1950)

Source: IDEA dataset.

Table A2: Effect of Time on Turnout Defined as Percentage of Voters in Voting age Population Using Spline Knots at Different Points in Time

Spline Knots	Model 0 None	Model I 1975	Model II 1980	Model III 1985	Model IV 1990	Model V 1995	Model VI 1980
Intercept	77.110*** (2.461)	73.906*** (4.126)	76.036*** (4.158)	77.473*** (4.214)	77.567*** (4.294)	75.972*** (4.334)	65.354*** (3.438)
$Time_{before\ knot}$		0.091* (0.043)	0.041 (0.036)	−0.003 (0.031)	−0.051 (0.028)	−0.096*** (0.025)	0.123*** (0.033)
$Time_{after\ knot}$		−0.301*** (0.029)	−0.352*** (0.036)	−0.409*** (0.045)	−0.443*** (0.059)	−0.445*** (0.082)	−0.349*** (0.035)
Compulsory Voting		6.668*** (1.439)	6.710*** (1.436)	6.700*** (1.443)	6.682*** (1.466)	6.671*** (1.492)	8.719*** (1.773)
Margin of Victory		−0.095* (0.044)	−0.098* (0.044)	−0.102* (0.045)	−0.101* (0.045)	−0.096* (0.046)	
Polarisation		−4.046 (3.600)	−3.428 (3.588)	−2.940 (3.602)	−2.657 (3.660)	−2.534 (3.727)	
Disproportionality		−0.227** (0.085)	−0.224** (0.085)	−0.225** (0.085)	−0.228** (0.086)	−0.223* (0.088)	
Effective Number of Parties		0.064 (0.320)	0.080 (0.320)	0.053 (0.321)	−0.009 (0.326)	−0.030 (0.333)	
Percentage of Young Adults		−0.048 (0.168)	−0.167 (0.175)	−0.217 (0.181)	−0.150 (0.187)	0.019 (0.185)	
Variance Components							
Level 1: Within Country	36.331	20.591	20.514	20.697	21.388	22.184	39.351
Level 2: In Initial Turnout	118.966	120.233	121.092	121.312	121.019	121.093	115.422
Goodness-of-Fit							
Deviance	2325	2138	2137	2140	2151	2163	2732
AIC	2331	2160	2159	2162	2173	2185	2744
BIC	2343	2203	2202	2205	2215	2227	2768

Table A2: (*Continued*)

Spline Knots	Model 0 None	Model I 1975	Model II 1980	Model III 1985	Model IV 1990	Model V 1995	Model VI 1980
$N_{elections}$	349	349	349	349	349	349	407
$N_{countries}$	20	20	20	20	20	20	20

Note: Entries are the result of a multilevel analysis for change with spline knots introduced at different points in time (Model I–V). In Models I–VI, the effects of time differ significantly before and after the spline knot. Voter turnout is defined as the percentage of voters in voting age population. Standard errors in parentheses. Models 0–V include 349 elections on the first level and 20 countries on the second level. Model VI includes 407 elections on the first level and 20 countries on the second level * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. *Source*: IDEA dataset (2014).

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