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Differential Turnout Decline in Norway and Sweden: A Generation of Apathy or Alienation?

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Voter turnout has been in a trend of gradual decline in most established democracies in recent decades and the reasons for this are by no means fully understood. While most studies agree that the trend is largely driven by younger generations voting less than older cohorts, the individual-level mechanisms of their declining propensity to vote are still disputed. A major distinction in the literature on democratic developments is that between theories of political *apathy* and political *alienation*: whether citizens are less interested in politics or still interested but instead estranged from their political systems. An interesting test for these different explanations can be found in Scandinavia: While Norway and Sweden have intimate historical, political and cultural similarities, Norway has been experiencing gradual turnout decline, while there has been no clear overall trend in Sweden. This study uses a combined dataset of over 50,000 respondents from 31 national election studies in these two countries from 1956–2013 to test the relative roles of apathy, alienation and generational dynamics in explaining these different trends in turnout. The results indicate that apathy has been declining while alienation has been rising in both countries. However, in Norway, those who are more apathetic today are much less likely to vote than apathetic citizens were in the past. The youngest generations are also significantly more apathetic and less likely to vote in Norway than in Sweden. These dynamics appear to account for the larger trend of turnout decline in Norway.

Voter turnout has been in a trend of gradual decline across almost all of the Western world in recent decades (Pintor & Gratschew 2002; Norris 2011; Hooghe & Kern 2016), including some historically high-turnout countries in Scandinavia (Wass 2007a; Gallego 2009; Persson et al. 2013), but the causes of this decline are still contested and relatively poorly understood. While aggregate trends such as globalization and inequality (Solt 2008; Marshall and Fisher 2015; Steiner 2016) have been found to be related to these developments and multiple studies find that this is largely driven by younger generations voting less than their older counterparts (Blais et al. 2004;

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Franklin 2004; Wass 2008; Persson et al. 2013), the individual-level mechanisms by which these citizens have a weaker propensity to vote are still widely debated.

An interesting piece of this puzzle can be found in Northern Europe: The Nordic countries have always had unusually high levels of turnout, but they have been experiencing very different turnout trends in recent decades (Bengtsson et al. 2014). While turnout has been stable at high levels in Denmark, it declined in Sweden for a few decades before recovering in recent years, but in Finland, Iceland and Norway it has seen a gradual trend of decline in the period (Pintor & Gratschew 2002; Gallego 2009). Furthermore, national election studies (NES) have been conducted after general elections in two of these countries since the 1950s: Norway and Sweden.¹ This provides a unique opportunity for a “most similar” research design to further our understanding of the turnout decline puzzle: these two countries have extremely intertwined histories, cultures and politics but for some reason, one of them has been experiencing gradual turnout decline while the other has experienced fluctuations without a clear overall trend. In this study, I therefore investigate the general puzzle of turnout decline in this unique setting, using attitudinal measures and validated voter turnout data from national election study datasets covering over 50,000 eligible voters surveyed after 31 elections in the period 1956–2013.

Prior studies of turnout decline on the individual level have discovered important roles of changing civic duty norms (Blais et al. 2004; Blais & Rubenson 2013) and of education (Gallego 2009; Dassonneville & Hooghe 2017) but these studies have thus far looked past an important distinction made in the broader literature on democratic developments and changing political attitudes: that between political *apathy* and political *alienation*. The former type of theories argue that citizens today are generally less interested in politics (Pirie & Worcester 1998; Park 2000; Putnam 2000; Wattenberg 2012; Fox 2015) while the latter argue that they are just as interested but instead estranged from their formal political systems for some reason (Norris 2002; O’Toole et al. 2003; Zukin et al. 2006; Marsh et al. 2007; Dalton 2009). In this literature, turnout decline is routinely cited as a consequence of those different developments, but that relationship has not yet been put to the test (Hay & Stoker 2009, 226; Smith 2009, 3–4; Flinders 2012a, 1; Wattenberg 2012; Dalton 2016, 13; Chou et al. 2017, 17).

Therefore, there is an ongoing debate in the academic literature on democratic developments and this debate results in different hypotheses about the causes of turnout decline, but these hypotheses have barely been tested by quantitative studies of turnout decline. Fox (2015) does test this distinction in the British context and Persson et al. (2013) look at both political interest on the individual level and party membership on the aggregate level in Sweden, but both are limited to single countries and the latter does not

measure alienation at the individual level. I argue that empirical studies of turnout decline should take note of this particular distinction made in the theoretical literature because it is an empirical contestation that is highly important for our understanding of voter turnout, turnout decline and broader democratic developments. While the distinction between apathy and alienation is only one step towards understanding democratic developments, it is a crucial step nonetheless: only when we have robust, empirical evidence about the long-term nature of changes in democratic attitudes and behaviour can we begin to ask why these are occurring, focusing in on shorter time-periods for a deeper understanding.

Whether citizens are less interested in politics or still interested but alienated from their democratic systems is also an important normative question about the nature of democracy and a crucial practical one about if and how citizens can be re-engaged with democratic systems of government. If they simply care less about politics, we may want to try to increase their interest e.g., through civic education (García-Albacete 2013; Pontes et al. 2017) or compulsory voting (Wattenberg 2012; Henn & Foard 2014). If they are still interested but instead estranged from their political systems, this may imply a more fundamental need to reform modern democratic systems and cultures. At the same time, the latter explanation is the fundamental justification for many projects for democratic innovations: if people are indeed still interested but do not identify with current channels of political participation, this would arguably support calls for providing more participatory venues within and without formal political systems (e.g., Dalton 2004a; Goodin 2008; Smith 2009).

In the next section, I briefly summarize the prior literature and theory of turnout decline in the Western world, deriving testable hypotheses based on that foundation. In the third section, I present the data and methods used to test these hypotheses and in the fourth section I present the results of the analysis. In the final section, I discuss these findings, their limitations and implications for further research, for policy-making and democratic reforms. The findings suggest that apathy has been declining while alienation has been rising substantially in both countries but the negative *effect* of apathy on turnout has grown much stronger in Norway and this appears to account for turnout decline there.

Theory and Hypotheses

The act of voting provides the fundamental link between governors and the governed in a democracy and the reasons why fewer and fewer citizens are choosing to take part in this activity in established democracies should be of concern for democratic theorists and policy-makers from all sides of the spectrum: most democratic theorists value relatively widespread public

participation as central to democracy (Dalton 1996; Norris 2002) and while some theorists might not see declining turnout as a problem in itself, the causes of this development should be of concern to them as well; they may signal more fundamental threats to the health and sustainability of democratic societies (Fieldhouse et al. 2007; Hay 2007; Martin 2015).

