

Revolt of the sore losers?

Why revolutionary attitudes are weakened in democracy

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Abstract

Contrary to a classic prediction of democratic theory, empirical studies do not find that democratic systems produce internal peace. This absence of relationship does not mean that democratic theory was entirely wrong. Indeed, democratic systems may have a negative effect on the support for revolution, as predicted by democratic theory, but a positive effect on opportunities for revolutions on the other part. Focusing on the support for revolution, this paper re-examines the classic prediction that democratic systems reduce political grievances. This rests on three arguments; that (1) *majority rule* guarantees that the number of dissatisfied people is relatively low, (2) *periodic elections* allow dissatisfied people to hope for a change in the leadership within a reasonable period of time, (3) *power-sharing* institutions diminishes the negative impact of an unwanted government on people. We test these arguments on 15 democratic countries using survey data on revolutionary attitudes from the European Values Survey (N=47,000). We find empirical support for all arguments. In addition to shedding light on the reasons why democracy weakens revolutionary attitudes, our analysis provides some clues to understand the recent increase in the support for revolution in democratic countries.

1. Introduction

A core assumption of democratic theory is that democratic institutions encourage internal peace (Przeworski 1999, Acemoglu and Robinson 2006). Democratic systems have for long been thought to temper the appeal for revolt by limiting the number of political losers and managing their consent (Popper 2014 [1963], Anderson et al. 2005). Specifically, three

definitional features of democratic systems should reduce political grievance compared to autocratic systems. Firstly, democracies are based on *majority rule*, which limit the number of people ruled by an unwanted government (Dahl 1989). Secondly, democracies hold *periodic elections*; hence people losing an election are aware that an institutional mechanism exists to remove the leader (Przeworski 1999). Finally, democracies encompass *power-sharing* institutions, which guarantee that the political losers do not lose too much (Lijphart 1977). However, empirical studies do not support to the view that democracies produce internal peace. Some scholar find an inverted-U shape relationship between level of democracy and the probability of onset of internal armed conflict (Muller and Weede 1990, Fearon and Laitin 2003, Hegre 2014), while others find no relationship (Vreeland 2008) or a slight monotonic or conditional relationship (Gleditsch and Ruggeri 2010, Bartusevičius and Skaaning 2018). This surprising result seems in contradiction with democratic theory.

The present paper argues that it is not and that democratic theory was true in predicting that democratic systems lowers the appeal for revolt. Indeed, the inconsistent effect of democracy on internal conflicts could reflect two inverted effects of democracy on political grievances and opportunities to revolt. On the one hand, democratic systems lower political grievances and thus reduce the desire for revolt. But, on the other hand, as democracies do not repress the formation of organizations, the cost of preparing armed insurgencies is lower. This means that democratic institutions produce weaker revolutionary attitudes, but increase the feasibility of armed conflicts (Hegre 2014). This conjecture is consistent with what MacCulloch and Pezzini (2010) found using survey data: the level of freedom in a country monotonically reduces support for revolutions. Experimental evidence also shows that political repression and lack of freedom increase revolutionary attitudes but decrease actual opposition (Abbinck and Pezzini 2005). Finally, in wealthy countries – where the cost of controlling potentially

subversive organizations is lower - the relationship between democracies and internal peace is monotonic (Collier and Rohner 2008, Gleditsch et al. 2009).

However, no evidence is provided on which mechanism lead democratic institutions to reduce the support for revolution. We aim to empirically re-examine the classic arguments derived from democratic theory: that is, that (1) *majority rule*, (2) *periodic elections* and (3) *power-sharing* institutions reduce revolutionary attitudes.

Whilst studies on revolutionary attitudes have so far compared democracies to autocracies (MacCulloch and Pezzini 2010, Abbink and Pezzini 2005), the present paper takes an alternative approach by focusing on the variation in revolutionary attitudes among democracies. Indeed, the three arguments derived from democratic theory, explaining the variation in revolutionary attitudes between democracies and autocracies, also yield direct predictions on the variation in support for revolution among democratic systems themselves. Expressed in other terms, these hypotheses imply that revolutionary attitudes are triggered (1) by losing out electorally, (2) by the probability of being the winner in the near future and (3) by the extent of power lost by the losers.

Our empirical focus on democratic systems has two main analytical advantages. Firstly, due to the very organisation of democratic systems, competitive institutions allow identifying political losers, their probability of winning in the future and measuring the extent of power-sharing, while this would be tricky in autocracies. Secondly, focusing on democracies allows keeping constant the potential effect of political opportunities on revolutionary attitudes. Indeed, as stated earlier, democratic systems increase the opportunity for insurgency (e.g. through the freedom of association), which could in turn affect revolutionary attitudes as perceived efficacy has been found to increase collective action intentions (van Zomeren et al. 2008). As the present paper aims at disentangle whether democracy affect revolutionary attitudes through reducing grievances, nor through opportunities, it is worth keeping constant

the level of opportunities. For these reasons, under the assumption that the mechanisms we put forward hold true in autocracies, we chose to test the hypotheses among democratic systems. To test our hypotheses, we use data from 15 democratic countries from three waves of the European Values Survey (1990, 1999 and 2008). These countries are all rated by Freedom House as perfectly democratic during the period. The surveys include a measure of revolutionary attitudes. Our results show that being one of the electoral losers significantly increases individuals' probability of being revolutionary. We find partial evidence that hoping to win in the future reduces on revolutionary attitudes. Finally, power-sharing institutions are found to decrease revolutionary attitudes.

In addition to shedding light on the reasons why democracy weakens revolutionary attitudes, our analysis provides some clues to better understand the variation of revolutionary attitudes among people living in democratic countries. On the one hand, according to the European Values Surveys, the variance in revolutionary attitudes is high between democracies – 1.4% of Danish people support a revolution versus 10.6% in France. On the other hand, the appearance of revolutionary attitudes has hugely increased in most European democracies since 1990. While this may be seen as a simple correlate of the rise of extremist parties in Europe, which advocate for radical political change, our theory suggests a different explanation: we propose that the rise of those parties increases revolutionary attitudes only to the extent that they do not acquire access to political power. In other words, the recent increase in the support for revolution is not only due to the expansion of extreme ideologies but also to the increasing number of electoral losers.

In the following section, we develop a theoretical approach to the impact of democratic institutions on revolutionary attitudes. Section 3 details our three hypotheses and empirical expectations. Section 4 outlines the empirical strategy and introduces the three waves of the European Values Survey. Section 5 reports the results and section 6 presents our conclusions.

2. Democracies and revolutionary attitudes: empirical and theoretical background

The idea of measuring revolutionary attitudes via international surveys has been developed by MacCulloch (2003). The measure used, which we describe below, has proven to be correlated with observable measures of internal conflicts and consistent with what we know on determinants of revolutions (MacCulloch 2004). Beyond individual variables, most of these studies have identified relevant economic, cultural or political factors which could explain support for revolution, but institutional factors have been relatively ignored. Thus, inequalities increase revolutionary attitudes (MacCulloch 2005), while GDP and growth of GDP reduce them (MacCulloch 2004, MacCulloch and Pezzini 2007). On the cultural side, religiosity decreases revolutionary attitudes, except for Muslims (MacCulloch and Pezzini 2007, 2010). Finally, certain relevant political factors have been identified. Typical characteristics of democracies, such as the degree of civil and political rights and press freedom, or a feeling that the country is not run for the benefit of the few, decrease revolutionary attitudes (Abbink and Pezzini 2005, MacCulloch and Pezzini 2010). However, although these results highlight a correlation between democratic systems and lower revolutionary attitudes, the mechanism by which this is achieved remains vague. Civil and political rights, especially when measured by Freedom House, are a proxy for too many institutional factors and different explanations could be responsible for these results. Through democratic theory, we have identified at least three main mechanisms explaining why democracies reduce revolutionary attitudes. We introduce them separately and comment the empirical evidence related to these arguments.

2.1 The *majority rule* as a restraint on revolutionary attitudes

Majority voting is considered an institutional way to resolve peacefully conflicts (Dahl 1989, Popper 2014 [1963]). Majority rule should moderate the appeal of revolutionary ideas

because it guarantees that there are not too many discontented people (less than one in two in a genuine democratic system). This means that people who do not support the government (“the losers”) should be more supportive of revolution not only in autocracies, but also in democracies, and the different outcomes between these political systems should not be due to different attitude of losers, but simply because of their number, which is lower in democracies.

