Article

Are volatile voters erratic, whimsical or seriously picky? A panel study of 58 waves into the nature of electoral volatility (The Netherlands 2006–2010)

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Abstract

Electorates appear to be adrift. Across Western Europe electoral volatility is increasing. But are volatile voters whimsical? Do they behave randomly, like drift sand, or are they emancipated, not committed to a single political party but loyal to their own preferences? To answer these questions this study focuses on the Dutch electorate, which has become the most volatile in Western Europe. We analyse the extensive 1Vandaag Opinion Panel (1VOP) dataset, which covers 55,847 adult respondents who participated in at least 2 of the 58 waves between November 2006 and June 2010. 1VOP allows us to break down electoral volatility by type, direction (intra-bloc versus inter-bloc) and time span. We conclude that volatility reflects voter emancipation rather than disengagement. Although more than half of the respondents (55 percent) change party preference at least once, they mostly stick to one of two ideologically coherent party blocs. Especially middle groups are volatile: people with modal income, with average levels of education and who position themselves in the political centre. However, the lower educated are more likely to switch between dissimilar parties. Our findings question the socialization model: although older voters are relatively loyal when they cast their ballots, they are the most volatile in the years in between.

In the end, the only feature of the Dutch electorate that is safely predictable is that it will remain unpredictable. The only enduring feature is the instability.

Peter Mair, 2008

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1. Introduction: Voters adrift?

Electoral volatility is increasing in most western democracies (Drummond, 2006). The net change in election results

has grown since the 1960s and again since the 1990s across Western Europe, except in small countries like Malta and Luxembourg (Mair, 2008). More and more voters shift from one party to another. What does the increase in electoral volatility mean? Is democracy strengthened or undermined by volatile voters?

On the one hand, electoral volatility is often treated as an ominous phenomenon. It would lead to ineffective government, populism and unstable democracy as politicians continuously need to adapt to the whims of their constituency. In the pessimistic perspective, volatile voters are characterized as increasingly 'whimsical' (Walgrave et al., 2010), 'fashionable' (Andeweg, 1982) or as 'drift sand'; in other words, as voters who do not choose in an informed way but through passions of the heart or short-term media images. On the other hand, electoral volatility also has a positive connotation, especially compared to the dystopian image of a society without any changes in vote intentions. Democratic accountability is only possible if voters critically evaluate their representatives and are willing to consider different options. The positive perspective on volatility thus implies an emancipated electorate consisting of sophisticated voters (Dalton, 1984): 'more and more voters have the necessary political skills to make political choices without relying on traditional loyalties' (Lachat, 2005).

In order to evaluate which of these two perspectives captures the nature of electoral volatility, we need to know what switching behaviour and which voters are most likely to be volatile. Do voters switch between parties that are ideologically very distinct or very similar? And who are these switchers? Does electoral volatility reflect emotional, uninformed and capricious voters' disinterest and lack of commitment or does it reflect informed, emancipated and critical voters' skilful adaptation to changing circumstances?

Although electoral volatility is a core concern of political scientists – 'for theoretically every voter ought to be a potential changer' (Daudt, 1961) – individual level studies of electoral volatility are scarce (Kuhn, 2009). The major reason is the lack of panel data available to study electoral volatility at the individual level (Bartolini and Mair, 1990; Roberts and Wibbels, 1999). Cross-national and longitudinal studies on net (aggregate) volatility at elections have provided structural and institutional explanations such as the electoral system and economic development rates (cf. Bartolini and Mair, 1990; Birch, 2003; Drummond, 2006; Tavits, 2005; Roberts and Wibbels, 1999). Yet, such aggregate analyses cannot be used to study the individual sources of volatility such as education, income and associational involvement. Moreover, aggregate shifts in parties' vote-shares underestimate all the individual changes that take place within the electorate: opposite changes cancel each other out in aggregate studies.

The scarce individual level panel studies on electoral volatility, although highly informative, were limited by methodological problems (e.g. Blais, 2004; Granberg & Holmberg, 1991; Lachat, 2007; Söderlund, 2008; Walgrave et al., 2010). First, because most studies had very few points of measurement, voters who make a single (informed) change in preference could hardly be pulled apart from voters who change party preference repeatedly. Second, these studies were limited to a comparison of actual votes at subsequent elections or at best vote intentions during the month(s) before an election, instead of changes that take place during the whole governmental period. Third, several studies had to assess past behaviour through retrospective questions, despite all the substantial biases towards consistency (see Beasley and Joslyn, 2001). Fourth, any distinction between voters who changed between ideologically similar parties ('intra-bloc volatility') and those who changed between ideologically dissimilar parties ('inter-bloc volatility') was based on one-dimensional systems, even when the party system under study was ultimately multidimensional.

To further the debate on electoral volatility, we require an extensive panel study with a large number of waves that span the full electoral cycle – including the years in which there were no parliamentary elections – for a large set of parties. Such panel data allow us to distinguish between single, informed changes and capriciousness. We therefore employ an extensive panel, the Dutch 1Vandaag Opinion Panel (1VOP), which covers 55,847 adult respondents who participated in at least 2 of the 58 panel waves between November 2006 and June 2010. This enables us to analyse the individual level sources of electoral volatility. Our focus on the Dutch case allows a detailed assessment of these sources of volatility. In a multiparty system voters have the highest potential to change vote intention, because both the high number of parties (Lachat, 2007) and the relatively small size of these ideological spaces (Roberts and Wibbels, 1999) stimulate volatility.

On the basis of our data we will be able to provide an evaluation of the nature of the volatility using information about the timing, extent, direction and explanation of volatility. If volatile voters tend to change repeatedly between multiple parties, if most switchers move fairly randomly between ideologically distinct parties, and if the switchers themselves have low levels of political sophistication, we would conclude that volatile voters are indeed whimsical, and behave like drift sand. If, on the other hand, volatile voters tend to stay with the same party before they change, if they switch between a small number of ideologically similar parties, and if the switchers have high levels of political sophistication, we would conclude that volatility is mainly the result of voters making an informed choice. Besides political sophistication we take rivalling explanations of volatility into account: socialization, embeddedness, socio-economic profile and media use. These relate to the general distinction between informed, emancipated vs. uninformed, capricious voters to a varying degree.
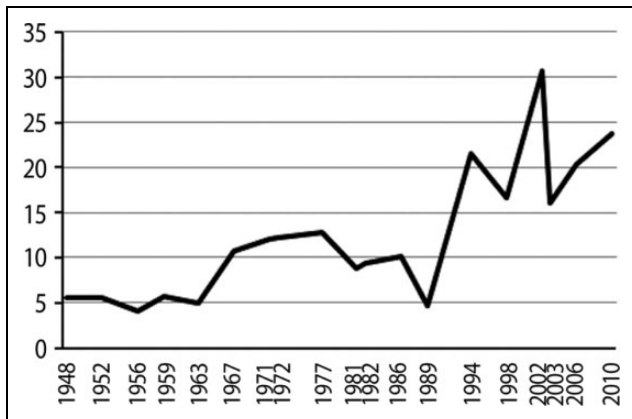
Figure 1. Net volatility: aggregate shifts in vote-shares (in percentages)

We set out to answer the following research questions:

1. What is the ratio of intra- and inter-bloc volatility among Dutch voters?
2. To what extent can both types of volatility be explained by (a) socialization, (b) (political) sophistication, (c) embeddedness in family, associational and church life, (d) socio-economic profile, and (e) media use?
3. To what extent do these explanations differ with the *timing* and the *direction* of electoral volatility?