A multitude of studies have examined the causes of turnout decline in established democracies, but many of the most notable of these have been carried out on the aggregate level, leaving an important gap in our understanding of the individual-level mechanisms by which individuals are voting less in later times (Franklin 2004; Fieldhouse et al. 2007; Steiner 2010; Hooghe & Kern 2016). In other words, we know that citizens appear to be voting less under certain circumstances, but we do not understand why.

That is not to say that we know nothing of the latter: an important body of research in the US and Canada has found that a declining sense of voting being a civic duty is strongly related to turnout decline (Blais et al. 2004; Rubenson et al. 2004; Blais & Rubenson 2013), the same appears to be the case in Finland (Wass 2008) and other studies have found an important educational gap behind turnout decline (Gallego 2009; Dassonneville & Hooghe 2017). These findings are certainly important, but I argue that they miss a fundamental distinction in the academic literature about democratic developments: that between apathy and alienation.

This distinction has been largely ignored in quantitative studies (Albacete 2014; Fox 2015; for exceptions, see Henn et al. 2003) but it has been highlighted as fundamental in many qualitative studies and theoretical writing on the current state of democracy and its prospects: whether citizens have become less interested in politics or are in fact still interested but instead do not identify with their political systems (O'Toole 2004; Marsh et al. 2007; Sloam 2007; Fox 2015). Chou et al. (2017, 17) exemplify this distinction when they write that:

Rather than always talking about apathy, and its corollary civic deficit, we perhaps need to pay equal attention to alienation, and its corollary disenchantment. It is the latter, rather than the former, which will help account both for youth disengagement from formal political arenas and their turn to informal political practices.

This distinction is apt because it usefully characterizes a fundamental – while not all-encompassing – debate within the vast literature on democratic developments in modern times. Political apathy theories arguably constitute the “conventional wisdom” (see e.g., Norris 2002; Deželan 2015) and are often voiced in public debate and media commentary (see Fox 2015): that citizens, and especially young people, have become much more apathetic about politics and are therefore disengaging from democracy. This view has much of its contemporary academic roots in Robert Putnam's (2000)

seminal work on declining social capital and has received support in several studies that find or cite growing apathy at the heart of modern democracy (Pirie & Worcester 1998; Park 2000; Pattie & Johnston 2012; Phelps 2012; Flinders 2012a; Wattenberg 2012; Albacete 2014). Furthermore, authors on both sides of this debate have claimed that these developments are behind turnout decline (e.g., Putnam 2000; Smith 2009, 3–4; Flinders 2012a, 1; Dalton 2016, 13). Therefore, this distinction serves as the major foundation for the hypotheses developed here, about individual-level explanations for turnout decline of this study – these developments are behind turnout decline, Norway's steeper decline of turnout should be accounted for by citizens becoming more apathetic, leading to the first hypothesis of this study:

H1: A rise in political apathy accounts for the steeper decline of turnout in Norway than in Sweden

However, a multitude of academics have in recent times claimed that this is a fundamental misunderstanding, arguing that citizens are interested but alienated from formal politics in one way or another. Many of these alternative theories are situated within the literature on “anti-politics”, which focuses on citizens’ distrust and dislike of politics and politicians (Hay 2007; Flinders 2012b; Corbett 2015) and often explicitly rejects apathy theories, for example when Hay and Stoker (2009, 226) write that “Contemporary political disaffection is not [...] a story of the decline of civic virtue, nor is it a story of political apathy – it is one of disenchantment, even hatred, of politics and politicians.” Other theories are more hopeful: Pippa Norris sees a “Democratic Phoenix” rising from the ashes of traditional democracy, where “critical citizens” still participate actively in democracy but through different processes and institutions than formal politics offer (Norris 1999, 2002, 2011); Russell Dalton sees “cognitively mobilized” citizens posing a “democratic challenge” by participating in more autonomous and diverse ways (Dalton 1984, 1996, 2004b, 2009); and David Marsh and Therese O’Toole (Marsh et al. 2007) argue that young people today conceive of politics in different ways than their political systems accommodate.

Not all of these authors explicitly use the term “alienation” in their work, and this concept has been defined and measures in various ways: it has been construed to have multiple dimensions relating to political efficacy, distrust and deprivation (Finifter 1970; Fox 2015) or simply as the distance that a voter feels from any political party or candidate on offer, whether in terms of issues or likability (Brody & Page 1973; Plane & Gershtenson 2004; Rubenson et al. 2004; Adams et al. 2006; Wuttke 2017). However, the original definition of the term in academia was as an “orientation which implies long-standing feelings of estrangement from some aspect of the individual’s

political environment” (Finifter 1970; Fox 2015, 146), or as “active non-identification” (Citrin et al. 1975; Fox 2015). Here, I use the term in this broader sense that encompasses these various alternative theories of democratic developments, all of which share the thesis that citizens are voting less, *not* because they are less interested in politics, but because they identify less with the formal political system and traditional modes of political participation. From these theories, I derive the second hypothesis of the study:

H2: A rise in political alienation accounts for the steeper decline of turnout in Norway than in Sweden

Aside from this central distinction, the previous findings of the important role of civic duty norms in turnout decline deserve attention. These findings speak to theories of a rise in “post-materialist” values, where citizens are more autonomous and more oriented towards direct democracy (Inglehart 1990; Norris 2002; Inglehart & Welzel 2010), that they are more “cognitively mobilized” and therefore take a more “rational” approach to voting, i.e., only voting if the elections spark their interest (Hooghe & Dejaeghere 2007; Rosanvallon 2008; Amnå & Ekman 2013; Dalton 2013). Since measures of civic duty norms are not available in the data used here (or other longitudinal data in Western Europe that I am aware of) I explore this possibility only indirectly, by asking if the effect of apathy on turnout has grown stronger over time. The logic behind this is that if citizens base their decision less on general ideas of civic obligations and more on their “rational” interest, then a lack of interest in politics should matter more than before for whether they vote or not. Thus, the third hypothesis becomes:

H3: A stronger effect of apathy on turnout over time accounts for the steeper decline of turnout in Norway than in Sweden

Finally, as mentioned at the outset, various individual-level studies in Western Europe have found that turnout decline is primarily driven by younger generations of citizens voting less than older generations across Western Europe (Blais & Rubenson 2013), in European Parliament elections (Bhatti & Hansen 2012), in Germany (Konzelmann et al. 2012), Finland (Wass 2007b), Sweden (Górecki 2013) and Norway (Gallego 2009). To examine the role of these generational dynamics in differential turnout decline in Norway and Sweden, the final hypothesis becomes:

H4: Differences in turnout between different generations of citizens account for the steeper decline of turnout in Norway than in Sweden

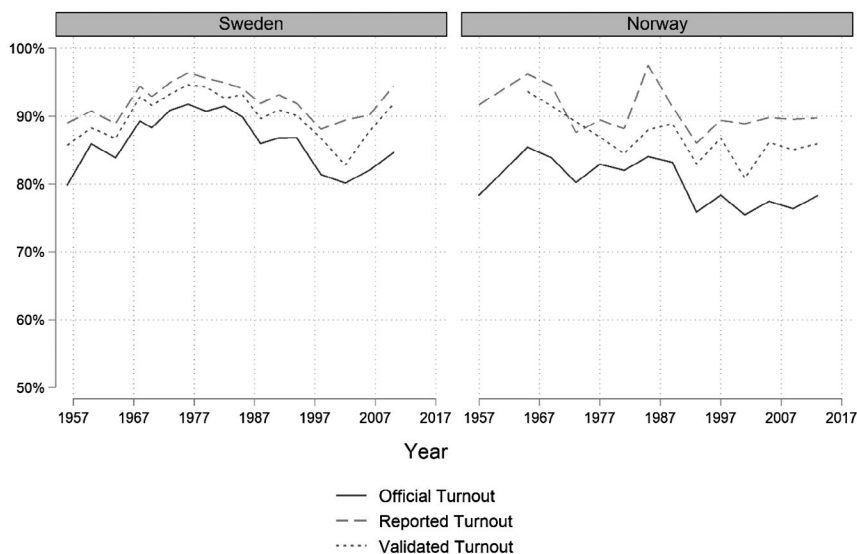
Data and Methods

To test these hypotheses, I combine data from national election studies in Norway and Sweden into a combined dataset of 51,947 respondents surveyed in the aftermath of 31 legislative elections in the period from 1956–2013. The data for Norway comes from the Norwegian Election Study (NSD), a national election study conducted by the Institute for Social Research (ISF) in Norway and Statistics Norway around parliamentary elections there from 1957–2013 (NSD 2017).² The data for Sweden comes from the Swedish National Election Study (SNES) from 1965–2010, today led by Professor Henrik Oscarsson and the Department of Political Science in Gothenburg (Holmberg & Oscarsson 2004; Holmberg et al. 2008, 2010).

In this analysis, the main dependent variable is a binary variable for respondents' validated turnout; that is, information from the electoral register in each country on whether the respondent actually voted or not. This information is for the same citizens who responded to the surveys, but it is a more reliable measure of their turnout than what they themselves report as it is checked against electoral registers. Of course, it is known that turnout in surveys is consistently over-reported and while part of this could be due to false reporting (and therefore not a problem for the validated measure), part of it is also likely to be due to sampling bias (Fullerton et al. 2007; Selb & Munzert 2013). However, in Figure 1, I compare these two measures with official turnout statistics from the IDEA (Pintor et al. 2004) database, showing a high degree of consistency in these different measures in the *trends* in turnout, which is the topic of this study. According to all three measures, voter turnout was stable in Norway from the 1950s until the 1980s when it declined significantly, remaining at similar level since, although this trend has been less stark in the survey measures. In Sweden, turnout rose steadily from the 1950s until the 1970s when it began to decline, until the 2000s, when it began rising again.

Political apathy and alienation are more subjective terms than turnout, describing underlying attitudes that have been measured in different ways, but the most basic and common measure of the former is to simply ask people how interested they are in politics (van Deth & Elff 2000; Ekman & Amnå 2012; Barrett & Brunton-Smith 2014). This measure is available in most of the datasets and in most of them it had four categories (corresponding to “very interested,” “fairly interested,” “little interest” and “no interest”). However, in Norway until 1989 there were only three categories (the “no interest” option was absent) so to ensure consistency between years³ and facilitate analysis, I recode the measure from all surveys into a binary variable, where reporting “little” or “no” political interest indicates apathy (1) but “very” and “fairly” interested indicates interest (0).

Figure 1. Voter Turnout in Norway and Sweden, 1957–2017. Official Turnout Statistics from the IDEA Database, Self-Reported Turnout in the Norwegian Election Study (NSD) and the Swedish National Election Study (SNES) and Validated Turnout from NSD and SNES.



As argued above, alienation is importantly different from apathy and indicates a lack of identification with the political system. Of course, many different measures might be valid for this underlying concept and there is probably no single perfect measure for it, especially not in available overtime data. Because other potential measures of alienation are not available for a long enough period in these datasets, I operationalise it here simply as not identifying with any political party, since parties are one of the most essential components of the traditional, formal political system (Schattschneider 1942). This approach is consistent with many studies that measure alienation as cognitive distance from all political parties (Brody & Page 1973; Plane & Gershtenson 2004; Rubenson et al. 2004; Adams et al. 2006; Wuttke 2017) and with the original definition of alienation as non-identification with the political system (Citrin et al. 1975).

Furthermore, in this analysis I take special note of the argument made in alternative theories that alienation is importantly different from apathy, that citizens are *not* less interested but *instead* alienated. In other words, these are argued to be at least partly mutually exclusive phenomena. To disentangle this in the analysis (and thus also deal with potential collinearity in any raw analysis of interest and party identification), I therefore go further and create two measures of alienation: a) one for respondents who report little or no political interest (are apathetic) and no identification with

any political party, a group preliminarily dubbed “disengaged” here (using the term in a cognitive, as opposed to a behavioural, sense) and b) another for respondents who report some political interest (not apathetic) but no party identification. While both measures can be of interest, it is the latter group which more accurately captures the concept of alienation developed here. Of course, party identification is a particular concept that has dynamics and relationships which we would not always count as “alienation”, but I argue that if citizens have grown to identify less with their political systems (alienation) over time, this development should manifest itself in a long-term trend of declining overall party identification, regardless of short-term, election-specific fluctuations in partisanship.

To test the final hypothesis of generational differences in turnout, and to explore how these might interplay with apathy and alienation, I use age-period-cohort (APC) analysis to disentangle the effects of *birth cohort* – different generations of citizens having been socialized in different social and historical circumstances, from *age* effects – being in different stages of your life-cycle, and *period* effects – being surveyed at a particular point in time (Yang et al. 2004; Persson et al. 2013; Bell & Jones 2014; Grasso 2014). This is notoriously difficult because of the so-called *identification problem*: it is statistically impossible at any given time to *identify* what the effect of cohort membership is when controlling for age and year of survey, because year – cohort = age. It is sometimes possible to work around this when we have data with observations (i.e., respondents) measured at different time points, because respondents born in the same year can be of different ages if they are surveyed at different time points, but the correlation will still often be problematically high in these situations, causing “multi-collinearity” which still makes it difficult and fraught to isolate birth cohort effects from age effects.

