# THE WINNER-LOSER GAP IN SAT-ISFACTION WITH DEMOCRACY OVER TIME

**Evidence from a Swedish citizen panel**

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# ABSTRACT

Several studies have demonstrated a gap in political support between electoral winners and losers. This research has generated a large stock of knowledge about the causes and effects of this winner-loser gap. Due to the use of cross-section survey data, however, we know little about the consistency of the winner-loser gap over time. Drawing on a unique Swedish panel survey this study investigates the stability of the winner-loser gap among Swedish voters over an electoral cycle. The analyses demonstrate a substantial consistency of the gap over time also when controlling for other determinants. The winner-loser gap seems to be a stable phenomenon rather than a short-lived election effect. The results are robust to different specifications and statistical techniques.

**Keywords:** political support; winners and losers; satisfaction with democracy; elections; Sweden

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## Introduction

One of the most established empirical findings from research on political support during the last two decades is that people who has casted a vote for a party ending up as the winner or in a winning coalition tends to report higher levels of political support than those voting for a losing party. This winner/loser-gap has been demonstrated in a wide variety of democracies displaying differences in terms of economic development, institutional arrangements, and democratic stability, both in terms of level and longevity of democracy (Anderson and Guillory 1997; Anderson et al. 2005; Anderson and Tverdova 2003; Bernauer and Vatter 2012; Blais and Gélineau 2007; Curini et al. 2012; Esaiasson 2011; Moehler 2009; Campbell 2013; Chang et al. 2014).

Most studies concerned with the winner-loser gap have focused on its *consequences* for different dimensions of political support. The fact that winners and losers all around the globe perceive the functioning of the democratic political system differently has been demonstrated in several studies. Although recent research has produced a substantial stock of knowledge about the consequences of being a loser or a winner there is one aspect of this issue that to a large extent has been overlooked in earlier research. We do not know much about *dynamics* of the winner-loser gap in political support. If losing has a negative effect on political support, what happens to this effect over time? Is the winner-loser gap a consistent political phenomenon with long-term effects or is it no more than a short-term emotionally driven election effect which will disappear as the electoral cycle rolls on?

This is the main question we set out to investigate in this paper. By taking advantage of unique data from a citizen panel this paper investigates the consistency of the winner-loser effect in Sweden over a period of almost four years. Since earlier research has – almost without exceptions – relied on pooled cross-sectional surveys covering different individuals at different points in time, we believe that both the analytical opportunities provided by the data and the results of the analyses make for an important contribution to the research on the dynamics of the winner-loser gap.

The paper is structured in the following way. We start out with a presentation of earlier research on the of the winner-loser gap and present the hypotheses that will guide the empirical analysis. In the second section we present the data used in the empirical analyses. The third section consists of the empirical analysis. We start out by applying a broad comparative perspective before zooming in on the dynamics and characteristics of the winner-loser gap in Sweden from the general election in 2010 to the spring 2014. The last section presents concluding remarks.

## The winner-loser gap in political support

The issue of how those on the losing side perceive the political system is central to democracy. In all democracies elections produces political losers, both when it comes to being represented in the political system and in the implementation of public policy. For democratic legitimacy, the way people react to political loss is critical (Anderson et al. 2005, 6; Esaiasson 2011). It is, important that, at least some, losers are supportive of the general performance of the democratic political system. Without broad support from winners *and* losers, the legitimacy of the system as such as well as for the decisions made might be threatened.

Much interest has been directed towards the relationship between electoral outcomes and political support on the individual level. Several studies have shown that being a political winner (in the sense of having cast a vote for a party that ends up on the winning side in the election) significantly increases the likelihood of being satisfied with the functioning of the political system, and vice versa for those that are losers. In the literature the winner/loser issue has been subject to different elaborations since it has been assumed that the effect of being a loser/winner has both different causes and consequences in different political contexts.