2. Volatility in The Netherlands

The Netherlands exemplifies the trend of increasing electoral volatility: once a typical example of a pillarized society (Lijphart, 1968) with frozen cleavages (Lipset and Rokkan, 1967) and stable voters (Andeweg, 1982), the country now harbours a highly volatile electorate (Mair, 2008). Four of the last five Dutch parliamentary elections (of the Lower House) belong among the most volatile elections in Western Europe since 1950. In response, one Dutch elder statesman, Wim Deetman (CDA), referred to Dutch citizens as 'emotional, irrational or intuitive' (Sommer, 2011), while another, Hans van Mierlo (D66), argued that voters merely 'jump on any train that comes by and looks kinda nice' (Van Weezel and Broer, 2009).

Figure 1 describes the net volatility as the share of votes that all winning parties gained compared to the previous election (Mair, 2008). Until the late 1960s, Dutch elections were highly predictable – more so than the Western European average. Voters had been socially segregated into vertical pillars, each consisting of its own schools, associations, unions and media and each headed by its own political parties. Because party leaders and their pillarized electorates were closely connected, electoral competition remained very small: on average, the election outcomes changed merely by 5 percent. Electoral volatility increased with depillarization in the late 1960s. Between 1967 and

1986 the average electoral change was about twice as high as in the previous decades (Andeweg, 1982), resembling the general Western pattern after 1970 (Drummond, 2006). Yet, this increase was only a precursor to much larger changes in the 1990s and 2000s. In 1994, political commentators spoke of a political earthquake, in 2002 of a political revolt. Since the peak of 30 percent in 2002, volatility declined a bit, although it remained at a historically and comparatively very high level.

Institutional explanations cannot account for this increase: the highly proportional electoral system (which provides fertile ground for high levels of volatility) has hardly changed.

3. Explanations of electoral volatility

Various theoretical models explain why some groups of voters are more volatile than others. The *socialization model* emphasizes habitual voting and learning. It takes time for voters to learn how the party system works and to acquire their own party preferences. With age, voters are socialized in the party system: they gain experience in forming political judgements (Walgrave et al., 2010), develop more stable political attitudes (Campbell et al., 1960; Dalton, 2000), and become less responsive to new cues (Walgrave et al., 2010). Indeed, younger voters are found to be more likely to change their party preference from election to election than older voters (e.g. Kuhn, 2009; Schmitt-Beck et al., 2006; Söderlund, 2008).

Our first hypothesis reads:

> **Hypothesis 1:** Young voters are more likely to be volatile than old voters.

The *cognitive sophistication model* (Albright, 2009; Kuhn, 2009; Lachat, 2007) builds on the idea that citizens increasingly 'possess the level of political skills and resources necessary to become self-sufficient in politics' (Dalton, 1988). Cognitive sophistication entails political interest, knowledge and skills that voters can use to become politically active.

In line with the negative image of electoral volatility, one would expect that whimsical voters are insufficiently capable of and interested in dealing with politics. Unsophisticated citizens would be much more likely to yield to new events or information (Lazarsfeld et al., 1948). However, we do not expect the relationship between cognitive sophistication and volatility to be linear (Albright, 2009).[1] Lachat (2007) argues that a crucial precondition of changes in vote intentions is the probability of *receiving* political cues and the probability of *yielding* to them. Although they might be more likely to adapt their non-attitudes in response to new political cues, politically unsophisticated voters are less likely to receive and understand these political cues. Therefore, they would be less likely to change their opinion. By contrast, politically highly sophisticated voters are more

likely to receive such political cues, but they are also capable of critically judging new political information. Consequently, they are less likely to change their established opinions when being exposed to new information. Hence, in general, the most volatile voters should not be the unsophisticated nor the highly sophisticated voters, but the middle group (Lachat, 2007; Kuhn, 2009).

The supposed balance between receiving cues and yielding to them invokes more specific hypotheses regarding the direction of changes. Moderately sophisticated citizens will be most likely to change between ideological similar parties, that is intra-bloc (Lachat, 2007; Walgrave et al., 2010). By contrast, lacking information about the ideological structure of the party system, the least sophisticated citizens will be more likely to change vote intention more randomly, i.e. between ideologically highly dissimilar parties.

The second set of hypotheses reads:

> **Hypothesis 2a:** There is a non-linear relationship between voters' level of cognitive sophistication and intra-bloc volatility: Volatility first increases then decreases with rising levels of cognitive sophistication.
> **Hypothesis 2b:** There is a negative relationship between voters' level of cognitive sophistication and inter-bloc volatility.

The third explanatory model focuses on voters' *embeddedness* in social networks such as family, church and associational life. Dutch voters have had stable party preferences for decades, because society as a whole had been highly pillarized (Andeweg, 1982; Lijphart, 1968): the integration of religious and associational life with politics made party choice self-evident and volatility marginal. Surprisingly enough, the claim that embeddedness in church and associations puts a lid on electoral volatility has not been tested before, even though it is consistently mentioned in analyses of pillarization.

We reach the same expectation through the mechanism of selection and subsequent socialization in these social networks (Hooghe, 2003). Many families, associations and churches are fairly homogeneous groups in terms of social norms and attitudes. Citizens select their partner, association and/or church to a large extent because they appeal to their own norms, interests and preferences. Subsequently, citizens are further socialized in these rather homogeneous environments where they find confirmation for their (party) preferences. Hence, stable family life, associational bonds or church memberships would form a barrier against electoral volatility.[2]

Our third hypothesis is therefore:

> **Hypothesis 3:** Voters who are socially more isolated (i.e. who have fewer social ties with family members, within associations or in church) are more likely to be volatile.

The fourth model emphasizes the *socio-economic profile* of voters. Modernization theory argues that not the poor but the middle income groups are most likely to be volatile (Lachat (2007), Zelle (1995), but see Walgrave et al., (2010)). Volatility would reflect vulnerability and frustration. Each is a strong impetus to change one's vote intention (Adriaansen (2011), Zelle (1995), but see Söderlund (2008), who finds no effect of disaffection). The more voters have a median income, the more they will lack evident class-based political identities. To the extent that class identities provide a meaningful cue to decide which party to vote for, voters with median incomes would be most volatile because they lack this cue and are more ambivalent towards the political alternatives.[3]

Hence, we argue:

> **Hypothesis 4:** There is a non-linear relationship between voters' level of income and volatility: volatility first increases then decreases with rising income levels.

Our final model revolves around *media use*. Media have a common scapegoat for ills of society. They are indeed prime candidates to stimulate electoral volatility (Latimer, 1987). Supposedly, media generally prime voters' attention primarily to short-term concerns, and thereby undermine the stability of the political agenda. The strong focus on persons, electoral horse races and scandals (Ansolabehere et al., 1991) supposedly induces volatility (Kleinnijenhuis and De Ridder, 1998). Low educated, politically disinterested citizens should be most susceptible to (changing) media images, and thus most likely to experience strong media effects on their level of volatility.

A more refined approach argues that not media-use *per se*, but rather the type of media and the content in those media affect electoral volatility (De Vreese and Semetko, 2004). When media broadcasts stimulate political knowledge about the major political issues, we may find moderate levels of volatility, in line with the cognitive sophistication model (cf. De Vreese and Boomgaarden, 2006). By contrast, when media describe the political process as a continuing battle, filled with (personal) scandals and incidents, electoral volatility will be stimulated. Volatility may therefore be lower among people who are exposed to 'highbrow' news media than among those who read tabloids.