Various methods have been proposed and used to deal with this problem in prior studies (e.g., Yang et al. 2004; Luo 2013; Persson et al. 2013) but arguably the most theoretically straightforward approach is to limit this collinearity by splitting respondents into broader categories of birth-year cohorts, based on theory and prior research on historically distinctive formative periods. In this study, I base the categorization of cohorts on one which prior studies have found to be valid and theoretically meaningful when analysing political participation in Western Europe (Grasso 2014; Fox 2015; Grasso et al. 2018). This categorization is based on the years in which respondents experienced a majority of their formative years and yields the following cohorts of citizens:

1. *Pre-WWII generation*: Born before 1926
2. *Post-WWII generation*: Born between 1926–1945
3. *60s and 70s generation*: Born between 1946–1957

4. *80s generation*: Born between 1958–1968
5. *90s generation*: Born between 1969–1981
6. *Millennial generation*: Born after 1981

I use these categories in the descriptive parts of the analysis here but when running regression models the collinearity between cohort, year and age was still too high to disentangle their respective effects (the VIF value for the cohort variable was 11.07) so I collapsed the cohort variable into three categories: 1) Pre/Post-WWII generations, 2) 60s–80s generations and 3) 90s and Millennial generations (reducing the VIF value to an acceptable 4.2). In all of the regression models, I control for respondent's age and age squared as well as respondents' gender and marital status. I do not control for variables such as education, ideology and efficacy because these are likely to be importantly related to the main independent variables and I am primarily concerned with whether turnout decline can be *accounted for* by apathetic or alienated citizens' voting behaviour, leaving the root causes of these developments and the direct causal mechanisms as a topic for future research. In the regression analyses, the data from each survey is weighted inversely according to sample-size and overestimation of official turnout; meaning that each survey weighs as if it has 1.000 respondents and the same overestimation of turnout. In Table 1.6. of the Appendix, I also present an exploration of aggregate correlates of these dynamics, using aggregate administrative data on trade union membership: these do not appear to explain or alter the dynamics discovered here, although it appears to account for a small, separate part of overall turnout decline in Scandinavia.

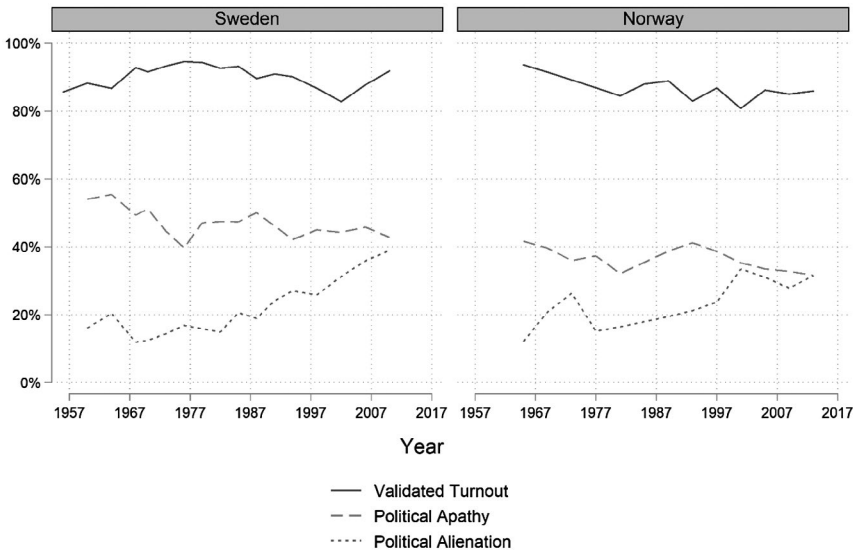
In the next section, I present the analysis of this study, starting with the descriptive trends of turnout, political apathy and alienation by generation (birth cohort) in Norway and Sweden. Because respondents are nested within survey-years, which in turn are nested within each country, I run multi-level logistical regression models with three levels⁴ (this is the preferred statistical method for dealing with data that is clustered in this way (Fairbrother 2013; Schmidt-catran & Fairbrother 2016) but in Appendix I, I also present fixed effects models (in Table 1.1) and models conducted on two levels with cluster-robust standard errors on the country-level (in Table 1.4)) to test each hypothesis in turn: if and to what extent the trends in turnout change when accounting for apathy, alienation, the interaction of apathy with year and birth cohort membership. To answer the particular question of differences in turnout trends between the two countries, I include a dummy variable for country and interact this with the variable for year to model whether turnout decline is significantly different between countries and how this may change in subsequent models. In Table 1.1 of the Appendix, I also present models where I include year as a categorical variable (because turnout has not been in a *linear* trend in either country).

All of these robustness checks confirm the findings presented here. Finally, I introduce the APC models where I test the hypothesis of generational differences in turnout being behind differential turnout decline in Norway and Sweden, and how these might relate to the other dynamics.

Analysis

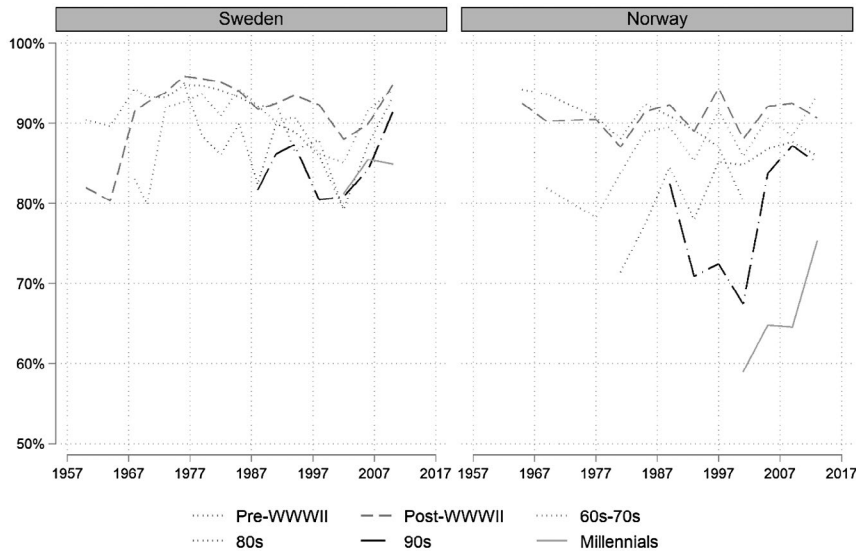
Starting with descriptive trends in the main variables, Figure 2 presents the overall trends in validated voter turnout, political apathy and alienation in Norway and Sweden. This reiterates the differential turnout trends already established and further suggests that, in fact, political apathy has been stable and potentially declining in both countries, while alienation has been rising considerably; especially in Sweden. Figure 3 presents the trends in turnout by birth cohort/ generation, indicating that younger generations are voting much less in Norway than older generations, and the trends in turnout of the latter seem fairly stable. This does not appear to be the case for Sweden, where turnout has been fluctuating largely consistently for different generations. Figure 4 presents the trends in political apathy by generation and Figure 5 presents the same for alienation. These indicate few consistent cohort differences except that in Norway, younger generations are markedly more apathetic than older ones, even if apathy is declining overall.