Empirically, a broad swathe of literature provides clues which are consistent with this view. They show that winning or losing elections affects peoples’ satisfaction levels. When their party has lost an election, they are dissatisfied not only with the outcome of the democratic game, but also with its rules (Nadeau and Blais 1993, Anderson and Guillory 1997, Anderson et al. 2005, Blais and Gélinau 2007, Listhaug et al. 2009). While much of this literature provides proof of the impact of being on the winning side on satisfaction with the way democracy works, some other studies have shown that this effect is bigger and affects people’s level of support for the political system (Singh et al. 2011, Dompnier and Magni-Berton 2012). However, almost nothing is known about the impact of supporting a party which has lost the election on developing revolutionary attitudes, except for Magni-Berton (2010) who has found such a relationship but only in the case of France albeit with a rather unsophisticated statistical test.

2.2 *Periodic elections as a restraint on revolutionary attitudes*

According to the minimalist conception of democracy developed by Przeworski (1999, see also Cheibub et al. 2010), being an electoral loser is not enough of a reason to develop a revolutionary attitude. Revolutionary attitudes develop when there are no other ways of changing the leadership within a reasonable period of time. Thus, systems with periodic and contested elections allow dissatisfied people to expect a change reasonably soon and hence

deters them from revolting. Unlike simple majority rule, therefore, systems with periodic and contested elections produce an expectation of winning even when citizens may currently be losers. This expectation of winning should reduce revolutionary attitudes.

This hypothesis introduces a distinction between losers in democracies. Some losers support political parties that can reasonably expect to win the next election. Others support parties which have no chance of winning in a near future. Only the latter should display revolutionary attitudes. Nevertheless, as far as we know, this empirical consequence of the minimalist conception of democracy has never been tested.

2.3 *Power-sharing* institutions as a restraint on revolutionary attitudes

Finally, democracies may reduce support for revolution because they restrict the power of government on individuals (Lijphart 1977). In this context, the losers are less supportive of revolution in a democratic system not because they expect to win, but because losing is less costly.

Tsebelis (2002) demonstrates that the stability of public policies is dependent on the number of veto players in the system. When there are many veto players, the agenda setter (say, the government) has little leeway to change the status quo according to its preferences. In this case people suffer less due to an unwanted government. Acemoglu and Robinson (2006) note that a balance of power between various social groups may occur in non-democratic systems, but it is unstable because it is not a *de jure* power which allows for the stabilization of long-term concessions. Democratic institutions are the solution to this commitment problem.

Empirically, Anderson et al. (2005) state that losers reject their political system to a lesser degree when the political system has a greater number of veto players, and when power is shared (for example in federal systems). In the same vein, Anderson and Guillory (1997) observe that losers are more satisfied with democracy in consensual systems than in majority

systems, where the winner takes all. This directly produces consequences on real conflicts. Hartzell and Hoddie (2003) demonstrate that peace agreements which specify high forms of power sharing reduce the likelihood of conflicts. Also, multiparty elections are observed reducing violent conflicts because they induce weak governments to share power with the opposition (Cheibub and Hays 2017). Finally, under specific conditions, federal systems contribute to reduce civil conflicts (Bakke and Wibbels 2006; Christin and Hug 2012). Finally, civil and political rights can be considered as a power sharing measure given that they decrease governmental power over individuals. Hence the negative relationship between the presence of such rights and revolutionary attitudes among the population, observed by MacCulloch and Pezzini (2010), may be interpreted this way.

3. Three hypotheses: Majority rule, periodic elections and power-sharing

All in all, three mechanisms can account for the relationship between democratic institutions and revolutionary attitudes based, respectively, on *majority rule*, on *periodic elections* and on *power-sharing* institutions. These mechanisms, explaining the variation in revolutionary attitudes between democracies and autocracies, yield direct predictions regarding the variation in support for revolution among citizens of democratic systems themselves.

According to the *majority rule* argument, support for revolution is always higher amongst losers – those who support a party or a leader who has been defeated. The advantage of democracy as defined by the majority rule principle is in minimizing the number of losers. Empirically, losers should tend to support revolution whatever the institutional setting or their ideological view. In short:

H1. "Majority rule": Electoral Losers are more supportive of revolution than electoral winners.

According to the *periodic elections* argument, revolutionary attitude depends on expectations of acceding to power without a revolt. In this case, losers that have been momentarily defeated but can expect to win at the next election should be less supportive of a revolution than losers whose preferred party has no chance of winning future elections.

H2. "Periodic elections": Electoral losers are more supportive of revolution when their preferred party is not likely to win elections in the future.

Finally, according to *power-sharing* argument, the amount of power lost by the losers influences their revolutionary attitude. Losers lose less when the division of power is well developed, because the status quo is then more change-resistant and the agenda setter has less power (Tsebelis 2002). Division of power is generally a characteristic of democracies, but amongst certain democracies, powers are more shared than in others (Lijphart, 2012). If this variance among democracies is a factor in predicting revolutionary attitudes, we should deduce that the higher level of support for revolution in autocracy is partly due to the lack of division of power.

H3. "Power-sharing": Electoral losers are more supportive of revolution when the country has little division of powers.

Theoretically, these three hypotheses are not exclusive. We can expect that losing leads to developing revolutionary attitudes, but this effect is amplified when there are no expectations of winning in the near future and the power afforded by the election is concentrated in the hands of the winner.

4. Empirical design

Our empirical investigation tests the three hypotheses that we have put forward. The tests are based on European Values Surveys from which we extract an individual measurement of revolutionary attitude and several variables which enable us to gauge our hypotheses. We then seek to explain the probability of a respondent adopting a revolutionary attitude.

4.1 Data and revolutionary attitude measurement

Our data comes from three waves (1990, 1999, and 2008) of the European Values Surveys in fifteen Western European countries.¹ Unfortunately, the item on revolutionary attitude is not included in every wave of the survey. For instance, in 1999, only two nations (Austria and Italy) interviewed the respondents about revolution, while in 1990 and 2008 the question was posed to respondents in fifteen countries. Our sample gathers about 43,200 respondents. To measure revolutionary attitude, we use the same question as that used by MacCulloch (2003, 2004, 2005): “On this card are three basic kinds of attitudes vis-à-vis the society in which we live in. Please choose the one which best describes your own opinion.” The first relevant response category is: “The entire way our society is organized must be radically changed by revolutionary action”, which has the value 1 and which means that respondents have a revolutionary attitude. There are two other responses which both have the value 0: “Our society must be gradually improved by reforms”, and “Our present society must be valiantly defended against all subversive force”. We excluded the “Don’t know” category from the analyses².

¹ For the detail, see table A1 in the appendix.

² We performed similar analyses including the “Don’t know” category within the null value of the variable, which yielded similar results. These results can be obtained from the authors upon request.

Insert table 1 around here

Overall, only a small number of the respondents declare they are revolutionary, around 6.0%, but there are great differences across the Western European nations (table 1) we studied. France is the most revolutionary country, with a proportion of 10.6 percent of respondents. Denmark has the lowest proportion of revolutionary, with 1.4 percent. Interestingly, we observe an increase in revolutionary attitudes over time, especially in 2008. Actually, the mean proportion of revolutionary respondents went from 4.5 % in 1990 to 8.0 % in 2008. This trend is observed for every country in our sample, except for Sweden, in which the proportion slightly decreased. Iceland displays the highest increase: going from 3.2 % in 1990 to 17.0 % in 2008.

4.2 Explanatory variables

4.2.1. Identifying winners and losers

To test our three hypotheses, winners and losers have to be identified through two types of information. Firstly, we identify the respondents' preferred political party. To do so, we follow Anderson and Guillory (1997), by coding the respondents' political preferences as a first step from their potential voting choice.³ However, many respondents refuse to respond or simply do not know how they'll vote yet. If this occurs, we use the party which appeals them the most as an indicator of their political preference⁴. We consider the remaining respondents -less than 1% of the sample- as being without partisan preferences.

Secondly, we have collected data on the ruling parties of every country in the study at the date of the interview. Thanks to this information, we identify whether individuals are electoral

³ The question is: « If there was a general election tomorrow, which party would you vote for? »

⁴ The question, « Which party appeals to you most? », was asked to people who answered « don't know » to the previous question.

losers or electoral winners by contrasting the national ruling party with their preferred party. Thus, individuals whose preferred party is not part of the national government are considered electoral losers. Besides, among the winners, we distinguish people supporting the leading parties from people supporting the other parties in a coalition government to take into account different levels of electoral gain. A party is considered leader of the coalition when it is part of the coalition and has got the highest proportion of seats at the national assembly.