Hence, our final set of hypotheses reads as follows:

> **Hypothesis 5a.** Voters who read newspapers are more likely to be volatile than voters who do not.
> **Hypothesis 5b.** Voters who read tabloids are more likely to be volatile than voters who read 'highbrow' newspapers.

4. Data
4.1. The 1Vandaag Opinion Panel

We base our empirical analysis on the data from the extensive 1Vandaag Opinion Panel (1VOP), collected by the

national television programme EenVandaag. The dataset covers 58 interview waves conducted between 19 September 2006 (two months before the 2006 parliamentary elections) and 21 June 2010 (12 days after the 2010 parliamentary elections). As such, the 1VOP covers panel data on vote intentions over a whole electoral cycle. Each wave posed a question on the intended voting behaviour – 'If Lower House elections were held today, which party would you vote for?' – followed by the full list of previously elected parties (and, later, new party TON). Although changing vote intentions cannot simply be equated conceptually with changing votes at the ballot box, they are evidently strongly related empirically.[4] Moreover, our theoretical models do not distinguish between changing vote intentions and changing votes. Finally, we find the same effects regardless which of the two measures we take as our dependent variable, with one relevant exception (see below and Appendix C).

We restricted the sample to respondents participating in at least two waves (to assess changes) and to respondents eligible to cast a vote,[5] 55,874 respondents in total. The frequency with which these respondents participated is quite high: half of them participated in at least 15 waves.[6]

4.2. Self-selection bias

The 1VOP is put together on the basis of self-selection: respondents could sign up for the opinion panel and were subsequently invited for each web survey by e-mail.[7] Neither the panel nor the samples per interview wave are thus randomly selected. Consequently, aggregate party preferences are not representative of the Dutch population. Nevertheless, given the large number of waves, the long time span, and the large sample size, 1VOP is the best dataset available for the purposes of this article.

Moreover, we should not exaggerate the self-selection problem. First, for the purposes of this study the self-selection bias is hardly problematic. Although respondents may be more volatile than the Dutch population as a whole (due to priming effects of being in a panel) or less volatile (due to the stabilizing effect of repeated questions), there are no a priori reasons for expecting that the *explanations* of electoral volatility might be biased in the 1VOP dataset.

Second, comparison of the 1VOP data with actual election outcomes shows similarities after weighting. The net volatility rate of the 2010 parliamentary elections was 23.7 percent, whereas net volatility according to the reported voting behaviour in these elections by the 1VOP respondents differed only slightly (22.2 percent). If we match the election outcomes of 2010 to those reported in 1VOP, there is hardly a difference once we weight respondents according to their votes at the 2006 elections: both the outcomes and the *changes* in election outcomes correlate strongly (*r*>0.98) with those in the 1VOP dataset.

Third, over-representation and under-representation in the sample would be problematic for multivariate analyses if certain types of respondents were (nearly) absent. Thanks to an exceptionally large sample size, however, we can safely assume that it covers all relevant categories of voters, even if some categories are under-represented. Moreover, analyses of interaction effects between various independent variables suggests that the main explanations are stable across subgroups.[8] There may be a more hidden bias in favour of citizens who are interested in societal topics and willing to express their opinions. Nevertheless, 1VOP often deals with topics that are not particularly about (party) politics itself.[9]

4.3. Dependent variable: Volatility

Changes in vote intention. Previous studies on volatility assessed changes in the actual vote during subsequent elections, and/or volatility in vote intentions during the campaign period (Blais, 2004; Granberg and Holmberg, 1991; Lachat, 2007; Söderlund, 2008; Walgrave et al., 2010; see Kuhn (2009) for an exception). Yet, opinion polls show that volatility outside the campaign and election periods is at least as large. To assess electoral volatility, we therefore assess respondents' (self-reported) voting behaviour at the elections of 2006 and 2010 and their vote intentions in the waves between these elections.[10]

Vote intention was measured with the question: 'If Lower House elections were held today, which party would you vote for?' The response categories cover all relevant parties at that time[11] (next to non-substantial categories to catch residual parties, non-voting, blank voting and the common missing value categories). On the basis of this repeated item we created variables that summarize electoral volatility over the whole period. First, we determined for each wave whether or not respondents changed their vote intention compared to the last wave they participated in. Only shifts between political parties are counted as volatility; shifts to and from non-substantial answer categories do not contribute to volatility. Hence, changing from party A (wave 1) to party B (wave 2) counts as volatility; changing from party A (wave 1) to being undecided (wave 2) does not. Changing from party A (wave 1) via undecided (wave 2) to party B (wave 3) leads to a volatility score of 1 change (at wave 3, when the substantive shift was made); changing from party A (wave 1) via undecided (wave 2) back to party A (wave 3) leads to a volatility score of 0 changes, as no substantive shift has been witnessed.

Based on these volatility scores per wave, we were able to assess (1) whether the respondent changed party preference at least once, (2) how often he/she changed party preference, and (3) how many unique parties he/she mentioned in total.

Intra-bloc and inter-bloc volatility. So far, we do not distinguish between the direction of changes in party preferences.

Electoral volatility is generally characterized by intra-bloc changes rather than inter-bloc changes (Bartolini and Mair, 1990; Granberg and Holmberg, 1990; Lachat, 2007; Walgrave et al., 2010). The same goes for The Netherlands, where voter movements in the party system are structured by two ideological dimensions (Van der Meer et al., 2012). A left-wing bloc that consists of Labour (PvdA), the Socialist Party and GreenLeft opposes a right-wing bloc that consists of the liberal-conservatives (VVD), the Christian-democrats (CDA) and the populist Freedom Party (PVV) and its short-lived alternative TON. There is very little exchange between these party blocs. Only the social liberals (D66) attract voters from both blocs, although voters do not use D66 to bridge the gap between the two. There is one exception to the central electoral position of D66 in the Dutch party system: D66 hardly exchanges voters with PVV (see Appendix A).

Using this information, we constructed two directional volatility measures. *Intra-bloc* volatility covers all voters who changed their vote intention at least once within one of the party blocs mentioned above. A switch to or from D66 counts as intra-bloc volatility for all except PVV voters. *Inter-bloc* volatility, by contrast, covers all voters who switched at least once from one party bloc to another (including those who switched between D66 and PVV). It does not matter whether those switches were direct or intermediated by a third party: we classify respondents by their preferences over the whole period.

Crucial control factors. Evidently, all these measures of electoral volatility depend on the number of waves respondents participated in (the more often one participated, the more likely one is to change vote intention at least once) and on the time span during which one participated (the more time passed, the more likely it is that events came to pass to change vote intention). Additionally, we need to eliminate two other methodological effects. Because we consider neither respondents who say they do not know their vote intention, nor respondents who refuse to answer the question as respondents with substantial answers, they are less likely to be considered volatile. The more often one says not to know which party to vote for, the lower the potential score of volatility. We control for four methodological artefacts (number of waves, time span, frequency of answering 'don't know' and frequency of refusing to answer) as independent variables in our multivariate models of electoral volatility.

4.4. Independent variables

For our determinants we rely primarily on socio-demographic and socio-economic characteristics. The socialization model is tested by the inclusion of age. In the original dataset, age is measured in five age groups, based on the age at which respondents first participated; a continuous variable is unavailable. Since we follow respondents over more than three years, age groups overlap (although all respondents are categorized uniquely); a person in age group 20 to 24 at the start of the interview waves in 2007 can be 26 years old in February 2009.