Figure 2. Validated Turnout, Political Apathy and Alienation in Norway and Sweden, 1956–2013.



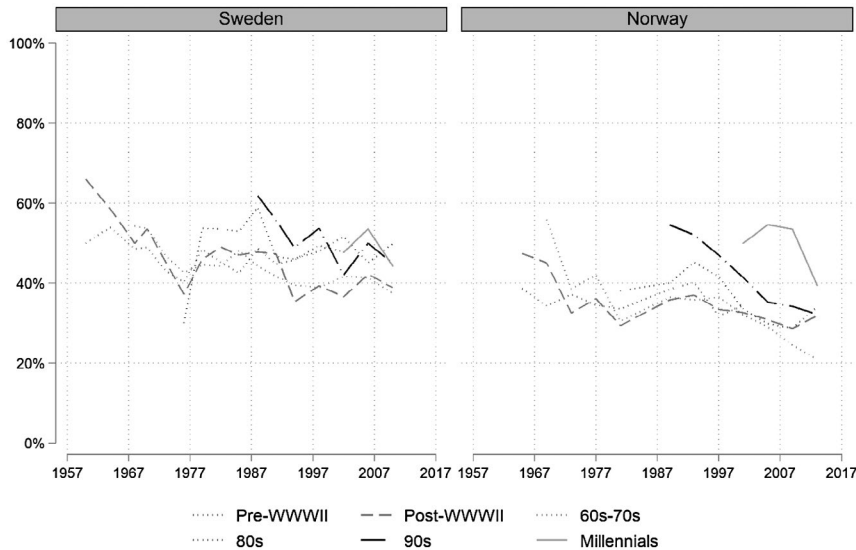
Source: NSD and SNES.

Figure 3. Validated Turnout in Norway and Sweden by Birth Cohorts, 1956–2013.



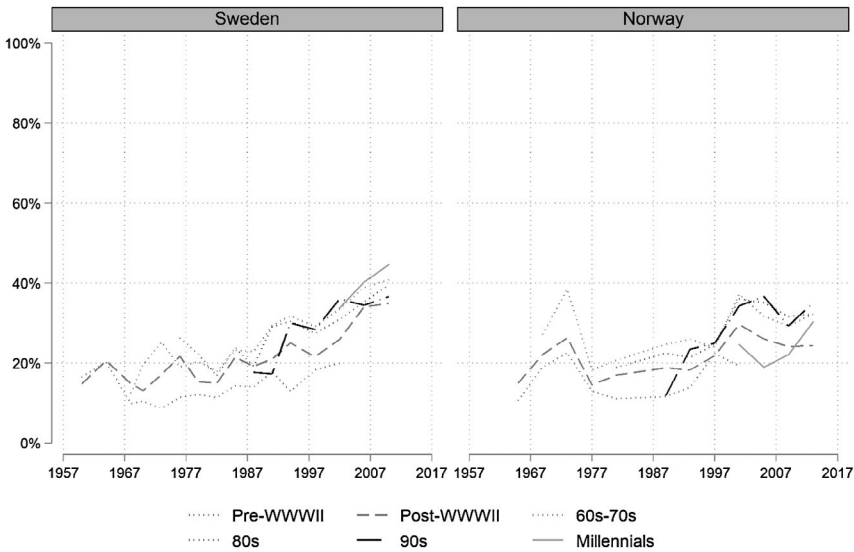
Source: NSD and SNES.

Figure 4. Political Apathy in Norway and Sweden by Birth Cohorts, 1956–2013.



Source: NSD and SNES.

Figure 5. Political Alienation in Norway and Sweden by Birth Cohorts, 1956–2013.



Source: NSD and SNES.

Alienation, however, is rising rapidly across generations in both countries. Regression models of these trends – presented in Tables 1.2 and 1.3 of the Appendix – confirm these impressions: apathy has been declining in both countries but significantly less so in Norway (although it was lower there to start with) and there, younger generations are considerably more apathetic than older ones. Alienation, however, has been rising significantly more in Sweden than in Norway.

Turning to the statistical analysis, Table 1 presents the multi-level logistical regression models with the validated turnout variable from the combined dataset as the dependent variable and tests hypotheses 1-4: the contribution of each potential explanation to the steeper decline of turnout in Norway than in Sweden. Model 1 is the baseline that interacts year with a country dummy for Norway, which is significant and negative; meaning that turnout has declined significantly more in Norway than in Sweden over time.⁵ Adding the variable for political apathy in model 2 indicates that apathy has very little effect on the interaction, rejecting hypothesis 1, and even exaggerates overall turnout decline (which is not too surprising, considering that apathy has been declining over time in both countries). Model 3 adds the dummy variable for “disengaged” citizens - who lack both interest and party identification - and model 4 introduces the more specific alienation variable (of interested citizens without party identification): both of these account for a part of turnout decline in both countries but they do

Table 1. Multilevel Logit Regression Models for Validated Voter Turnout in Norway and Sweden