Insert table 2 around here

The percentage of respondents who support the ruling party does not make up the majority (table 2). Around 30.7% of respondents identified as their most preferred party a member of the national coalition, among which 21.2% chose the leading party of the coalition government and 9% another party of the coalition. Interestingly, compared to the beginning of the 90s, in 2008 the percentage of support for governmental parties' decreased by 2.1 per cent, and the gap is even greater in terms of support for the leaders of the coalition government (5.5 per cent). Therefore, the increase in the number of losers may be responsible for the recent increase in revolutionary attitudes.

Descriptive data reveal that the proportion of revolutionary attitude is greater amongst individuals whose preferred party does not participate in government (6.4%) and lower for people whose preferred party is the leading party of the national coalition or another party in the government (3.2% and 3.5% respectively). These descriptive results are consistent with our hypothesis (H1) that the support of revolution emerges among the losers. However, a reverse causal mechanism would also make sense. Indeed, respondents who advocate for a revolution may simply be unlikely to vote for incumbent parties because such parties are typically less revolutionary than opposition parties. In other words, being an electoral loser

may be the consequence - and not the cause - of one's political extremism. To minimize this reverse causality concern in our multivariate analyses, we control for both respondent extremism and party radicalism (see below). Hence, we are able to test whether loosing affects revolutionary attitude independently from one's level of political extremism and radicalism.

In addition, we collected data on the time spent since the current ruling party has overseen the government. This information enables us to take into account the impact of time on the revolutionary attitude according to the partisan preference of the respondent. Whatever this preference, the length of time in power may lead to a ruled fatigue: the adoption of a revolutionary attitude may increase with the duration of the same party in charge of national government. But the impact of time should be differentiated depending on respondent preference: only respondents whose preferred party does not take part in national government should be clearly more revolutionary when the duration of the government increases. In contrast, we have no particular expectation about the respondent who does not have partisan preferences or whose preferred party is taking part into the national government.

4.2.2. Measuring the probability to win in the future

To test H2 we need to measure the perceived probability of a party winning an election in the future. This has been estimated using its past record in charge, following Blais and Gélinau (2007). We assumed that if a party never held government or did not hold government for a long period of time, its supporters tend to view the electoral game as rigged and lower their expectations of winning in the future⁵. In our tests, we use two types of indicators for this probability factor.

⁵ Actually, people may measure their chances of winning in two distinct ways. Firstly, a "winning" outcome may be attributed a probability that is independent from past outcomes – as per an unloaded dice: the chances of getting a "1" is not affected by the time since the last "1" outcome. Or, people may adapt their perceived probability of winning according to past outcomes – that is, they see the election as a loaded dice: the more

Firstly, given the partisan preference defined above, for each respondent we create three dummy variables indicating if their preferred party is currently in government, has already held government, or has never held government. In the case of alliance or merge between parties, we consider that the party has participated into the government if one its component did so in the past. In the case of parties that separate into different entities, we consider that those entities have participated in government if the parties did so in the past.

We expect that a revolutionary attitude strongly emerges among individuals who intend to vote for a party which has never held government. Table 3 indicates that 22.6% of the respondents prefer a party which is not currently in charge but was in the past, whereas 15.1% prefer a party which has never held government. It is worth noting that support for parties which have never acceded to government did not fundamentally change between 1990 and 2008 (table 3). Therefore, whatever the impact of this variable on revolutionary attitudes, we exclude the idea that an increase in revolutionary attitudes is essentially due to an increase in support for parties that have never ruled.

An alternative way to measure the perceived chances of winning would be to use data on the electoral success of the party at the next election. Yet, the next electoral outcome may be highly different from what people expected it to be at the time the answered to the survey. To capture this, we use an alternative measure of the perceived chances to win in the future using the EVS data as an electoral poll. For each party, we use the percentage of respondents in the country sample preferring the party. In contrast of the past electoral success, this measure does not take into account the effect of the electoral system on the probability to win, but this gives a more up-to-date indication of the popularity of the party in the public opinion. We expect revolutionary attitudes to be negatively associated with this variable among supporters of the party.

frequent the “1” outcomes in the past, the more chance there is of the dice being loaded in favour of “1”. Our variable measures the perceived probability of winning only for the latter case.

Insert table 3 around here

4.2.3. Measuring the extent of power-sharing among democracies

Finally, to test H3 we use two measures of the political constraints on the winners that capture distinct dimensions of power-sharing: the first captures the *de facto* level of power-sharing inside the national assembly, while the second captures the *de jure* (i.e. due to institutional rules) level of power-sharing outside the national assembly. The first is the “legislative fractionalization index” (Beck et al. 2001) which measures the probability of two randomly picked seats in the assembly being held by two different parties. The index varies from 0 – all seats held by the same party – to almost 1 – each seat held by different parties⁶. We assume that the parties that are not in power lose less power in the case of a fractionalized assembly for two reasons. Firstly, their relative loss of power is lower because the winners are less powerful - they must share their power with other parties. Secondly, opposition party may get more impact on legislative decisions in the case of fractionalized assemblies. Indeed, legislative fractionalization is a core feature of consensual democracies, in which decision-making is typically more inclusive than in majoritarian democracies (Lijphart 2012). Consequently, we expect that the greater the fractionalization of the assembly the lower the revolutionary attitudes among the “losers”. In our sample (table 4), the average value of the legislative fractionalization is 0.7 with very slight variations over time.

Insert table 4 around here

⁶ The exact formula of the index is $1 - (\% \text{ seats held by party A})^2 - (\% \text{ seats held by party B})^2 - \dots$

The second indicator is Schmidt's index of veto points (Armingeon et al. 2013) which captures the institutional constraints on the winners outside the national assembly⁷. The index is the sum of six dummy variables, each one indicating the presence of an institutional veto point: membership of the European Union, low degree of centralization of the state, difficulty of amending the constitution, high degree of bicameralism, central bank independence and frequent referenda. Note that, unlike legislative fractionalization, institutional constraints reduce the power of governments, but do not necessarily increase the power of parties that are not members of the government coalition. Some institutions, such as federalism, bicameralism and referenda, potentially increase the influence of opposition parties.

The variable goes from 0 – absence of constraint – to 6 – strong constraints on the government. In our sample (table 4), we observe quite a low index with an average of 2.3. But the index is increasing over time, from 1.7 in the first EVS wave to 2.7 in the last one.

Because institutional constraints reduce the level of political power at stake during the elections, we expect that the greater the number of veto points there are in a country the lower the revolutionary attitude among the “losers”. The variation in the number of veto points over time is therefore not a cause of the recent increase in revolutionary attitudes.

4.3 The control variables

To explain one's probability of displaying revolutionary attitudes, we also control for three groups of factors. Firstly, as discussed previously, we control for both the individual level of extremism and party radicalism to handle the issue of reverse causality. The level of extremism is captured by controlling for the respondent's ideological position on a categorical left-right scale going from 1 to 10. This variable ensures us that the revolutionary attitude stems from being ruled by a given party, regardless of the ideological extremism of

⁷ This measure covers all countries and years required for the study, but does not mention which veto points are controlled by the same players. This could decrease de facto their number.

respondents. Since this variable could be too closely related to their partisan preference, we provide two estimates: one with and one without this information to make sure that it does not alter the outcomes. Party radicalism is captured by a dummy variable indicating whether the preferred political party is a radical party, according to the classification provided by Rooduijn and Burgoon (2017) - based on Mudde (2007) and March (2011). This variable allows taking into account the reverse causal relationship that people with a revolutionary attitude support radical parties which are less likely to win elections than mainstream parties. Secondly, we control for individual variables which have been shown to affect revolutionary attitudes: gender, age, education and income level, religion, occupational and marital status (MacCulloch 2003, 2004, 2005, MacCulloch and Pezzini 2007, 2010).

The third group of variables measures country level factors which have already been proven relevant. The macroeconomic situation is described by three measurements. The first macroeconomic variable is the GDP per inhabitant expressed in purchasing power parity, which should decrease the likelihood of revolutionary attitudes (MacCulloch 2003, 2004, MacCulloch and Pezzini 2010). The second is the growth of the GDP in volume which should also decrease the percentage of revolutionary attitudes (MacCulloch 2004, MacCulloch and Pezzini 2010). Finally, the amount of public spending as a percentage of the GDP should diminish the chances of displaying revolutionary attitudes (MacCulloch 2004). We introduce fixed effects by country in order to capture some country-related factors that are not captured by other explanatory variables. We also introduce fixed effects associated with the waves of the ESV survey.