We assess cognitive sophistication primarily through level of education. Educational level is measured in eight ordered categories, ranging from primary education (1) to academic education (8). We include its quadratic term to test non-linear relationships.[12]

Within the model of social embeddedness, we focus on religion, household composition and associational involvement. Religious denomination distinguishes the non-religious, Protestants, Catholics, Muslims and an 'other' category. Household composition is measured in five categories: living with partner, single parent, living with parents, single and an 'other' category. Marital status includes the categories married, divorced, widowed and not married. Having a child is a dummy variable in which 1 means that the respondent has at least one child. Finally, associational involvement is operationalized through three dummy variables: involvement in a sports association, involvement in a trade union and membership of a political party.

To assess socio-economic positions, we incorporate household income, daily activity, sector and house ownership. Income is measured in seven ordered categories, ranging from no income to over twice the standard income. To allow for the expected non-linear relationship, the square of income is also included. Daily activity has six categories: employed, unemployed, houseman/wife, school, pensioned and 'other'. Sector of employment is categorized as the six most common branches of industry: agriculture, industry, commerce/finance, services, research/education and government, plus an 'other' category. House ownership is included as a dummy variable.

For media use we include dummy variables for the largest Dutch newspapers (*Telegraaf*, *AD*, *NRC*, *De Volkskrant*, *Trouw*), regional newspapers and free newspapers. Telegraaf is often considered the least politically sophisticated newspaper in The Netherlands, coming closest to the image of a tabloid. *NRC*, *De Volkskrant* and *Trouw* are often described as the typical highbrow newspapers in The Netherlands.

Finally, we control for gender and living environment (city size).[13]

4.5. Methods of analysis

As we test our hypotheses on dichotomous measures of volatility as well as on count measures, we apply respectively binomial logistic regression models and Poisson regression[14] models in our analysis.

5. Results: Mapping electoral volatility

5.1. Shifting vote intentions

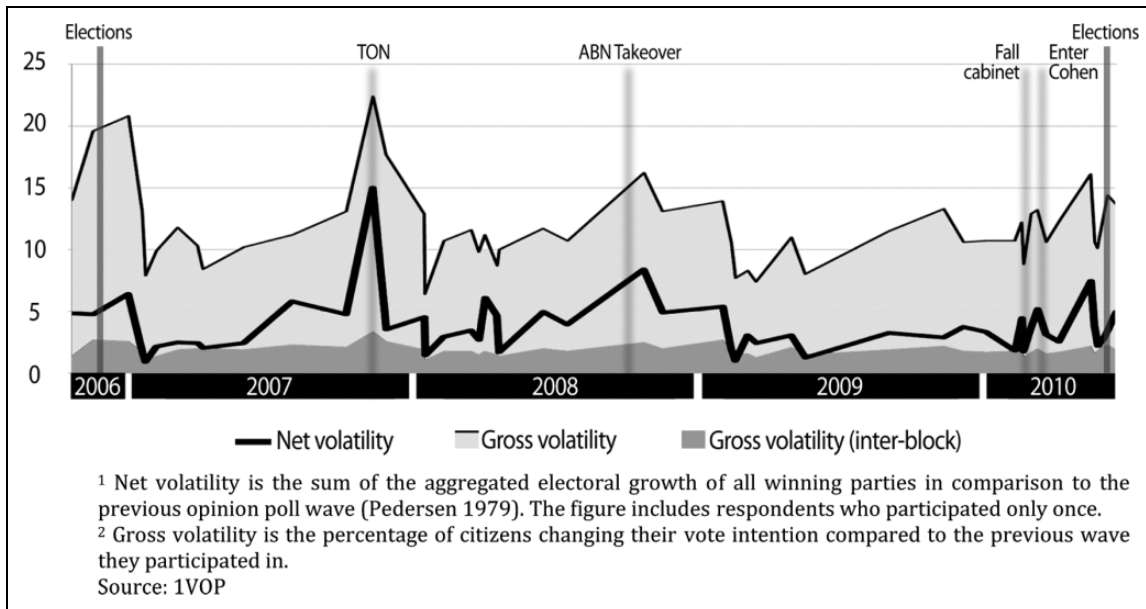Figure 2 displays the electoral volatility between subsequent opinion poll waves.[15] The large black line shows net

Figure 2. Net volatility[1] and gross volatility[2]: shifts between 1VOP waves

volatility, i.e. the percentage by which party support changed compared to the previous opinion poll wave (similar to Figure 1). The grey fields represent inter-bloc and intra-bloc gross volatility, i.e. the percentage of voters that changed since their own previous participation in the panel.

Volatility is a rather consistent characteristic of the Dutch electorate. Even in the most stable waves 4 percent of the respondents changed party preference. On average in every opinion poll 12 percent of voters (one in eight) changed preference. Gross volatility is consistently substantively larger than net volatility (on average 8 percentage points), even when the net changes in opinion polls are minimal. Even rather consistent outcomes thus obscure quite sizeable electoral changes. However, inter-bloc volatility is relatively small. On average, 2 percent of voters shift between ideologically dissimilar parties and 16 percent of all changes are inter-bloc. Only a minority of the changes in party preference therefore fit the image of voters as drift sand.

Evidently, volatility is likely to be higher when the time interval between two subsequent waves is larger. Yet, the largest peaks were caused by external events. The first peak directly followed the split of MP Rita Verdonk from VVD and the inclusion of her new political party, TN, as an option in the polls in November 2007. The split by – then popular – Verdonk led to sudden net shifts in virtual seat distribution of 15 percent. A second, smaller, peak took place in the first week of October 2008, following the sudden nationalization of the ABN Amro bank by the Dutch government. Vice-PM and Pvda party leader Wouter Bos benefited from a sudden image of decisiveness. Volatility increased again after the coalition broke down (February 2010), when Job Cohen replaced Bos as PvdA party leader (March 2010) and as the elections approached (May and

June 2010). The level of volatility in those months was rather low due to the large number of polls in a short time span. Figure 2 illustrates that the temporal variance in electoral volatility is mainly caused by sudden changes in intra-bloc volatility: the only (slight) peak in inter-bloc volatility is in November 2007.

5.2. Volatile voters

Many (45 percent) of the 55,874 respondents never changed party preference in any of these polls between 2006 and 2010; 55 percent thus did change at least once.[16] Three-quarters of the sample changed party preference three times or less. Although voters could potentially change vote intentions 57 times, the actual maximum was 30. The relative frequency by which respondents change vote intention hardly differs with the number of waves in which they participated (see Appendix B).

These 30,720 volatile respondents on average intended to vote on 2.75 different political parties (minimum 2, maximum 10; SD=0.98). Most of them (52 percent) mentioned only two political parties.

Changes within party blocs are most common: 46.6 percent of the respondents moved between parties of the same bloc, whereas 12 percent of the respondents moved between parties of different blocs at least once in the period under study.