	(1)	(2)	(3)	(4)	(5)
<i>FPI</i>					
Year	-0.006*** (0.000)	-0.009*** (0.000)	-0.006*** (0.000)	-0.005*** (0.000)	-0.010*** (0.000)
Norway	12.403*** (0.152)	10.700*** (0.772)	8.663*** (0.168)	10.363*** (0.536)	0.459 (0.355)
Norway*Year	-0.007*** (0.000)	-0.006*** (0.000)	-0.004*** (0.000)	-0.005*** (0.000)	-0.000 (0.000)
Apathy		-1.029*** (0.034)			-2.050*** (0.406)
Disengaged			-1.088*** (0.035)	-1.190*** (0.040)	
Alienation				-0.284*** (0.044)	
Apathy*Year					0.001** (0.000)
Norway*Apathy					17376*** (0.351)
Norway*Year*Apathy					-0.009*** (0.000)
Gender	0.072* (0.034)	0.208*** (0.036)	0.164*** (0.036)	0.158*** (0.033)	0.203*** (0.034)
Age	0.017*** (0.001)	0.015*** (0.001)	0.013*** (0.001)	0.012*** (0.001)	0.015*** (0.001)
Age ²	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)
Marital status	0.700*** (0.034)	0.701*** (0.036)	0.708*** (0.038)	0.702*** (0.036)	0.704*** (0.036)
Constant	14.255*** (0.417)	20.130*** (0.284)	13.062*** (0.344)	10.780*** (0.262)	20.613*** (0.427)
<i>RP3</i>					
Level3: Country	0.387 (5.341)	0.962 (24.653)	5.151 (112.517)	0.226 (2.976)	2.919 (101.908)
<i>RP2</i>					
Level2: Country-year	0.084** (0.030)	0.080*** (0.028)	0.076** (0.027)	0.075** (0.027)	0.079** (0.028)
Observations	40717	40717	40717	40717	40717
DIC statistic	26345.015	25421.514	25427.191	25390.718	25413.958

Standard errors in parentheses.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.
Source: NSD and SNES.

not explain Norway's larger turnout decline, rejecting hypothesis 2. Figure 6 illustrates this by plotting the predicted probabilities of voting over time in both countries from models 1, 3 and 4: the probabilities of voting with and without controlling for each alienation variable in turn, holding control variables constant.

Model 5 tests hypothesis 3 by introducing the interactions of apathy with year and the country dummy, to see if the negative effect of apathy on turnout has become stronger over time and if this is different between countries. These indicate that this has not occurred in Sweden (the former interaction is positive but very small) but that this has indeed been the case in Norway: the three-way interaction is negative, significant and fairly substantial. Moreover, the interaction of country with year becomes insignificant in this model, indicating that this strengthening of the apathy effect in Norway appears to account for its steeper turnout decline, supporting hypothesis 3. Figure 7 illustrates this again by plotting the predicted probabilities of voting by year and the political apathy variable in both countries, showing that turnout decline is rather strikingly most pronounced for apathetic citizens in Norway: the prediction for interested citizens was 94.7% in 1965 and 91.0% in 2013 but for apathetic citizens it was 88.0% in 1965 and 76.5% in 2013 (an 11.5 percentage point difference). In Sweden, the predictions were 92.4% in 1960 and 87.0% in 2010 for apathetic citizens (a 5.4 point difference), indicating a 6 percentage point difference in differences.

Figure 6. Predicted Probabilities of Voting Over Time in Norway and Sweden. Predictions from Multi-Level Regression Models, with and without Controlling for Alienation Variables.

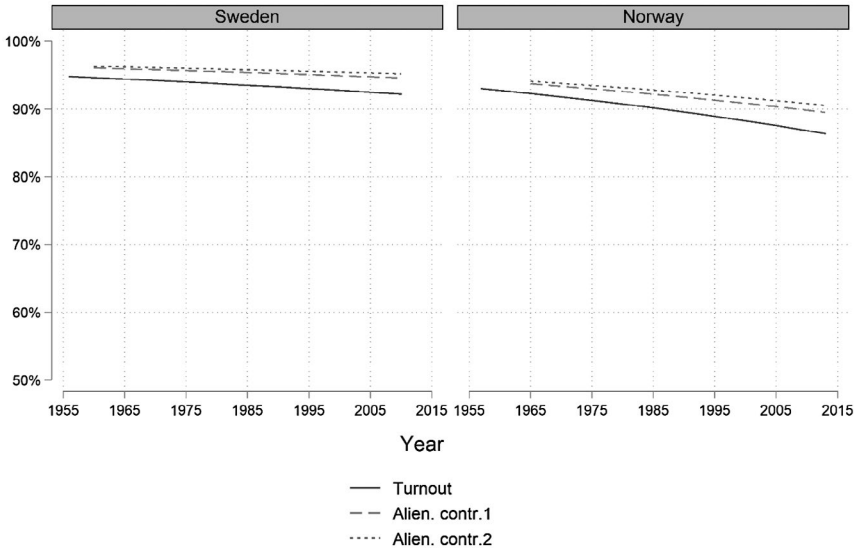
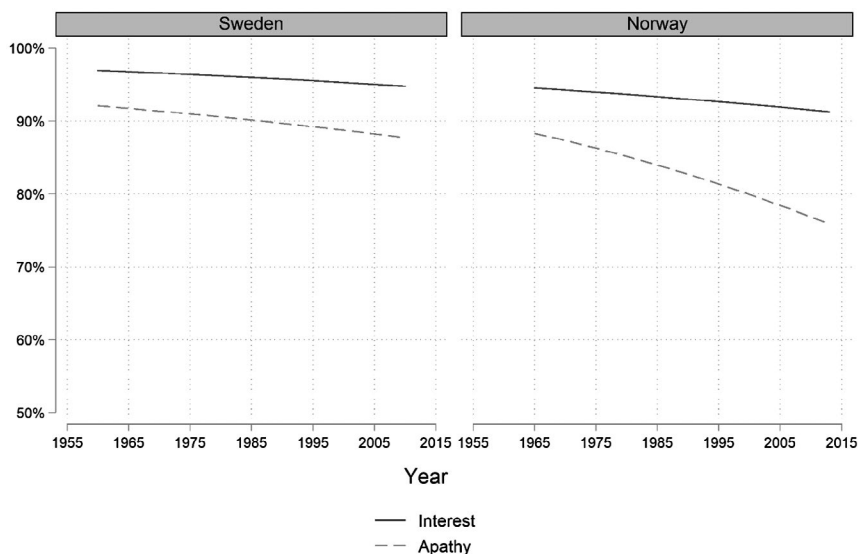


Figure 7. Predicted Probabilities of Voting Over Time in Norway and Sweden by Level of Political Interest/Apathy. Predictions from Multi-Level Regression Models Including Apathy and its Interaction with Year.



Turning to hypothesis 4, the APC analyses in Table 2 looks at the role of birth cohort membership and then adds the apathy and alienation variable to the models in turn. Model 1 shows a strong support for hypothesis 4: controlling for life-cycle effects, younger generations of citizens appear to be voting significantly less in Norway than in Sweden relative to older generations, and this appears to account for Norway's larger turnout decline. In fact, controlling for cohort effects makes the interaction of Norway and year positive, indicating that at least relative to Sweden, there is a positive period effect on turnout in Norway which partly counteracts the overall trend of turnout decline there; this makes sense when noting that turnout has not declined uniformly in the latter part of the period here, and the reasons for this are an interesting topic for future research.