Finally, we use a *probit* model to estimate the coefficients. To eliminate the potential heteroscedasticity related to the country and date, we correct the standard errors using the cluster method (see Cameron and Triverdi 2005).

5. Empirical results

Before detailing the estimates for our three hypotheses separately, there follows some general comments about our results.

5.1 General comments

The estimates related to our three hypotheses are displayed in table 5 for H1, table 6 for H2 and table 7 for H3. Before discussing these results, it is worth discussing the general characteristics of our empirical outcomes.

In table 5, the first column (model A) simply depicts the baseline model in which none of our hypotheses are tested. Thus, this specification contains only control variables. Its explanatory power is satisfying with a pseudo- R^2 of 0.10. Adding our variables of interest does not deeply alter the significance thresholds and coefficients of any of our control variables and slightly increases the pseudo- R^2 .

Symmetrically, our variables of interest are not impacted by the control variables, especially the political self-placement of the respondents. In the general specification where we simultaneously introduce all variables related to our three hypotheses (table A2 in the appendix), the associated coefficients are not deeply impacted by the exclusion or integration of the political self-placement and the party radicalism variables. For reasons to do with convenience, this conclusion is only detailed for the general tests (table A2) although it is also confirmed for each hypothesis separate tests, for each specification proposed in this article.

Furthermore, the table A2 – in the appendix – confirms that the simultaneous test of our three hypotheses does not alter the conclusion we made subsequently about each hypothesis. Given the constraints related to introduction of potential overlapping of the variables related to each hypothesis, we prefer to discuss the separate tests instead of the general test which restrains us in our choice of variable of interest.

The coefficients associated with control variables are in line with the literature. As regards ideological position, people are significantly less revolutionary when moving away from the extreme left – which is congruent with what MacCulloch (2003) find. Besides, people whose preferred party is radical have a significantly higher probability of displaying a revolutionary attitude. Moreover, most individual socio-demographic variables produce results which are consistent with previous studies (MacCulloch 2003, 2004, 2005, MacCulloch and Pezzini 2010): female gender, religious commitment, age and earning significantly decrease the likelihood of being revolutionary, and being unemployed significantly increases revolutionary attitudes. Also, in our models, level of education decreases the probability of being a revolutionary whereas the link between education and revolutionary attitudes is unclear in the literature: some studies found it to have a positive impact (MacCulloch 2003, 2005), others insignificant (MacCulloch and Pezzini 2010) and still others U-shaped impact (MacCulloch 2004).

Given the stability of the estimated coefficients of the control variables, we decide thereafter to only present our variables of interest and the political self-placement in the tables in order to simplify the tables and presentations. Detailed results can be obtained from the authors upon request.

Our main concern is about the control variables which depict the macroeconomic situation of the respondent. Indeed, there is a potential multicollinearity across these variables and between these and the fixed effects related to the years and countries. When we simultaneously introduce the three macroeconomic variables (using specification A in table 5), both spending and the GDP per capita are significant and have coefficient with a positive sign. Of these three variables, only the coefficient of the index of public spending variable remains significant if we exclude one or the two other variables. By contrast, the coefficient associated with GDP growth is significant (and positive) only in the baseline specification

whereas it is not when excluding one or two of the two other variables. And the GDP per inhabitant has a significant coefficient when the variable is included in the specification with the index of public spending, the coefficient is not significant otherwise. Yet, the exclusion of sets of dummy variables indicating the nation and the EVS waves leads to different conclusions. Without the two sets of fixed effects, only GDP growth has a significant coefficient which is negative and more in line with expectations. The two other variables have an insignificant coefficient. Consequently, it is difficult to disentangle the effects of the macroeconomic context on the revolutionary attitude. This is the reason why we prefer not to comment on the outcome related to this information. However, the question about the variable indicating macroeconomic context has no impact on our variable of interest. Regardless of the variables introduced in the specification, this does not deeply alter our conclusion about the tests of our three hypotheses.

In the same vein, estimating the models for each of the three waves of EVS instead of using the overall sample leads to similar conclusions about the interest variables. Our results hold true in each wave subsample.

Insert table 5 around here

5.2 Majority rule hypothesis

Table 5 details the estimations results for the tests of H1. Specifications B and C in table 5 display the tests of the relationship between the winning/losing status of respondents and their revolutionary attitude. In specification B, we only introduce the dummy variable indicating whether the preferred party of the respondent is currently involved in national government. And in specification C, we introduce the distinction about whether the preferred party is the leader of the national coalition or is another part of the coalition. In these specifications, we

introduce a dummy variable accounting for respondents having no partisan preferences. Hence, the baseline reference is people whose preferred party belonging to opposition. It is noteworthy that in these three specifications all the coefficients are significant at the 5% threshold. The conclusions converge strongly with our predictions. When the preferred party of the respondent takes part in national government regardless of its position in it, the probability of being a revolutionary is lower (B). More precisely, when the preferred party is involved in national government -compared to the situation where the preferred party belongs to governmental opposition- respondents face a 0.02 diminution of their probability of being revolutionary. The impact is similar for respondent without partisan preference. The effect is the same with regard to the role of the party played within the national coalition (specification C): A simple test of equality indicates that the three estimated coefficients are not different (even at the 10% threshold). It is illustrated by the figure 1 that depicts the predicted probability according to the situation of the preferred party. The 5% confidence intervals show there is no difference at all across respondents without preferred party, those whose preferred party is the leader of the government coalition and these whose preferred party simply belongs to the government coalition. And the highest probability is reached by the respondent whose preferred party is not involved to the government coalition.

Moreover, respondents with no partisan preferences are also less revolutionary compared to respondents whose preferred party is in opposition. This outcome is not surprising since the lack of partisan preference could imply a general indifference toward politics and a status-quo position regarding changing the political system. By contrast, respondents who have a preference for a party which is not represented in the national government are more revolutionary.

Specifications D and E in table 5 are related to the additional test of H1 by analysing the effect of the time since the ruling party has been in government on revolutionary attitudes.

Model D shows that there is generally no significant relationship between time in power and revolutionary attitudes. But model E shows that this relationship interacts, yet a low level of significance ($p < 0.10$), with the status of people's preferred party. As expected, the effect of time on revolutionary attitudes is lower for people whose preferred party is involved in the national government. This supports the hypothesis of an effect of time being governed by the same party on losers' attitudes.

To sum up, the *majority rule* hypothesis receives empirical support: people are significantly more prone to be revolutionary if their preferred party is part of the opposition. This effect is greater when an unwanted incumbent has been in charge for a long time.

Insert table 6 around here

5.3 Periodic elections hypothesis

Table 6 details the tests of H2: the relationship between the revolutionary attitude and the perceived probability of winning in the future. To clarify the comments, in these tests we do not make any distinction as regards the role played by the preferred party (leader or regular member of the coalition government).⁸ In specification I, this probability is approximated by whether the preferred party has ever led the national government. As expected, it shows that people who support a party which has never led government are significantly more prone to be revolutionary. Compared to the rest of the sample and the respondents without partisan preferences, having never been involved in national government increases the probability of being revolutionary by 0.02.

In specification II, we introduce two differences by adding two other dummy variables: among the preferred parties which have already led government, we distinguish the parties

⁸ This is also because this question is more linked to H1, the hypothesis dedicated to the majority rule.

that are currently leading government from the parties that are not currently leading government but did so in the past. Hence, the baseline reference is now people whose preferred party has never been involved in government. This new specification confirms our first outcome and those related to H1. In line with H1, respondents whose preferred party is currently overseeing government are less revolutionary. In line with H2, both people whose preferred party is currently in charge and people whose preferred party was in charge in the past are less revolutionary than people who support a party which has never ruled. The first group of respondents experiences a 0.03 decreasing of his probability, and the second a 0.01 decreasing compared to respondent whose the preferred party has never been involved in national government. The predicted probabilities (and the confidence interval of five percent) from the respondent categories drawn in figure 2 give a better view of the effects by ranking the categories. The respondents whose preferred party is currently leading government have the lowest predicted probability of 0.041 which is significantly different from the three others at 5% threshold. The predicted probability of respondents whose preferred party has already led government is 0.059; the predicted probability of respondents without partisan preference reaches 0.068; and the highest probability is for respondents whose preferred party has never been involved in government with 0.072. But we observe a slight overlapping of the 5% confidence intervals between the first category and the two others, and a large overlapping for the respondents without partisan preference and respondents whose the preferred party never ruled the nation, meaning there is no significant difference of predicted probability between them. As regards H2, these results may actually be interpreted as the diminishing effect of the hope of winning in the future on revolutionary attitudes.