6. Results: Explaining volatility

6.1. General volatility

Table 1 describes the outcomes of our multivariate regression analyses of electoral volatility. It shows no evidence

for the *socialization* explanation. Rather, we reach the opposite conclusion: older citizens (especially 55+) are consistently more volatile than the young. We thus reject hypothesis H1. Because this directly opposes the findings from previous studies (Kuhn, 2009; Schmitt-Beck et al., 2006; Söderlund, 2008), we examined the differences between these previous studies and ours. Due to data limitations, these studies were limited to changes in the actual vote or to changes during the campaign period directly before elections, whereas we focus on changes during the whole governmental period. Therefore we broke down our dependent variable accordingly (see Appendix C). We find that outside of campaigns and elections, older voters are more likely to be volatile than younger voters. But when push comes to the shove and voters cast their ballots, older people are the most loyal. This remarkable effect has not been signalled before, probably because previous research focused primarily on elections and campaigns. More research is needed to investigate whether it also holds in other settings, or whether it was due to idiosyncratic characteristics of the Dutch governmental period under study here.[17]

We return to our findings in Table 1. We find more support for the *sophistication* explanation. There is a non-linear effect of level of education. Voters with an average level of education are more volatile than both the lower and the higher educated. We can deduce from the significant parabolic effects that volatility is consistently lowest among voters who merely finished elementary school and those who finished an academic education.[18]

Our expectations regarding social embeddedness (involvement with church, family and associational life) were false. Voters from various religious backgrounds change more often and mention more unique parties than non-religious voters. However, concurrently, Protestant voters are less likely to change at least once. Partners or children have no stabilising effect on party preference either. Rather, voters who live with a partner or with children are more volatile than singles. Finally, involvement in associational life does not consistently stabilize party preferences either. It should not be surprising that party members and union members are more loyal than non-members, even though the differences are rather small for trade unions. However, we find the opposite for members of sports associations: they are less, not more, volatile than non-members. Apparently depillarization has proceeded to such an extent that embeddedment in church, family and associational life no longer stabilizes party preference. Hypothesis H3 is refuted.

The fourth model emphasized voters' *socio-economic profiles*. Table 1 shows that the poor and/or unemployed are not likely to be more volatile. Rather, income has a curvilinear effect on electoral volatility. The most volatile voters are the middle income groups: the chance to change party preference and the number of parties mentioned both increase with rising income levels up to the modal income level, and subsequently decrease again. This supports hypothesis H4. We interpret this finding with reference to the lack of a common identity and an evident (class-based) party to vote for among the middle classes.[19]

The final model in our analyses predicted that (specific types of) media use would stimulate electoral volatility. We find that newspaper readers are generally neither more nor less consistent in their party preference. Rather, volatility differs from paper to paper. Readers of the major Dutch tabloid, *Telegraaf*, are indeed more volatile, change more frequently, and mention more political parties. However, readers of some highbrow newspapers (*de Volkskrant* and *NRC*) are in some ways also more volatile than non-readers. Whereas hypothesis H5a is refuted, evidence for hypothesis H5b is mixed.

The significant and substantive effects also illustrate that volatility is common among many social groups. Predicted probabilities only tell part of the story, as they depend strongly on our methodological control variables. Ceteris paribus, the model predicts that of the respondents who participated only twice (and within a short time frame) 33 percent switched parties versus 85 percent of the respondents who participated in thirty waves across the whole time span of the 1VOP. Under the constraints that much variance in the model is due to differences in participation rates and under the assumption of equal participation rates for all respondents, we can provide a conservative estimation of the likelihood of members of various social groups to switch parties. A 55+ year old non-religious male with average education and a middle income would have a likelihood of 61 percent to switch parties, whereas this is 'only' 44 percent for a 28-year-old non-religious and highly educated female with a high income.

6.2. Intra vs. inter-bloc volatility

One puzzle remains unanswered: is there a difference between voters who change *within* a bloc of ideologically similar parties and voters who change *between* such party blocs? Table 2 shows the outcomes of our analyses. The single most evident difference between intra-bloc and inter-bloc volatility is the one that we had expected to find in the cognitive sophistication model. Regarding intra-bloc changes we find that voters with an average level of education are the ones who are most volatile. This supports H2a. However, regarding inter-bloc changes, we find that volatility consistently decreases with level of education: low-educated voters are most likely to change between ideologically dissimilar parties. This supports H2b.

Additionally, Table 2 tells us that the difference between men and women in Table 1 is not due to differences in intra-bloc volatility but exclusively because men are more likely to change between dissimilar parties. Intriguing is also the fact that readers of free and regional papers

Table 1. General regression models of electoral volatility (unstandardized coefficients).

	All respondents Volatility[1]		Volatile respondents No. of changes[2]		Volatile respondents No. of parties[2]	
General						
Gender (male)	0.043 (0.022)	*	0.013 (0.010)		0.016 (0.005)	**
Living environment (ref: village)						
• Big city	0.085 (0.027)	**	0.025 (0.012)	*	0.007 (0.006)	
• Small city	0.048 (0.022)	*	0.008 (0.010)		0.003 (0.005)	
Socialization						
Age (ref: 40-57)						
• 20-27	−0.059 (0.061)		−0.127 (0.029)	**	−0.018 (0.012)	
• 25-42	−0.097 (0.030)	**	−0.064 (0.014)	**	−0.016 (0.006)	**
• 55-67	0.126 (0.030)	**	0.074 (0.013)	**	0.024 (0.006)	**
• 65+	0.072 (0.044)		0.115 (0.019)	**	0.022 (0.009)	**
Cognitive sophistication						
Level of education	0.096 (0.034)	**	0.030 (0.015)	*	0.022 (0.007)	**
LoE (squared)	−0.011 (0.003)	**	−0.003 (0.002)	*	−0.003 (0.001)	**
Social embeddedness						
Religion (ref: none)						
• Protestant	−0.155 (0.028)	**	0.066 (0.013)	**	0.022 (0.006)	**
• Catholic	0.000 (0.025)		0.030 (0.011)	**	0.028 (0.005)	**
• Islamic	0.520 (0.120)	**	0.076 (0.054)		0.024 (0.022)	
• Other	0.147 (0.044)	**	0.024 (0.019)		0.023 (0.009)	**
Household composition (ref: single)						
• Living with partner	0.103 (0.040)	**	0.039 (0.018)	*	0.010 (0.008)	
• Single parent	−0.001 (0.063)		0.087 (0.028)	**	0.022 (0.013)	*
• Living with parents	0.020 (0.070)		0.020 (0.035)		0.013 (0.015)	
• Other	0.003 (0.050)		0.045 (0.024)	*	0.017 (0.011)	
Marital status (ref: not married)						
• Married	−0.008 (0.040)		0.023 (0.018)		0.014 (0.008)	*
• Divorced	0.156 (0.042)	**	−0.029 (0.019)		−0.003 (0.009)	
• Widowed	0.073 (0.061)		0.071 (0.026)	**	0.028 (0.013)	*
Having a child	−0.018 (0.028)		0.023 (0.013)	*	0.002 (0.006)	
Involvement in sports association	0.010 (0.024)		0.021 (0.010)	*	−0.004 (0.005)	
Involvement in trade union	−0.068 (0.022)	**	0.001 (0.010)		−0.007 (0.005)	
Member political party	−1.160 (0.024)	**	−0.072 (0.013)	**	−0.061 (0.006)	**
Socio-economic vulnerability						
Income	0.082 (0.043)	*	−0.007 (0.019)		0.017 (0.009)	*
Income (squared)	−0.011 (0.005)	**	−0.001 (0.002)		−0.002 (0.001)	**
Daily activity (ref: employed)						
• Unemployed (but looking)	−0.043 (0.063)		0.002 (0.030)		0.008 (0.014)	
• Houseman/wife	−0.113 (0.064)	*	0.008 (0.028)		0.004 (0.013)	
• School/study	0.100 (0.074)		0.048 (0.035)		0.008 (0.015)	
• Pensioned	−0.088 (0.050)	*	0.019 (0.021)		0.017 (0.010)	*
• Other	0.032 (0.049)		0.038 (0.021)	*	0.023 (0.010)	*
Sector (ref: government)						
• Agriculture	0.054 (0.102)		0.062 (0.044)		−0.013 (0.021)	
• Industry / construction	0.054 (0.050)		0.022 (0.022)		.014 (0.011)	
• Commerce / finance	0.088 (0.041)	*	0.009 (0.018)		−0.001 (0.008)	
• Services	0.092 (0.039)	**	0.025 (0.018)		0.022 (0.008)	**
• Research & development / education	0.062 (0.046)		0.027 (0.022)		0.010 (0.010)	
• Other	−0.049 (0.052)		−0.002 (0.024)		−0.000 (0.011)	
House ownership	0.006 (0.023)		−0.007 (0.010)		−0.010 (0.005)	
Media						
Telegraaf	0.210 (0.023)	**	0.036 (0.010)	**	0.016 (0.005)	**
AD	0.018 (0.025)		0.010 (0.011)		0.008 (0.005)	
NRC	0.037 (0.028)		0.065 (0.013)	**	0.010 (0.006)	*
De Volkskrant	0.019 (0.025)		0.028 (0.011)	**	−0.001 (0.005)	
Trouw	−0.094 (0.037)	**	−0.015 (0.019)		−0.005 (0.008)	
Regional paper	−0.046 (0.020)	**	0.014 (0.009)		−0.003 (0.004)	
Free paper	0.060 (0.030)	*	0.017 (0.013)		0.015 (0.006)	**