Adding the alienation variables in model 2 has little effect on these dynamics but again accounts for some of Sweden's more fluctuating turnout decline, indicating that this effect is largely separate from generational effects. The same applies for the overall strengthening apathy effect but in model 4, I include a four-way interaction between cohort, apathy, year and country, to explore if the strengthening apathy effect is stronger among younger generations in Norway than in Sweden. The number of coefficients in such a model is cumbersome so the full model is only presented in the Appendix (Table 1.5) but model 4 illustrates that this is indeed the case: the

Table 2. APC Models of Turnout in Norway and Sweden by Birth Cohort, Apathy and Alienation

	(1)	(2)	(3)	(4)
<i>FPI</i>				
Year	-0.009*** (0.000)	-0.007*** (0.000)	-0.007*** (0.000)	-0.008*** (0.000)
Norway	-5.525*** (0.600)	-8.480*** (0.205)	-17.192*** (0.323)	-9.275*** (0.341)
Norway*Year	0.003*** (0.000)	0.004*** (0.000)	0.008*** (0.000)	0.004*** (0.000)
60s/80s	-0.041 (0.073)	-0.045 (0.067)	-0.046 (0.068)	29.572*** (0.489)
90s & Millennials	0.224* (0.112)	0.217* (0.099)	0.208+ (0.114)	117.335*** (0.862)
Norway*60s/80s	-0.243*** (0.086)	-0.231*** (0.084)	-0.252*** (0.083)	-28.736*** (0.715)
Norway*90s & Millennials	-0.694*** (0.109)	-0.702*** (0.116)	-0.683*** (0.116)	-110.581*** (0.629)
Disengaged		-1.191*** (0.039)	-0.635*** (0.047)	
Alienation		-0.281*** (0.043)	-0.672*** (0.051)	
Apathy			-1.828*** (0.210)	-4.431*** (0.466)
Apathy*Year			0.000*** (0.000)	0.002*** (0.000)
Norway*Apathy			14.808*** (0.439)	
Norway*Year*Apathy			-0.007*** (0.000)	
60s/80s*Apathy*Year*Norway				
90s/Millen*Apathy*Year*Norway				
Age	0.013*** (0.002)	0.008*** (0.001)	0.008*** (0.001)	-0.017*** (0.000)
Age^2	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.084*** (0.000)
Marital status	0.694*** (0.037)	0.697*** (0.037)	0.695*** (0.036)	0.010*** (0.002)
Constant	18.856*** (0.232)	15.236*** (0.249)	16.674*** (0.336)	-0.000*** (0.000)
4-way interactions				0.701*** (0.036)
<i>RP3</i>				18.368*** (0.292)
Level3: Country	0.138 (2.354)	0.395 (15.204)	1.428 (18.062)	✓
<i>RP2</i>				
Level2: Country-year	0.086** (0.030)	0.076** (0.027)	0.075** (0.027)	0.299 (3.713)
Observations	40717	40717	40717	0.089*** (0.031)
DIC statistic	26307.998	25353.553	25043.454	40717
				25356.229

Standard errors in parentheses.
+*p* < 0.10, **p* < 0.05, ***p* < 0.01, ****p* < 0.001.

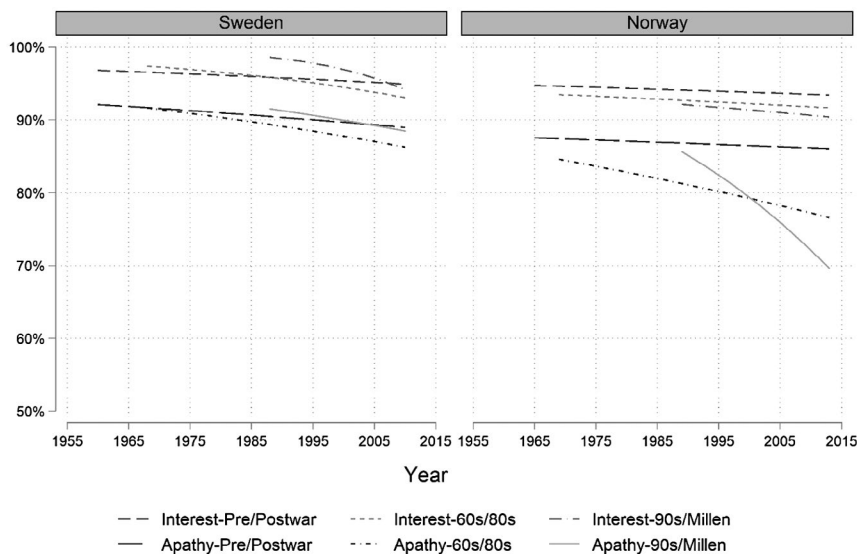
negative effect of apathy on turnout has strengthened significantly more for younger generations in Norway. Finally, Figure 8 illustrates these by plotting voting probabilities by cohort and apathy in each country, showing that the younger generations in Norway clearly stand out in this regard.

Discussion

The analysis presented here indicates that there are no simple, single solutions to the puzzles of turnout decline, at least not in Scandinavia. While turnout has been declining significantly more in Norway than in its neighbouring Sweden, political apathy has been more widespread in Sweden than in Norway and political alienation has likewise been rising more dramatically there. In both countries, apathy has been declining while alienation has been rising and the latter accounts for part of turnout decline in both countries, but neither can explain why it has been declining more in Norway, rejecting hypotheses 1 and 2. On the other hand, the negative effect of apathy on turnout has become much stronger in Norway but not in Sweden and this appears to explain why turnout has been declining more in Norway, supporting hypothesis 3.

The generational differences in turnout discovered in prior studies are confirmed for Norway here, but not in Sweden; the youngest generations even seem to be voting a bit more there. These generational differences in Norway also appear to account for the steeper decline of turnout there,

Figure 8. Predicted Turnout by Apathy and Birth Cohort in Norway and Sweden.



supporting hypothesis 4. Therefore, both a strengthening apathy effect and a generational effect appears to separately account for differential turnout decline in Norway and Sweden, suggesting that in their absence, turnout might have declined even less in Norway than in Sweden. Although separate, these dynamics are also interestingly related: the youngest generations are more apathetic in Norway and the strengthening of the negative apathy effect is also stronger there.