Finally, in specification III, we analyse whether the predicted share of votes of the party, measured by the share of respondents preferring the party in the EVS, affects revolutionary attitudes. Contrary to our expectations, this new variable does not significantly affect people's

probability of being a revolutionary. Besides, in specification IV, we find no significant interaction between this variable and the losing/winning status of respondents.

To sum up, the *periodic elections* hypothesis receives mixed empirical support: people who support a party that never led government are more prone to be revolutionary, but, there is no relationship between revolutionary attitudes among the losers and the popularity of their preferred party in the public opinion at the time of the survey.

Insert table 7 around here

5.4 Power-sharing hypothesis

Table 7 details the tests of H3: the relationship between constraints on government and revolutionary attitude as measured at the national level. Specifications 1, 2 and 3 test alternatively and then simultaneously whether the level of legislative fractionalization and the number of veto points affect the probability of being revolutionaries, without taking into account their partisan preference. Specification 1 shows, as expected, that the level of fractionalization decreases the likelihood of a revolutionary attitude: a one-unit increase of fractionalization index leads to a decreasing of 0.13 of the probability of being revolutionary. The effect is illustrated by the figure 3.

Specification 2 shows, contrary to our expectations, that there is no significant relationship between the number of veto points and peoples' revolutionary attitudes. These results hold when both variables are simultaneously included (specification 3).

Specifications 4 and 5 test whether the link between constraints on government and revolutionary attitudes depends on respondents' partisan preference. In specification 4, we test the interaction between the level of fractionalization and the winning/losing status of people's preferred party. The coefficient of the level of fractionalization is still negative and

becomes significant at a lower threshold ($p < 0.01$) than in specifications 2 and 3, and the interaction term is insignificant. Specification 5 displays somehow similar results for the number of veto points. While it was not significant in the previous specifications, the negative relationship between the number of veto points and probability of being revolutionary becomes significant when adding the interaction term – of which the coefficient does not attain statistical significance. Overall, these last two results indicate that institutional constraints diminish revolutionary attitudes of both electoral winners and losers, contrary to our expectations.

To sum up, we find mixed empirical evidence for the *power-sharing* hypothesis. We demonstrate that the higher the level of power-sharing, especially inside the national parliament, the lower revolutionary attitudes. Yet, contrary to our expectations, this diminishing effect of power-sharing institutions on revolutionary attitudes is true for both political losers and winners.

6. Conclusion

The recent literature on internal conflicts has casted serious doubt on the classic view that democratic institutions produce peaceful nations (Muller and Weede 1990, Fearon and Laitin 2003, Hegre 2014, Vreeland 2008, Gleditsch and Ruggeri 2010). In contrast, the present study re-brands the claim that democratic institutions are better able at limiting the appeal for revolts. We have argued that, while democracy may create more opportunities to revolt, it nonetheless performs better at limiting political grievances. Based on democratic theory, our study found empirical support for three mechanisms by which democracy may reduce revolutionary attitudes: firstly, being part of the losers of a political system, i.e. supporting a party that is excluded from government, increases revolutionary attitudes. Secondly, revolutionary attitudes are more likely when respondents' preferred party has always been

excluded from government. Thirdly, revolutionary attitudes can be reduced if the parliament is strongly fractionalized and if institutional constraints limit the power of the ruler. These results support the view that *majority rule*, *periodic elections* and *power-sharing* institutions, which are definitional features of democratic systems, all play a role in decreasing revolutionary attitudes.

These results are consistent with what we know about political grievances generated by weak political rights (Gurr 2000, Elbadawi and Sambanis 2002, Collier and Hoeffler 2004, MacCulloch and Pezzini 2010). Our study helps us to identify more effectively the sort of grievances that trigger revolutionary attitudes. In fact, our results indicate that revolutionary attitudes are not only driven by frustrations about institutional rules but also by frustrations about the consequences of the rules. This should be true in autocracies as well as in democracies, implying that, in this case, the difference between democracy and autocracy is not of nature but of degree: the democratic system is better at managing political losers (Anderson et al. 2005).

Moreover, this paper has shed some light on the increase of revolutionary attitudes in European democracies since 1990. Over the course of nearly twenty years, the parties in charge have governed, on average, with about 10% fewer votes than previously (Le Gall and Magni-Berton 2016), which can also be observed, to a lesser degree, in EVS surveys. The increasing number of losers may explain the increase in revolutionary attitudes. However, the number of parties which have never held government has not increased and the level of power-sharing among democracies is quite stable. Therefore, these factors are not responsible for the considerable increase in revolutionary attitudes.

Finally, our results will hopefully contribute to a better understanding of the variance in revolutionary attitudes among European democracies. An example of a less revolutionary country is Denmark, which has a highly fractionalized parliament, and a long tradition of

minority governments which need the support of other parties to work effectively. Alternation of power is also common. These factors clearly minimize the number of losers. Similar situations – in the Netherlands, Finland or Austria – are associated with low degrees of revolutionary attitudes. However, when coalitions are too large, alternation of power can be more difficult to achieve, which may lead to an increase in the intensity of revolutionary attitudes among the losers, as occurred in Iceland in 2008. Finally, in majority and plurality systems – such as France or United Kingdom – there are many losers, which explains their high level of revolutionary attitudes.

7. Appendix

7.1 Details of our sample by country and EVS waves

Insert table A1 here

7.2. Ancillary estimate

Insert table A2 here

8. References

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Table 1. Proportion of revolutionaries per country according to the 3 EVS waves

	EVS waves				
	%	1990-1993	1999-2001	2008-2010	Overall
Austria		2.17	2.04	4.74	3.00
Belgium		4.08		6.54	5.03
Germany		6.06		11.02	7.96
Denmark		1.60		1.23	1.37
Spain		5.53		7.77	6.26
Finland		2.55		3.00	2.85
France		4.28		14.62	10.62
Great Britain		5.10		10.25	7.67
Ireland		3.71		10.36	6.65
Iceland		3.19		16.97	10.44
Italy		7.13	4.14	8.87	6.50
Netherlands		1.88		3.97	3.15
Norway		2.40		4.22	3.27
Portugal		4.65		11.42	8.60
Sweden		6.05		5.42	5.73
Total		4.49	3.24	7.95	5.95
<p><i>A respondent is considered a revolutionary if he/she answers “The entire way our society is organized must be radically changed by revolutionary action” to the question “There are three basic kinds of attitudes vis-à-vis the society in which we live in. Please choose the one which best describes your own opinion.” The non-respondents are excluded from the studied sample.</i></p>					

Table 2. Party preference of respondents per EVS waves

The most preferred party of the respondent is ...	EVS Waves Number (%)			
	1990-1993	1999-2001	2008-2010	Overall
... one of the parties in the coalition government	7,140 (31.55)	1,169 (33.19)	6,182 (29.41)	14,581 (30.72)
... the leading party in the coalition government	5,469 (24.17)	626 (17.77)	3,918 (18.64)	10,103 (21.23)
... another party in the coalition government	1,671 (7.38)	543 (15.42)	2,264 (10.77)	4,478 (9.49)

Table 3. Preferred party of the respondents and party's record in government

The most preferred party of the respondent ...	EVS Waves Number (%)			
	1990-1993	1999-2001	2008-2010	Overall
... is currently in charge of government	7,140 (31.55)	1,169 (33.19)	6,182 (29.41)	14,581 (30.72)
... is not currently in charge but was in past	5,110 (22.57)	766 (21.75)	4,794 (22.81)	10,670 (22.62)
... has never been involved in government	3,527 (15.58)	301 (8.55)	3,313 (15.76)	7,141 (15.14)

Table 4. Division of power per wave

	EVS Waves			Overall
	Mean			
	1990-1993	1999-2001	2008-2010	
Legislative fractionalization	0.73	0.74	0.72	0.72
Schmidt index of veto points	1.73	3	2.67	2.27

The mean is the simple average value of the national variable

Table 5. Estimates of the probability of being revolutionary: Majority rule hypothesis (H1)