Source: IVOP

Standard errors in parentheses; one-sided tests; **$p<0.01$; *$p<0.05$.

All analyses control for number of waves, time span, frequency of answering 'don't know' and answering 'refuse'.

Pairwise deletion of missing values for income, sector, religious denomination and sport. Listwise deletion of missing values on other variables.

[1]Logistic regression analysis (full sample: N = 52587).

[2]Poisson regression analysis (volatile sample only: N = 29164).

Table 2. Logistic regression models of intra-bloc and inter-bloc volatility (unstandardized coefficients).

% volatile	Inter-bloc volatility 12.0		Intra-bloc volatility 46.6	
General				
Gender (male)	0.236 (0.034)	**	0.005 (0.022)	
Living environment (ref: village)				
• Big city	0.006 (0.039)		0.095 (0.027)	**
• Small city	0.063 (0.032)	*	0.011 (0.022)	
Socialization				
Age (ref: 40–57)				
• 20–27	−0.181 (0.103)	*	0.014 (0.062)	
• 25–42	−0.123 (0.046)	**	−0.072 (0.030)	**
• 55–67	0.101 (0.043)	**	0.155 (0.030)	**
• 65+	0.009 (0.062)		0.125 (0.044)	**
Cognitive sophistication				
Level of education	−0.050 (0.008)	**	0.112 (0.034)	**
LoE (squared)	n.a.		−0.010 (0.003)	**
Social embeddedness				
Religion (ref: none)				
• Protestant	−0.014 (0.041)		−0.392 (0.028)	**
• Catholic	0.242 (0.035)	**	−0.062 (0.025)	**
• Islamic	0.243 (0.180)		0.520 (0.118)	**
• Other	0.036 (0.065)		−0.055 (0.044)	
Household composition (ref: single)				
• Living with partner	0.161 (0.063)	**	0.070 (0.040)	*
• Single parent	0.189 (0.090)	**	−0.033 (0.062)	
• Living with parents	0.078 (0.118)		−0.059 (0.071)	
• Other	0.074 (0.082)		0.008 (0.050)	
Marital status (ref: not married)				
• Married	0.038 (0.061)		−0.001 (0.040)	
• Divorced	−0.004 (0.063)		0.122 (0.042)	**
• Widowed	0.155 (0.086)	*	0.051 (0.060)	
Having a child	0.020 (0.040)		−0.042 (0.028)	
Involvement in sports association	0.017 (0.033)		0.047 (0.024)	*
Involvement in trade union	0.010 (0.031)		−0.105 (0.042)	**
Member political party	−0.719 (0.040)	**	−1.189 (0.025)	**
Socio-economic vulnerability				
Income	0.190 (0.062)	**	0.091 (0.043)	*
Income (squared)	−0.022 (0.007)	**	−0.008 (0.005)	*
Daily activity (ref: employed)				
• Unemployed (but looking)	−0.034 (0.095)		−0.105 (0.063)	*
• Houseman/wife	−0.032 (0.092)		−0.195 (0.064)	**
• School/study	0.054 (0.127)		0.187 (0.075)	**
• Pensioned	0.048 (0.067)		−0.025 (0.049)	
• Other	0.126 (0.068)	*	−0.041 (0.049)	
Sector (ref: government)				
• Agriculture	−0.264 (0.162)		0.083 (0.102)	
• Industry / construction	−0.015 (0.070)		0.015 (0.050)	
• Commerce / finance	−0.044 (0.059)		0.080 (0.040)	*
• Services	0.006 (0.057)		0.111 (0.039)	**
• Research & development / education	0.027 (0.069)		0.083 (0.046)	*
• Other	−0.085 (0.076)		−0.037 (0.052)	
House ownership	−0.088 (0.033)	**	0.060 (0.023)	**
Media				
Telegraaf	0.046 (0.032)		0.258 (0.023)	**

(continued)

Table 2. (continued)

% volatile	Inter-bloc volatility 12.0		Intra-bloc volatility 46.6	
AD	0.146 (0.035)	**	0.019 (0.025)	
NRC	−0.037 (0.044)		0.091 (0.028)	**
De Volkskrant	−0.059 (0.038)		0.072 (0.025)	**
Trouw	−0.048 (0.058)		−0.207 (0.038)	**
Regional paper	0.068 (0.029)	**	−0.013 (0.020)	
Free paper	0.164 (0.041)	**	−0.004 (0.030)	

Source: IVOP (N=52587).
Standard errors in parentheses; one-sided tests; **$p<0.01$; *$p<0.05$.
All analyses control for number of waves, time span, frequency of answering 'don't know' and answering 'refuse'.
Pairwise deletion of missing values for income, sector, religious denomination and sport. Listwise deletion of missing values on other variables.

(including the regionally oriented *Algemeen Dagblad*) are most likely to change between ideologically dissimilar parties. These newspapers generally focus less on national politics. Possibly the root of volatility is not so much framing the news in terms of political scandals, but rather the focus of these media on apolitical news. Nevertheless, any interpretation of these media 'effects' as socialization effects is just as likely as selection effects in this analysis. We need to analyse the specific content of the newspapers, and link them to our panel data, to come to a better understanding (e.g. De Vreese and Semetko, 2004).

7. Summary and discussion: Electoral volatility and the state of representative democracy

This article started out by signalling that electoral volatility has increased strongly in The Netherlands. According to critics, this rise of volatility would point to a crisis of representative democracy, whereas others argue that volatility reflects voter emancipation: voters who started to take their civic role seriously.

Our study speaks to this debate by distinguishing between two types of switching. Inter-bloc volatility, i.e. between two ideologically distinct parties, comes closest to the description of volatile voters as drift sand, as the changes in party preference appear unstructured. Intra-bloc volatility, i.e. between ideologically similar parties, signals some extent of political sophistication, as voters remain loyal to a group of ideologically similar parties. We tested various theories on the characteristics of volatile voters who switch between and within blocs. Our extensive individual level panel data allowed us to focus not only on the stability of the vote that is actually cast in the voting booth, but also on the stability of vote intentions in dozens of waves between these elections.