Earlier research has investigated issues such as different types of electoral systems (Anderson and Guillory 1997; Bernauer and Vatter 2012), the effect on trust (Anderson and LoTempio 2002; Holmberg 1999; Lühiste 2006), political efficacy (Anderson and Tverdova 2001), system legitimacy (Moehler 2009) and support for political reforms (Bowler and Donovan 2007). Others have investigated how the winner/loser effect is mediated by contextual and individual-level factors, such as election context (Banducci and Karp 2003; Craig et al. 2006, Esaiasson 2011), bureaucratic quality (Anderson and Tverdova 2003), policy congruence between parties and voters (Curini et al. 2012) and level of democratic experience (Chang et al. 2014; Anderson et al. 2005). Thus, the dominant research agenda has been to assess the effects of the winner-loser gap on political support – most frequently satisfaction with democracy – and investigating variables that may have a mediating impact on this effect. Most often this has been done by utilizing national and cross-national opinion polls conducted before and after elections. As a consequence we know a lot about the differences in support and trust between winners and losers at certain points in time and in different types of democracies. We also know a great deal about how these differences are mediated by institutional arrangements and individual characteristics.

The dynamics of the winner-loser gap

Since most studies have utilized cross-sectional data and compared winners and losers shortly after elections, we cannot be certain about the assumption that winning or losing actually generates satisfaction or dissatisfaction with democracy. Using cross-sectional data the best we can do is to assess the aggregated gap in support between winners and losers and to observe if this gap is present before and after the election (thus comparing winner-loser gaps consisting of different samples and individuals).

The few studies that have taken an interest in the dynamics of the winner-loser gap have approached the issue from different viewpoints. Drawing on a series of *Eurobarometer* (EB) surveys of Britain, Germany and Spain, Anderson et al. (2005) examine the difference in satisfaction with democracy over time. Their analysis shows that while there is substantial variation between countries and over time, the winner-loser gap in satisfaction with democracy seems to persist over long periods of time. Thus, they argue that the experience of losing is not a temporary disappointment with the election outcome but appears to be a lasting aspect of how voters regard the functioning of the democratic system.

It has also been shown that losing repeatedly further decreases political support among losers. Anderson and colleagues find a difference between first and second election losses on the one hand and subsequent ones on the other. The decline in support is less substantial after the first and second election but becomes more pronounced in subsequent elections, suggesting that losing significantly affects political support after the second electoral loss in a row (Anderson et al. 2005). Also, in relation to the dynamics of the winner-loser gap, Blais and Gélineau (2007) use the Canadian federal election panel study to show that eventual winners were already more satisfied with the way democracy works than the eventual losers during the electoral campaign, i.e. before the election took place. Moreover, they find a general boost in satisfaction after the election among both winners and losers (and non-voters). However, this positive effect is greater among winners.

In a recent article, Curini et al. (2012) investigate the interplay between past experience of winning and voters' policy preferences and satisfaction with democracy. The results show that winning always has a positive effect on support, but also that winning either in the recent past or in the present produces a comparable effect. And, interestingly, for repeated winners support only increases if there is a close match between their own policy positions and those of the government. If not, the effect of winning disappears. However, in a study of six new democracies experiencing government turnover in the most recent election Chang et al. show that what is most important in

terms of satisfaction with democracy is whether an individual has *any* experience from being a winner or if she is a two-time loser. Voters who have lost two consecutive elections show significantly lower levels of SWD compared to voters who have won in at least one election. Thus, losers are not necessarily less satisfied when taking into account how their winner-loser status evolved over time. Moreover, expanding their analysis to a sample of both new and old democracies they show that the negative effect of being a 'constant' loser is only observable in young democracies (Chang et al. 2014).

Thus, taken together, the empirical studies employing a dynamic perspective on the winner-loser gap and political support suggest – on the most basic level – that there is a positive (negative) effect on political support of being an electoral winner (loser), but also that there is a dynamic pattern when it comes to the number of times a voter is a winner (or a loser) and also that policy preferences seem to exercise a mediating effect on the gap in satisfaction between winners and losers. And, most importantly for our purposes, the presented evidence suggests that winning and losing has both short-term and long-term effects on satisfaction with democracy.