Probit model	A		B		C		D		E		
	coef.	s.e.	coef.	s.e.	coef.	s.e.	coef.	s.e.	coef.	s.e.	
no partisan preference			-0.25**	0.11	-0.25**	0.11			-0.24**	0.11	
preferred party involved in nat. Gvt			-0.27***	0.039					-0.23***	0.048	
preferred party is the leader of Coalition Gvt					-0.27***	0.045					
preferred party is another party in the Coalition Gvt					-0.26***	0.045					
Years since current coalition has governed							0.00046	0.0018	0.0022	0.0016	
Years if preferred party is involved									-0.0044*	0.0024	
left-right self-placement (1 as reference):											
2	-0.20***	0.055	-0.20***	0.055	-0.20***	0.055	-0.20***	0.055	-0.20***	0.055	
3	-0.54***	0.076	-0.53***	0.074	-0.53***	0.074	-0.54***	0.076	-0.54***	0.074	
4	-0.78***	0.067	-0.78***	0.066	-0.78***	0.066	-0.78***	0.067	-0.78***	0.066	
5	-0.64***	0.060	-0.65***	0.063	-0.65***	0.063	-0.64***	0.060	-0.65***	0.063	
6	-0.70***	0.067	-0.70***	0.069	-0.70***	0.069	-0.70***	0.067	-0.70***	0.069	
7	-0.68***	0.090	-0.68***	0.094	-0.68***	0.094	-0.68***	0.090	-0.68***	0.094	
8	-0.70***	0.071	-0.70***	0.069	-0.70***	0.069	-0.70***	0.071	-0.70***	0.070	
9	-0.60***	0.094	-0.59***	0.093	-0.59***	0.093	-0.60***	0.094	-0.59***	0.093	
10	-0.52***	0.086	-0.50***	0.082	-0.50***	0.081	-0.52***	0.086	-0.50***	0.082	
do not know, refuse or missing	-0.59***	0.062	-0.62***	0.064	-0.62***	0.064	-0.59***	0.062	-0.62***	0.063	
Preferred party is a radical one (1 if yes)	0.25***	0.046	0.20***	0.047	0.20***	0.047	0.25***	0.046	0.19***	0.045	
Growth of gdp (in volume)	0.0089	0.0084	0.0085	0.0082	0.0081	0.0082	0.0084	0.0082	0.0068	0.0079	
Public spending on gdp (%)	0.029***	0.0068	0.028***	0.0068	0.028***	0.0068	0.029***	0.0074	0.027***	0.0074	
gdp per capita (1,000)	0.019***	0.0043	0.020***	0.0044	0.020***	0.0044	0.018**	0.0073	0.017**	0.0068	
gender (1 if female)	-	0.072***	0.027	-0.071**	0.028	-0.070**	0.028	-0.072***	0.027	-0.070**	0.028
Matrimonial status (0 as reference)											
1	0.11**	0.050	0.11**	0.051	0.11**	0.051	0.11**	0.050	0.11**	0.051	
2	-0.024	0.062	-0.022	0.061	-0.022	0.061	-0.024	0.062	-0.023	0.061	

3	0.17**	0.075	0.17**	0.076	0.17**	0.076	0.17**	0.075	0.16**	0.076
4	0.088	0.055	0.084	0.055	0.084	0.055	0.088	0.055	0.085	0.055
5	0.022	0.062	0.025	0.062	0.025	0.062	0.022	0.062	0.025	0.062
Number of children (none as reference)										
1	-0.069	0.051	-0.064	0.051	-0.064	0.051	-0.069	0.051	-0.065	0.051
2	-0.081	0.053	-0.078	0.053	-0.078	0.053	-0.081	0.053	-0.077	0.053
3	-0.068	0.066	-0.056	0.066	-0.056	0.066	-0.068	0.066	-0.055	0.066
4	-0.030	0.080	-0.023	0.081	-0.022	0.081	-0.030	0.079	-0.022	0.081
5 and more	-0.025	0.12	-0.022	0.12	-0.022	0.12	-0.024	0.12	-0.018	0.12
age education stops ("no education" as reference):										
younger than 14 years	-0.15	0.11	-0.15	0.10	-0.15	0.10	-0.15	0.11	-0.15	0.10
bet 15 and 17 years	-0.17*	0.093	-0.18**	0.089	-0.18**	0.089	-0.17*	0.094	-0.18**	0.090
bet 18 and 20 years	-0.21**	0.10	-0.22**	0.097	-0.22**	0.097	-0.21**	0.10	-0.22**	0.097
older than 20 years	-0.29**	0.12	-0.31***	0.11	-0.31***	0.11	-0.29**	0.12	-0.30***	0.11
do not know, refuse or missing	-0.10	0.11	-0.12	0.10	-0.12	0.10	-0.099	0.11	-0.11	0.10
age ("less than 24 years" as reference):										
	-				-				-	
bet 25 and 34 y	0.085***	0.029	-0.089***	0.029	0.087***	0.028	-0.085***	0.029	0.089***	0.029
bet 35 and 44 y	-0.13***	0.041	-0.14***	0.040	-0.13***	0.040	-0.13***	0.041	-0.14***	0.040
bet 45 and 54 y	-0.19***	0.050	-0.19***	0.050	-0.19***	0.050	-0.19***	0.050	-0.19***	0.050
bet 55 and 64 y	-0.29***	0.057	-0.29***	0.055	-0.29***	0.054	-0.29***	0.057	-0.29***	0.055
older than 64 y	-0.42***	0.071	-0.41***	0.069	-0.41***	0.068	-0.42***	0.071	-0.42***	0.069
do not know, refuse or missing	-0.40*	0.21	-0.38*	0.21	-0.38*	0.21	-0.40*	0.21	-0.38*	0.21
employment status ("full time" as reference):										
part time (less than 30h/week)	0.034	0.031	0.035	0.031	0.035	0.031	0.034	0.031	0.034	0.030
self employed	0.16***	0.035	0.16***	0.035	0.16***	0.035	0.16***	0.035	0.16***	0.035
retired/pensioner	-0.042	0.043	-0.038	0.043	-0.038	0.043	-0.042	0.043	-0.039	0.043
housewife	-0.018	0.039	-0.0099	0.039	-0.010	0.039	-0.018	0.039	-0.010	0.039
student	-0.091	0.063	-0.089	0.062	-0.088	0.062	-0.090	0.063	-0.089	0.062
unemployed	0.15***	0.050	0.14***	0.050	0.14***	0.050	0.15***	0.050	0.14***	0.050

other	0.085	0.068	0.099	0.066	0.099	0.066	0.085	0.068	0.100	0.067
do not know, refuse or missing	-0.22	0.16	-0.22	0.17	-0.22	0.17	-0.22	0.16	-0.22	0.17
Income ("low" as reference):										
medium	-0.081**	0.036	-0.077**	0.037	-0.076**	0.037	-0.081**	0.036	-0.078**	0.036
high	-0.19***	0.042	-0.19***	0.041	-0.19***	0.041	-0.19***	0.042	-0.19***	0.041
do not know, refuse or missing	0.013	0.039	-0.00071	0.039	0.000090	0.039	0.013	0.039	-0.0019	0.039
religion ("none" as reference):										
roman catholic	-0.21***	0.033	-0.19***	0.029	-0.19***	0.029	-0.21***	0.033	-0.19***	0.029
protestant	-0.26***	0.055	-0.25***	0.049	-0.25***	0.049	-0.26***	0.055	-0.25***	0.049
other	-0.15**	0.068	-0.13*	0.069	-0.13*	0.069	-0.15**	0.068	-0.13*	0.069
Constant	-2.76***	0.45	-2.61***	0.46	-2.62***	0.46	-2.71***	0.52	-2.48***	0.53
Country fixed effects	yes									
Time fixed effects	yes									
N	40,121		40,121		40,113		40,121		40,121	
Pseudo-R ²	0.10		0.10		0.10		0.10		0.10	
Log pseudolikelihood	-8,082		-8,031		-8,028		-8,082		-8,029	
<p>The standard-errors are corrected using the cluster method related to both the country and the year of the survey. ***, **, * respectively mean the coefficient is significant at 1%, 5%, 10%.</p> <p>A respondent is considered a revolutionary if he/she answers “The entire way our society is organized must be radically changed by revolutionary action” to the question “There are three basic kinds of attitudes vis-à-vis the society in which we live in. Please choose the one which best describes your own opinion.” The non-respondents are excluded from the studied sample.</p>										

Table 6. Estimates of the probability of being revolutionary: Periodic elections hypothesis (H2)