We draw two major conclusions. First, volatility occurs among wide layers of the population: more than half of the respondents substantively changed party preference at least once between September 2006 and June 2010. These changes take place continuously, although some peaks in volatility occur in response to external events.

Second, Dutch voters are neither erratic nor whimsical. Their changes in vote intention are far from random: even when they change, voters dominantly stick to parties that are very similar in ideological terms. The large majority of the changes take place within blocs of ideologically similar parties. Moreover, the act of changing vote intentions does not seem to reflect irrationality or disinterest. Not the low-educated change party preference most frequently but those with an average education; not the low income groups but those with modal incomes; not the political radicals but the political moderates. These effects imply emancipated voters who display informed rather than capricious voting behaviour: they choose between a set of rather similar alternatives.

We therefore conclude that the increased levels of electoral volatility do not point to a crisis of representative democracy. Such doom scenarios find no support in the actual behaviour of Dutch voters. Rather, voters have started to do what they are supposed to do: Choose (Rose and McAllister, 1986; Thomassen, 2010). Picky voters are loyal to their own ideas, not to a single political party. This might reflect a crisis of the established parties (CDA, PvdA and VVD) that lost formerly self-evident support and increasingly become one of many medium-sized political parties.

Increased volatility does come with a risk, not for the democratic processes but for the governance of the polity. It has led to an increasingly fragmented party system. Short-term electoral successes will go at the cost of potential coalition partners. It will then be increasingly difficult to form manageable and stable government coalitions. Although electoral volatility currently contributes to the quality of democracy, it might ultimately lead to a shattering of the Dutch party system.

Funding

Notes

1. The classic 'cognitive mobilization model' argued that the most sophisticated voters would be the least aligned to political parties and therefore the most volatile (Dalton, 1984).
2. The relationship between social embeddedness and volatility is more complex than we can test: the effect of social ties might be conditional on the congruence of political attitudes (Kuhn, 2009). Different opinions within a household or an association would stimulate volatility. Only a strong overlap in political attitudes might reinforce (stabilize) these attitudes.
3. If one's socio-economic profile is related to electoral volatility, this should be mediated through voters' ideological positions: radical voters (both left-wing and right-wing) should be more stable in their vote intentions than moderate voters.
4. Of the voters who never changed their vote intention in our analyses (partly due to a lack of involvement in the poll) only 14 percent switched party at the ballot box; of the voters who changed their vote intention at least once, 52 percent switched party at the ballot box.
5. All analyses are restricted to those in the second lowest age group (20–27) and higher, leaving out the lowest age groups (which included adolescents). This did not affect our findings substantively.
6. The average participation frequency is 18.6 times; 5 percent of the respondents participated only twice, whereas 9 percent took part in 40 waves or more.
7. Online accounts cannot be proved to be strictly personal. We used background questions on age, sex and educational level (that respondents were asked to fill in twice: in 2007 and in 2009) to check for potentially shared accounts: respondents with changing sex or decreasing age or educational level were excluded from the sample. These respondents made up less than 0.5 percent of our dataset.
8. On demographic characteristics the sample is mainly biased on gender (69 percent male instead of 49 percent), age (over-sampling of age 40–65) and level of education (50 percent tertiary education instead of 28 percent). To check whether our substantive findings are affected by sample bias, we modelled the interactions of age with education, age with gender and education with gender. None was significant.
9. Most waves of the 1VOP in this time span did not include a question on vote intention; only the 58 in this study did, often as the final question in the questionnaire.
10. As a robustness check on our findings and as a comparison with previous studies, we broke down our volatility measure temporally. We distinguished between volatility in the *actual vote* at the 2006 and 2010 Lower House elections, volatility during the campaign period (i.e. between February and June 2010) and volatility outside the campaign period (i.e. between January 2007 and January 2010). Nearly all effects were consistent, with one relevant exception (see below).
11. Christian Democrats (CDA), Labour (PvdA), the Socialist Party (SP), the Liberal-Conservatives (VVD), the Freedom Party (PVV), GreenLeft (GL), ChristianUnion (CU), the Democrats (D66), the Animal Party (PvdD), the Orthodox Christians (SGP), and the short-lived party 'Proud of the Netherlands' (TON). TON never got elected into parliament, but in 2007 and 2008 had huge support according to the opinion polls. TON has been included as an answer category since the announcement of its foundation in November 2007.

12. Obviously, we wanted to include more direct measures of political sophistication. In March 2011 we collected additional data for a subset of the sample. Those data covered measures of political interest, involvement and knowledge. Additional analyses using these measures showed further confirmation for the cognitive sophistication model. The (self-reported) knowledge and interest are important determinants of electoral volatility (hampering volatility), that also explain the original relationship between level of education and volatility. As such, there is evidence for the causal pathways suggested by the cognitive sophistication model.

13. In multi-level analyses we assessed whether there was significant, substantial variance at the level of neighbourhoods, municipalities and provinces. Most contextual variances were not significant; at best they made up 3 percent of all variance. This implies that volatility is hardly affected by local contexts.

14. Negative binomial regression analyses led to the same substantive outcomes.

15. Of the 58 polls, 7 were held among a specific subsample of the panel. These polls are not included in the calculation of net or gross volatility in Figure 2.

16. The percentage stable voters is an overestimation inflated by the large number of respondents who only took part in two waves or took part only during a short time span.

17. Additional analyses show that the result cannot be explained simply by the establishment of a new conservative party (TON) in 2007 that supposedly appealed especially to older voters.

18. We found further support in additional analyses. In the weeks before the provincial elections of 2011 (nearly a year after our final measure of party preference in this study) 19,028 respondents of the 1VOP answered questions about their political interest, knowledge and news usage. The first two were significantly related to volatility: more knowledgeable and/or interested voters were more stable. Moreover, this explained the original curvilinear effect of education.

19. Additional analyses on a subset of the dataset (see notes 3, 10, 16) support this interpretation. We would expect that voters with less outspoken ideological preferences would be more volatile than ideologically more radical voters. We find a curvilinear effect of left–right position in the expected direction: the most volatile voters are slightly right of the left–right scale, the most consistent voters are at the extremes. Moreover, left–right positions explain why the middle incomes are more volatile than voters with a lower or higher level of income.