This tells us that while very similar in many respects, these two Scandinavian countries are each experiencing their own kind of democratic developments. Turnout has been fluctuating in Sweden but there is a slight trend of overall decline there and this seems to be because citizens of all generations identify less with political parties there and these citizens are less likely to vote. In Norway, turnout has declined more clearly even if both apathy and alienation are less widespread there, because younger citizens are voting less there and because citizens who are apathetic today are much less likely to vote than apathetic citizens in the past, and much less likely than in Sweden.

These findings raise the question of why apathetic citizens are voting less today than they did before and why this trend is so much more pronounced in Norway than in Sweden. A potential explanation lies in the status of labour unions and the strength of class identification: while still comparatively strong, the strength of labour union movements and their relationship to government seems to have weakened in Scandinavia in recent decades and there are indications that the influence of labour unions has weakened more in Norway than in Sweden (Gray & Caul 2000; Allern et al. 2007). Since class identification and union mobilization efforts are well known to increase the propensity to vote (Ibid.), this may explain why apathetic citizens are now voting less in these countries: they do not have the same alternative motivation to vote that was provided by the labour unions to a greater extent in earlier years. In Table 1.6 of the Appendix, I provided some exploration of this possibility using aggregate administrative data for the extent of trade union membership in each country-year and these do not appear to alter the dynamics discovered here, but a further examination into this (especially on the individual level) would be in order, as well as into the role of other related factors such as education and civic duty norms.

However, the findings of this study considerably advance our understanding of turnout dynamics and differential turnout decline in Norway and Sweden, and the generational nature of these dynamics suggest that we may expect them to sharpen in coming decades. Rising political alienation in both countries suggests that the political (party) system is not appealing enough to interested citizens there, which may imply a need for reforming the party system and perhaps the democratic system itself to provide other avenues for participation (Dalton 2004a; Smith 2009), depending on our

normative standpoints. At the same time, the stronger effect of apathy on turnout in Norway implies that citizens have less of a motivation to vote today than before if they do not find politics interesting, which may call for more extensive mobilization efforts by political organizations and/or greater appeals to notions of civic duty e.g., through civic education or compulsory voting (Wattenberg 2012; Pontes et al. 2017). Alternatively, it may simply suggest that citizens are becoming more “rational” in their approach to voting (Rosanvallon 2008; Dalton 2013).

These findings move the academic debate further by showing that citizens are indeed becoming less apathetic but more alienated in these countries, as claimed in many academic writings but thus far largely untested with longitudinal data (Marsh et al. 2007; Hay & Stoker 2009; Chou et al. 2017). At the same time, they provide indirect support for the role of civic duty norms and focus the research agenda of turnout decline towards examining in more detail why apathetic citizens are so much less likely to vote today than in the past. In doing so, the findings of this study move us one step close to understanding differential turnout decline in Norway and Sweden, as well as turnout decline in established democracies more broadly, even as there are many further steps that should be taken in future research.

In that regard, this study is obviously limited to these two countries and to the broad measures of apathy and alienation used here: future studies would do well to analyse these dynamics in other countries, using more varied measures of apathy and alienation and investigating the drivers of the developments discovered here. In particular, the measure of alienation used here (being interested in politics but not identifying with any political party) is a fairly superficial one (partly due to data availability) and because this concept has been understood, defined and measured in various ways in prior studies, it is important to keep that debate alive and to see if these results hold using alternative measures. Furthermore, it is still difficult to parse out any causal mechanisms with the limited range of measures available over time: the measures of apathy and alienation adopted here could of course be importantly related to other factors and there is no necessary causal relationship, in the sense that perhaps exogenous factors are causing citizens both to be more alienated and to vote less. This is not contrary to the theory and hypotheses developed here, however, on the contrary it is part of the argument of all apathy and alienation theories that these attitudes are caused by other developments.

Further examining these causal mechanisms is an important topic for future research but a robust empirical understanding of the developments in apathy and alienation and their role in turnout decline is a fundamental prerequisite for that enquiry, and this is provided here. It is a substantively important finding that citizens in Norway and Sweden are becoming more interested in politics but that in both countries, these politically interested

citizens are identifying much less with political parties than before and that a considerable part of their turnout decline is due to these citizens being less likely to vote. At the same time, the finding that citizens who are not interested in politics are much less likely to vote today than before in Norway and that this accounts for the larger turnout decline there, is an important step towards understanding differential turnout decline in Norway and Sweden, and towards understanding the broader puzzle of turnout decline in the Western world.

NOTES

1. While a study of the other three countries would certainly be worthwhile, they do not have NES data available that captures any trend of turnout decline there in the period.
2. For Norway, the data applied in the analysis in this publication are based on "Election Survey, 1957–2013." The data are provided by Statistics Norway and Institute for Social Research, and prepared and made available by NSD – Norwegian Centre for Research Data. Neither Statistics Norway, Institute for Social Research nor NSD are responsible for the analyses/interpretation of the data presented here.
3. While we can never be entirely sure of such consistency, the difference here is a rather straightforward case of an added category below the bottom category of earlier versions. Exploration of correlations with other variables do not indicate substantive differences between the measures of apathy before and after 1989.
4. I run these models in the MLwiN software through Stata, using the runmlwin user-created command (Rasbash et al. 2009; Leckie & Charlton 2013), using the Markov Chain Monte Carlo (MCMC) method, where IGLS MQL1 estimates from a previous model are used as initial values.
5. Note that all of the regression are only run on observations for which the apathy and alienation variables are non-missing. In Table 1.5 of the Appendix, I present the overall trend models for turnout, apathy and alienation and plot these together with the descriptive trends to illustrate the fit of these models.

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Supporting Information

Additional supporting information may be found in the online version of this article at the publisher's web site:

Table 1.1. Regression models separated by country and political apathy, using year as a categorical predictor variable (dummy for each year in each country)

Table 1.2. Regression models for trends in turnout, apathy and alienation – without controls

Table 1.3. Regression models for trends in turnout, apathy and alienation – with controls

Table 1.4. Multi-level regression model on 3 levels from MIWin (using the `runmlwin` command in Stata) compared with a multi-level regression model on 2 levels from Stata (using the `melogit` command), with cluster-robust standard errors for the country level

Table 1.5. APC regression models for trends in turnout, apathy and alienation and a 4-way interaction of apathy, year, country and cohort on turnout

Table 1.6. Regression models adding aggregate administrative data for trade union membership to explanations of turnout decline

Table 1.7. Regression models from table 1 without the variable for age²

Table 1.8. Diagnostics from the final model of the analysis (no. 4 in table 2)

Table 1.9. Full cohort model (no. 4 from table 2) with the entire dataset in model 1, dropping data from Sweden in 1960 and 1964 in model 2 and further dropping data from Sweden in 2010 in model 3.