Probit model	I		II		III		IV	
	coef.	s.e.	coef.	s.e.	coef.	s.e.	coef.	s.e.
No partisan preference	-0.18*	0.11	-0.033	0.066	-0.25**	0.12	-0.25**	0.12
Has never been involved in gvt	0.16***	0.045	ref					
Is currently in charge of gvt			-0.31***	0.053				
Is not currently in charge but was in past			-0.12***	0.040				
Predicted votes for preferred party					-0.00031	0.0021	-0.00030	0.0023
preferred party involved in nat. Gvt					-0.27***	0.039	-0.26***	0.074
Predicted votes if preferred party involved							-0.000081	0.0038
left-right self-placement (1 as reference):								
2	-0.20***	0.055	-0.20***	0.055	-0.20***	0.054	-0.20***	0.054
3	-0.54***	0.075	-0.54***	0.073	-0.53***	0.073	-0.53***	0.073
4	-0.78***	0.067	-0.78***	0.065	-0.78***	0.065	-0.78***	0.065
5	-0.63***	0.062	-0.66***	0.062	-0.65***	0.062	-0.65***	0.062
6	-0.70***	0.069	-0.71***	0.069	-0.70***	0.069	-0.70***	0.069
7	-0.67***	0.092	-0.68***	0.093	-0.68***	0.093	-0.68***	0.093
8	-0.70***	0.073	-0.69***	0.071	-0.70***	0.069	-0.70***	0.069
9	-0.59***	0.094	-0.58***	0.092	-0.59***	0.092	-0.59***	0.092
10	-0.52***	0.088	-0.50***	0.084	-0.50***	0.081	-0.50***	0.082
do not know, refuse or missing	-0.58***	0.062	-0.64***	0.062	-0.62***	0.063	-0.62***	0.064
Preferred party is a radical one (1 if yes)	0.17***	0.051	0.18***	0.044	0.20***	0.042	0.20***	0.042
Country fixed effects	yes		yes		yes		yes	
Time fixed effects	yes		yes		yes		yes	
N	40,121		40,121		40,121		40,121	
Pseudo-R ²	0.10		0.10		0.10		0.10	
Log pseudolikelihood	-8,031		-8,027		-8,031		-8,031	
The standard-errors are corrected using the cluster method related to both the country and the year of the survey. ***, **, * respectively mean the coefficient is significant at 1%, 5%, 10%.								

A respondent is considered a revolutionary if he/she answers “The entire way our society is organized must be radically changed by revolutionary action” to the question “There are three basic kinds of attitudes vis-à-vis the society in which we live in. Please choose the one which best describes your own opinion.” The non-respondents are excluded from the studied sample.

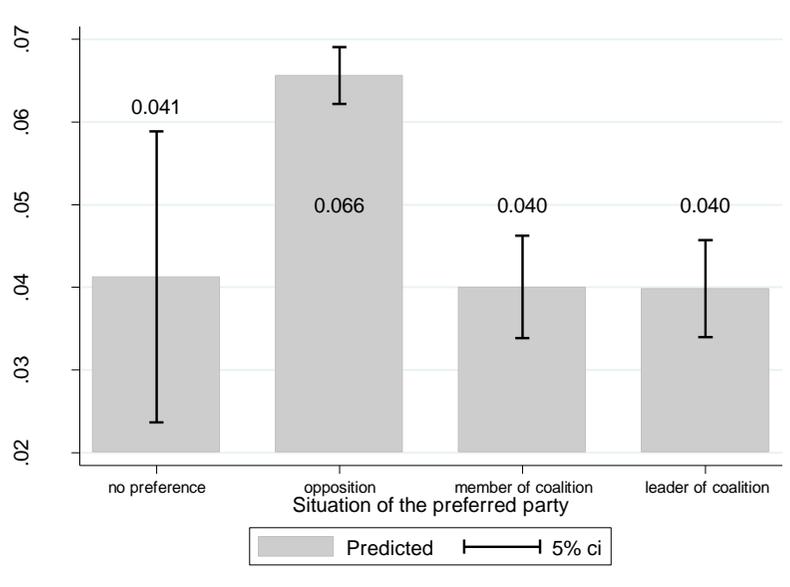
The other explanatory variables are the same as those in the specification detailed in table 4

Table 7. Estimates of the probability of being revolutionary: Power-sharing hypothesis (H3)

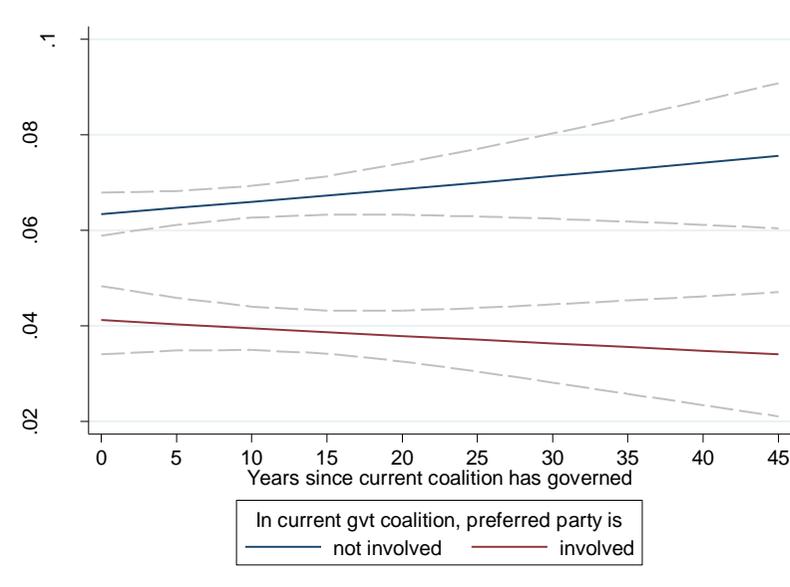
Probit model	1		2		3		4		5	
	coef.	s.e.								
Legislative fractionalization	-1.44**	0.57			-1.36**	0.61	-1.49***	0.49		
Schmidt index of veto points			-0.064	0.050	-0.036	0.044			-0.099**	0.045
No partisan preference							-0.26**	0.12	-0.25**	0.11
preferred party is involved in Gvt							-0.41*	0.21	-0.25***	0.085
Legislative fractionalization if preferred party is involved in Gvt							0.21	0.29		
Schmidt index of veto points if preferred party is involved in Gvt									-0.0070	0.033
left-right self-placement (1 as reference):										
2	-0.20***	0.055	-0.20***	0.055	-0.20***	0.055	-0.20***	0.055	-0.20***	0.054
3	-0.54***	0.076	-0.54***	0.076	-0.54***	0.077	-0.53***	0.074	-0.54***	0.072
4	-0.78***	0.068	-0.79***	0.067	-0.78***	0.068	-0.77***	0.067	-0.78***	0.065
5	-0.64***	0.061	-0.64***	0.061	-0.64***	0.061	-0.64***	0.064	-0.65***	0.062
6	-0.70***	0.067	-0.70***	0.067	-0.70***	0.067	-0.70***	0.069	-0.71***	0.069
7	-0.68***	0.091	-0.68***	0.091	-0.68***	0.091	-0.67***	0.094	-0.68***	0.093
8	-0.70***	0.071	-0.70***	0.071	-0.70***	0.071	-0.69***	0.069	-0.70***	0.069
9	-0.59***	0.094	-0.60***	0.094	-0.60***	0.094	-0.59***	0.093	-0.60***	0.091
10	-0.52***	0.086	-0.52***	0.086	-0.52***	0.086	-0.50***	0.082	-0.50***	0.080
do not know, refuse or missing	-0.58***	0.062	-0.59***	0.062	-0.58***	0.062	-0.61***	0.064	-0.63***	0.062
Preferred party is a radical one (1 if yes)	0.25***	0.047	0.24***	0.047	0.25***	0.048	0.20***	0.047	0.19***	0.051
Country fixed effects	yes									
Time fixed effects	yes									
N	40,121		40,121		40,121		40,121		40,121	
Pseudo-R ²	0.10		0.10		0.10		0.10		0.10	
Log pseudolikelihood	-8,081		-8,081		-8,076		-8,025		-8,028	
The standard-errors are corrected using the cluster method related to both the country and the year of the survey. ***, **, * respectively mean the coefficient is significant at 1%, 5%, 10%.										