However, some critical voices argue that a winner-loser gap can be observed in most countries because surveys of different aspects of political support are typically carried out shortly after an election, when losers might be less satisfied with the way democracy works in their country as a short-term effect of electoral loss, i.e. that the winner-loser effect is 'entirely a fleeting emotional one. In the long run, this emotionally-driven dip in satisfaction should level out' (Cutler et al. 2013, 14). This is an interesting statement, but the merit of the argument has to be put to test by confronting it with empirical data. Nonetheless, the argument does indeed illustrate the need for a dynamic perspective when empirically investigating the winner-loser gap. Thus, taking stock of the research on the winner-loser gap two main hypotheses about the winner-loser gap can be singled out:

H1 (The stability hypothesis): Experience of losing is not a temporary disappointment with the election outcome, but a *lasting aspect of how voters regard the functioning of the democratic system and the winner-loser gap will thus be stable over time.*

H2 (The electoral effect hypothesis): The frequently observed winner-loser gap is an *emotionally driven short-time effect of experiencing electoral loss* and the negative effect levels out over the course of the electoral cycle.

## Data, research design and operationalization

In this study we rely on four different data sources. We start out by depicting the winner-loser gap in general across a wide range of democratic countries using pooled data from the *Comparative Study of Electoral Systems* (CSES, modules 1, 2 and 3).[1] From these election studies we have selected the last election study from all countries classified as free by Freedom House.[2] After a comparative view on the winner-loser gap we zoom in on one of these countries, namely Sweden. The reason for choosing Sweden as our case is first and foremost the availability of a unique panel study. However, Sweden could also be regarded a 'critical case' since levels of political support and trust are at a comparatively high level and even electoral losers express relatively high levels of support.

At the University of Gothenburg, an Internet based *Election Campaign Panel* has been conducted since the elections of 2002. In some of the analyses in this paper we will use the election campaign panel for the election of 2010. After the recruitment of this panel, the respondents were asked to continue their participation in a repeated citizen panel, and to this date 8 larger rounds of the *Citizen Panel* have been carried out. The main part of the recruitment to the Citizen Panel was initiated during the election campaign of the Swedish general election in 2010 and was mainly done through Internet advertising on the websites of newspapers, and on Twitter, Facebook and blogs. In connection to the Swedish parliament election panel members were also recruited through party simulations on both Facebook and the election site of Swedish public radio. Recruitment has also occured in connection with Gothenburg's Science festival, exhibitions, and through sports associations etc.

This implies that the Citizen Panel is consisting of self-recruited participants who are not representative for the Swedish population as a whole. The data are therefore mainly used for randomized survey experiments or panel data collection, where focus is on changes over time in certain groups or individuals. Therefore, the self-recruited part of the Citizen Panel is an important complement to the conventional nation-wide representative surveys that are conducted at University of Gothenburg, such as for example the surveys by the SOM-institute.[3] In order to test the face-validity of these panel data, we use a national representative survey from the SOM-institute – *Riks-SOM 2010* – conducted in the autumn of 2010, carried out at more or less the same time as the post-election campaign panel. In the survey carried out within the Citizen Panel there are a number of items that, with rare exceptions, are included in all surveys. Among these panel questions are questions of

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[1] For data description and download see, www.cses.org.
[2] See www.freedomhouse.org.
[3] For details, see www.som.gu.se.

institutional trust, satisfaction with democracy, political interest, interpersonal trust, as well as attitudes towards political parties and political issues. Participation in the Citizen Panel is voluntary and the respondents are free to leave the panel at any time.[4]

The first round of the Citizen Panel was launched in November 2010. Thereafter a new survey has been sent out twice a year, one in the spring (April-May) and one in the autumn (October-November). This in turn implies that we have the opportunity to track the same individuals from the election campaign of 2010 to May 2014. For the panel analyses presented below we use a fully balanced panel (using list wise deletion), which leaves us with 695 respondents in total. Given that 4358 respondents initially participated in the first panel step but only 695 respondents participates in all panel, gives a response-rate of 16 percent. This drop-out rate of course affects the composition of the panel. However, one should remember that the initial recruitment was based on a non-representative opt-in sample.