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Appendix A

Table A. Vote intention in 2010 and party preference since 2007 (percentage of 2010 voters that had considered voting for each party before at least once)

		SP	GL	PvdA	CU	D66	CDA	VVD	PVV	PvdD	SGP	Other	Not	Total
							Vote elections 2010[1]							
	SP	93.0	27.4	31.5	6.1	12.6	4.3	5.0	13.4	13.5	7.0	28.9	29.0	25.2
	GL	15.9	90.5	22.7	5	12.2	1.9	2.6	1.8	14.3	1.2	19.3	10.7	17.7
	PvdA	17.5	24.6	90.5	5	19	5.8	5.3	4.9	5.2	0.0	15.8	16.8	29.3
	CU	3.1	5.8	3.7	95.3	3.7	9.7	2.0	2.1	2.2	32.6	4.4	5.1	5.9
	D66	20.2	33.2	36.7	7.2	96.2	10.4	23.5	5.5	12.2	2.3	33.3	25.7	29.2
	CDA	3.7	3.6	3.6	15.3	8.6	95.3	14.7	5.4	5.2	10.5	8.8	6.1	14
% considered voting	VVD	8.1	5.1	5.3	3.6	20.3	16.4	93.8	19.8	4.8	8.1	17.5	19.6	25.9
for each party	PVV	18.1	4.3	8.7	6.7	5	11.9	42.1	98.3	11.7	17.4	39.5	35	30.5
	PvdD	7.8	8.1	4.8	3.3	4.1	1.2	2.5	2.8	92.6	3.5	14.9	7.5	5.6
	SGP	0.8	0.4	0.4	7	0.3	1.8	0.7	0.7	0.9	88.4	1.8	1.9	1.3
	TON	7.6	2.8	3.3	3.6	5.6	8.7	29.5	32.1	3.5	7.0	44.7	17.3	14.2
	Other	3.2	1.5	1.9	1.7	1.1	1.3	4.6	6.0	3.5	2.3	55.3	4.7	3.4
	Not	9.1	5.0	6.5	4.2	3.8	3.5	5.7	6.0	6.1	5.8	20.2	54.2	6.6
	N	1766	1485	3760	359	1519	1308	2855	2731	230	86	114	214	16427

Source: 1VOP
N = 16,427 respondents
[1] Categories 'TON' and 'other' are combined in 2010 (columns). 'Blanc' is integrated with 'not'.
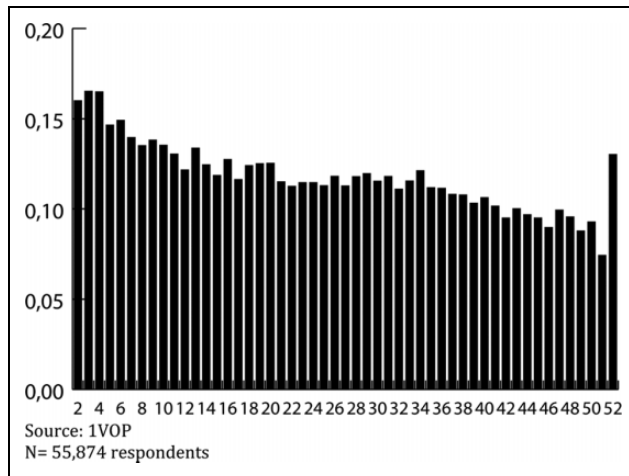
Appendix B

Figure B. Relative number of changes in party preferences set out against the number of waves in which voters participated

Appendix C

Table C. Logistic regression models of volatility broken down by period (unstandardized coefficients)

	Actual votes (Elections)	Outside campaign months	During campaign
N	25212	48978	34402
% volatile	37.1	49.1	41.6
General			
Gender (male)	–0.008 (0.032)	0.072 (0.023)	–0.052 (0.027)
Living environment (ref: village)			
● Big city	0.089 (0.038)	0.099 (0.028)	–0.010 (0.032)
● Small city	0.022 (0.031)	0.047 (0.023)	0.017 (0.026)
Socialization			
Age (ref: 40–57)			
● 20–27	0.344 (0.089)	–0.059 (0.064)	0.007 (0.079)
● 25–42	0.087 (0.044)	–0.049 (0.031)	–0.068 (0.037)
● 55–67	–0.087 (0.042)	0.130 (0.031)	0.079 (0.035)
● 65+	–0.170 (0.060)	0.088 (0.046)	0.025 (0.051)
Cognitive sophistication			
Level of education	0.010 (0.048)	0.060 (0.035)	0.145 (0.041)
LoE (squared)	0.000 (0.005)	–0.008 (0.003)	–0.013 (0.004)
Social embeddedness			
Religion (ref: none)			
● Protestant	–0.029 (0.040)	–0.196 (0.029)	0.001 (0.033)
● Catholic	0.090 (0.035)	0.007 (0.026)	0.022 (0.030)
● Islamic	–0.426 (0.203)	0.432 (0.128)	0.678 (0.158)
● Other	0.162 (0.061)	0.086 (0.045)	0.201 (0.052)

(continued)

Table C. (continued)

	Actual votes (Elections)	Outside campaign months	During campaign
Household composition (ref: single)			
● Living with partner	0.095 (0.058)	0.138 (0.042)	0.036 (0.050)
● Single parent	0.012 (0.085)	0.053 (0.065)	0.022 (0.073)
● Living with parents	–0.024 (0.106)	0.085 (0.075)	–0.040 (0.092)
● Other	0.060 (0.078)	0.033 (0.052)	0.014 (0.067)
Marital status (ref: not married)			
● Married	–0.097 (0.058)	0.004 (0.041)	0.017 (0.049)
● Divorced	0.096 (0.058)	0.160 (0.044)	0.059 (0.050)
● Widowed	0.056 (0.083)	0.120 (0.063)	0.048 (0.071)
Having a child	–0.074 (0.040)	–0.043 (0.029)	0.039 (0.033)
Involvement in sports association	–0.048 (0.029)	0.021 (0.025)	–0.004 (0.025)
Involvement in trade union	–0.126 (0.031)	–0.051 (0.023)	–0.029 (0.026)
Member political party	–0.983 (0.035)	–1.107 (0.025)	–0.992 (0.030)
Socio-economic vulnerability			
Income	0.141 (0.054)	0.049 (0.046)	0.084 (0.046)
Income (squared)	–0.018 (0.006)	–0.007 (0.005)	–0.010 (0.005)
Daily activity (ref: employed)			
● Unemployed (but looking)	0.051 (0.085)	–0.035 (0.066)	0.062 (0.074)
● Houseman/wife	0.009 (0.088)	–0.054 (0.067)	–0.111 (0.075)
● School/study	0.133 (0.114)	0.087 (0.079)	0.160 (0.099)
● Pensioned	–0.059 (0.059)	–0.006 (0.052)	–0.067 (0.052)
● Other	0.039 (0.060)	0.061 (0.052)	0.095 (0.053)
Sector (ref: government)			
● Agriculture	–0.023 (0.146)	0.030 (0.107)	0.130 (0.120)
● Industry / construction	–0.006 (0.069)	0.052 (0.052)	–0.037 (0.058)
● Commerce / finance	0.071 (0.055)	0.094 (0.042)	–0.003 (0.047)
● Services	0.117 (0.054)	0.086 (0.041)	0.057 (0.045)
● Research and development / education	0.047 (0.066)	0.030 (0.048)	0.058 (0.056)
● Other	0.023 (0.075)	–0.018 (0.053)	–0.071 (0.064)
House ownership	–0.069 (0.033)	0.004 (0.024)	–0.040 (0.028)
Media			
Telegraaf	0.079 (0.032)	0.268 (0.024)	–0.070 (0.027)
AD	0.009 (0.036)	0.016 (0.026)	0.036 (0.030)
NRC	0.011 (0.041)	0.051 (0.030)	0.023 (0.035)
De Volkskrant	–0.014 (0.035)	0.020 (0.026)	0.018 (0.029)
Trouw	–0.018 (0.054)	–0.111 (0.039)	–0.029 (0.045)
Regional paper	0.004 (0.029)	–0.085 (0.021)	0.061 (0.024)
Free paper	0.132 (0.042)	0.091 (0.030)	0.033 (0.036)

Source: 1VOP.
Standard errors in parentheses.
All analyses control for number of waves, time span, frequency of answering 'don't know' and answering 'refuse'.
Pairwise deletion of missing values for income, sector, religious denomination and sport. Listwise deletion of missing values on other variables.

Author biographies

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