A respondent is considered a revolutionary if he/she answers “The entire way our society is organized must be radically changed by revolutionary action” to the question “There are three basic kinds of attitudes vis-à-vis the society in which we live in. Please choose the one which best describes your own opinion.” The other explanatory variables are the same as those in the specification detailed in table 4

Figure 1: Predicted probability according to H1



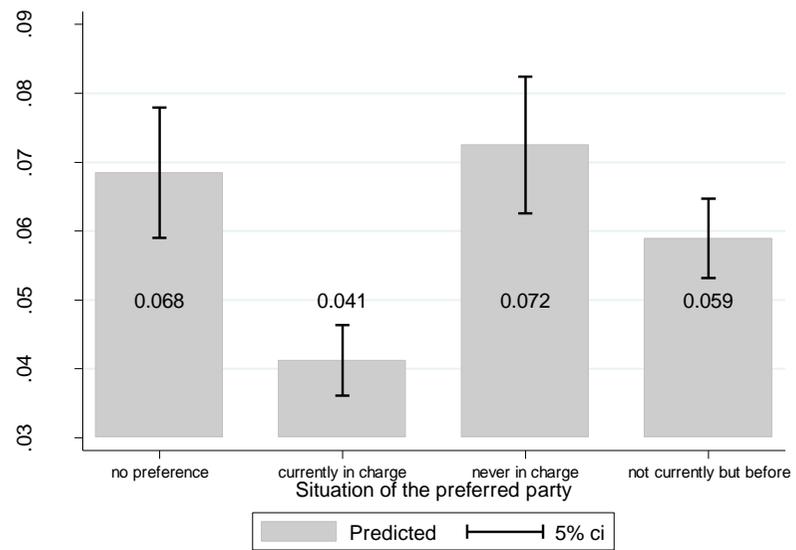
Predicted probabilities calculated with model C in table 5



The continuous line represents the predicted probabilities and the dash ones the 5% confidence intervals

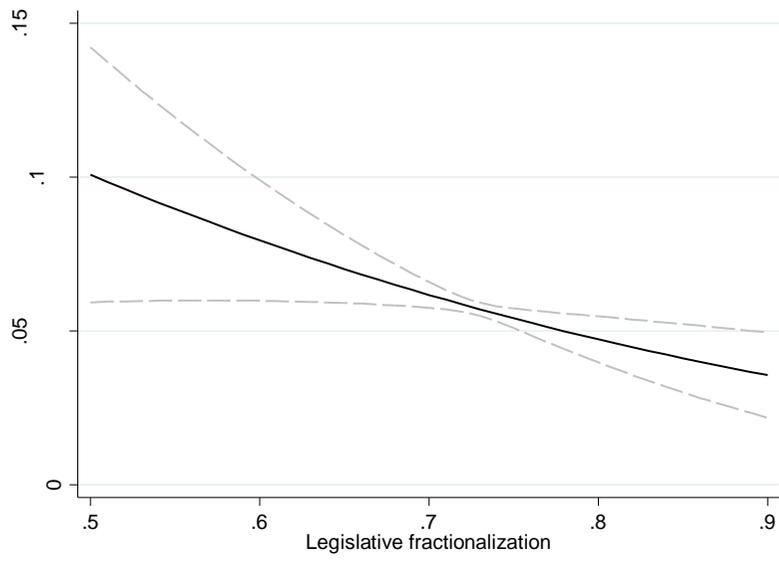
Predicted probabilities calculated with model E in table 5

Figure 2: Predicted probability according to H2



Predicted probabilities calculated with model II in table 6

Figure 3: Predicted probability according to H3



*The continuous line represents the predicted probabilities and the dash ones the 5% confidence intervals
Predicted probabilities calculated with model 1 in table 7*

Table A1. Sampling constitution

Nations	EVS waves			Total
	1990-1993	1999-2001	2008-2010	
AT	1,288	1,420	1,415	4,123
BE	2,400	0	1,498	3,898
DE	3,150	0	1,889	5,039
DK	939	0	1,466	2,405
ES	2,253	0	1,359	3,642
FI	532	0	1,010	1,542
FR	934	0	1,477	2,411
GB	1,372	0	1,365	2,737
IE	970	0	772	1,742
IS	690	0	766	1,456
IT	1,920	1,907	1,387	5,214
NL	958	0	1,486	2,444
NO	1,164	0	1,065	2,229
PT	989	0	1,383	2,372
SE	925	0	977	1,902
Total	20,484	3,327	19,345	43,156

Table A2. Estimates of the probability of being revolutionary: general test

Probit model	coef.	s.e.	coef.	s.e.
Status of the preferred party (has never ruled as reference):				
No partisan preference	-0.29**	0.12	-0.36***	0.12
leader of the coalition gvt (H1)	-0.31***	0.049	-0.28***	0.072
member of the coalition gvt (H1)	-0.30***	0.051	-0.28***	0.066
Is not currently in charge but was in past (H2)	-0.10***	0.039	-0.12***	0.044
Legislative fractionalization (H3)	-1.43***	0.49	-1.47***	0.52
Schmidt index of veto points (H3)	-0.074*	0.042	-0.029	0.028
left-right self-placement (1 as reference):				
2	-0.20***	0.055		
3	-0.54***	0.074		
4	-0.78***	0.067		
5	-0.66***	0.064		
6	-0.71***	0.070		
7	-0.68***	0.095		
8	-0.70***	0.071		
9	-0.59***	0.093		
10	-0.50***	0.084		
do not know, refuse or missing	-0.64***	0.064		
Preferred party is a radical one (1 if yes)	0.19***	0.052		
Growth of gdp (in volume)	0.020***	0.0070	0.024***	0.0075
Public spending on gdp (%)	0.027***	0.0043	0.029***	0.0052
gdp per capita (1,000)	0.029***	0.0045	0.031***	0.0044
gender (1 if female)	-0.071**	0.028	-0.087***	0.025
Matrimonial status (0 as reference)				
1	0.11**	0.051	0.075	0.056
2	-0.025	0.061	-0.0029	0.057

3	0.16**	0.075	0.19***	0.072
4	0.082	0.054	0.049	0.057
5	0.021	0.062	0.030	0.057
Number of children (none as reference)				
1	-0.067	0.051	-0.044	0.056
2	-0.082	0.053	-0.065	0.058
3	-0.061	0.066	-0.038	0.070
4	-0.024	0.081	-0.014	0.081
5 and more	-0.020	0.12	0.013	0.11
age education stops ("no education" as reference):				
younger than 14 years	-0.15	0.10	-0.16	0.10
bet 15 and 17 years	-0.18**	0.089	-0.19**	0.092
bet 18 and 20 years	-0.22**	0.096	-0.22**	0.097
older than 20 years	-0.31***	0.11	-0.29***	0.11
do not know, refuse or missing	-0.12	0.10	-0.13	0.10
age ("less than 24 years" as reference):				
bet 25 and 34 y	-0.089***	0.028	-0.067**	0.030
bet 35 and 44 y	-0.13***	0.039	-0.095**	0.038
bet 45 and 54 y	-0.19***	0.050	-0.15***	0.049
bet 55 and 64 y	-0.28***	0.055	-0.23***	0.048
older than 64 y	-0.41***	0.069	-0.34***	0.071
do not know, refuse or missing	-0.39*	0.21	-0.29	0.20
employment status ("full time" as reference):				
part time (less than 30h/week)	0.034	0.031	0.030	0.029
self employed	0.16***	0.034	0.14***	0.030
retired/pensioner	-0.035	0.043	-0.045	0.042
housewife	-0.011	0.039	-0.052	0.053
student	-0.086	0.062	-0.072	0.059
unemployed	0.14***	0.052	0.14***	0.051
other	0.094	0.064	0.092	0.062

do not know, refuse or missing	-0.22	0.17	-0.15	0.15
Income ("low" as reference):				
Medium	-0.077**	0.036	-0.10***	0.038
High	-0.19***	0.041	-0.21***	0.040
do not know, refuse or missing	-0.0049	0.039	-0.038	0.038
religion ("none" as reference):				
roman catholic	-0.19***	0.029	-0.29***	0.038
protestant	-0.23***	0.049	-0.33***	0.050
other	-0.15**	0.069	-0.25***	0.068
Constant	-1.63***	0.39	-2.40***	0.46
Country fixed effects	yes		yes	
Time fixed effects	yes		yes	
N	40,121		42,958	
Pseudo-R ²	0.11		0.08	
Log pseudolikelihood	-8,017		-8,916	
<p>The standard-errors are corrected using the cluster method related to both the country and the year of the survey. ***, **, * respectively mean the coefficient is significant at 1%, 5%, 10%.</p> <p>A respondent is considered a revolutionary if he/she answers “The entire way our society is organized must be radically changed by revolutionary action” to the question “There are three basic kinds of attitudes vis-à-vis the society in which we live in. Please choose the one which best describes your own opinion.”</p>				