## The dependent variable: Satisfaction with democracy

In general, we set out to investigate how evaluations of the functioning of the political system are being affected by having cast a vote for the losing side in elections. In order to measure evaluations of the functioning of the political system, we follow the standard procedure in earlier research and use the 'satisfaction with democracy' indicator. Similar to most other surveys (e.g. *Eurobarometer* and the *Comparative Study of Electoral Systems*) the particular question in the Citizen Panel asks the respondents to what extent they are satisfied with the way democracy works. It is scaled from 1 (very dissatisfied) to 4 (very satisfied).[5] We are aware of the fact that this is not in any way an unproblematic indicator, as its meaning and measurement has been discussed and debated in the literature (Canache et al. 2001; Linde and Ekman 2003; Norris 2011). It is however the most frequently used item in earlier research on the winner-loser gap. Thus, using this item as our indicator of political support put us in a good position to generalize the results of our analysis to the broader field of research on different democracies.

## The issue of classifying winners and losers

In order to investigate possible effects of being an electoral winner or loser we need individual level data on people's voting behaviour. The panel surveys contain data on respondents' vote in the last election. By matching this information with the parties that formed government after the 2010

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[4] For more details about the information to panel members, see medborgarpanelen.gu.se.
[5] The original scale in the questionnaire goes 'very satisfied' (1) to 'very dissatisfied' (4).

election we are able to identify electoral winners and losers. The 2010 election resulted in a prolonged mandate to govern for the centre-right government alliance consisting of the conservative Moderate Party (*Moderaterna*), the Liberal People's Party (*Folkpartiet*), the Centre Party (*Centerpartiet*) and the Christian Democrats (*Kristdemokraterna*). Voters stating that they cast their vote for any of these parties in the election are thus defined as winners.

Defining losers in a democracy with proportional representation such as Sweden might be somewhat complicated. One strategy is to classify all other voters – regardless of which non-government party they cast their vote for – as losers. Another is to include only those who voted for a party that ended up in parliament. In this study we opt for the latter strategy. Hence, we leave out the voters casting their vote for small anti-system parties and parties that have never been represented in parliament (i.e. as part of the parliamentary opposition). However, this group is very small and the choice of strategy does not affect the results in any significant way. We thus define as losers those who state that voted for any of the four non-government parties in the Swedish parliament - the Social Democratic Party (*Socialdemokraterna*), the Left Party (*Vänsterpartiet*), the Green Party (*Miljöpartiet*) and the Sweden Democrats (*Sverigedemokraterna*).

Concerning the definition of losers, an interesting issue that has not received much attention in the literature is whether all losers lose equally much. In the Swedish case, it is not unlikely that people voting for the Swedish Democrats could to some extent perceive themselves as winners, since the party did their best election and gained parliamentary representation for the first time, although they became part of the opposition after the election. Thus, it is not totally unlikely that some losers feel like something like 'relative winners', i.e. contributing to a successful election result for the party they feel attached to, although not ending up in a government position. Moreover, the fact that there was no alternation in power after the 2010 election means that we are able to investigate both short- and long-term (at least the medium-term) consequences of being a winner or loser. Unfortunately, this also means that we are not able to study the effect of losers becoming winners after an election with a change in government.

## The winner-loser gap in a comparative perspective

We start out the empirical analysis by employing a broad comparative perspective in order to investigate the general validity of the winner-loser gap hypothesis. Figure 1 presents data on electoral winners and losers and their average level of satisfaction with democracy in 28 countries included in the Comparative Study of Electoral Systems. The countries represent a broad range of democracies

with varying characteristics, such as level of democratic consolidation, levels of political support and institutional arrangements.

The countries are ordered by average level of public satisfaction with democracy. The bars illustrate the winner-loser gap, i.e. the difference in level of satisfaction between winners and losers. The dots indicate the average level of satisfaction of winners. There is a quite substantial variation among countries, both in terms of general level of satisfaction and in the size of the winner-loser gap. A first note that should be made is that in six countries (Bulgaria, Czech Republic, Hungary, Italy, New Zealand and South Africa) losers actually display higher levels of satisfaction than the winners. However, in 22 out of 28 countries, the winners are more content with the way democracy works than the losers.

Regarding levels of satisfaction in general there is a clear tendency that citizens in established democracies are on average more satisfied with the functioning of the democratic system than their counterparts in more recent democracies, and in particular in post-communist countries. On the right hand side of the figure we find mature democracies with the Scandinavian countries displaying the highest levels of political support.

As shown in Figure 1, Swedish citizens are in general satisfied with the way democracy works, with an average level of satisfaction at 2.95 on the 1–4 scale. This corresponds very well with the general picture of Sweden as a country with comparatively very high levels of political support and trust (See Klingemann 1999; Norris 2011; Dahlberg et al. 2014).

*FIGURE 1. SATISFACTION WITH THE WAY DEMOCRACY WORKS AMONG ELECTORAL WINNERS AND LOSERS IN 28 DEMOCRACIES*
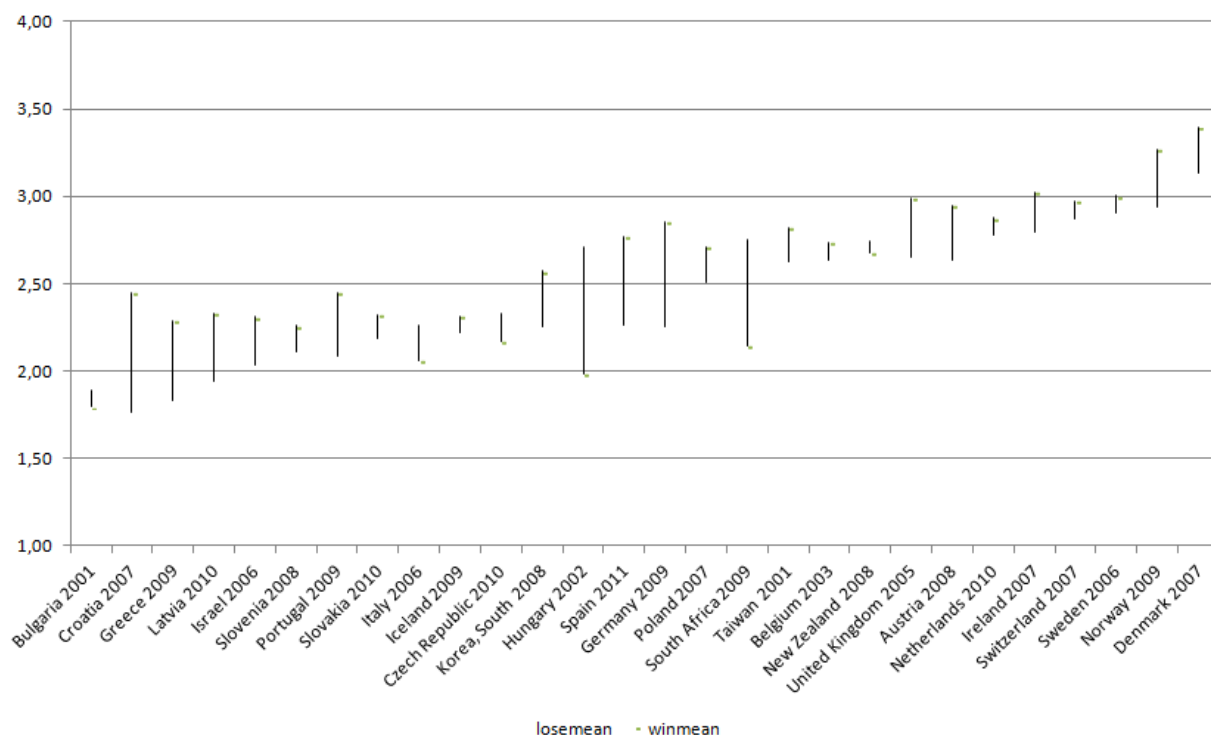


*Comment: Bars illustrate the average difference in satisfaction with democracies between winners and losers. The dots to the right of the bars indicate the average levels of satisfaction with democracy among winners.*
*Source: Comparative Study of Electoral Systems (CSES), modules 1-3.*

Interestingly for our purposes in this paper, the gap between winners and losers in terms of satisfaction in Sweden is quite narrow, compared to most other countries. Sweden thus comes forward as a country with both high levels of general satisfaction with the way democracy works and where a majority of the losers also perceive the functioning of the system in a positive way. This makes Sweden a particularly interesting case to study when it comes to the dynamics of the winner-loser gap. If the gap is both present and stable during the course of the electoral cycle in an established democracy with high levels of support and a relatively small gap in support between winners and losers, the findings could probably be generalizable to other democracies. If the winner-loser gap on the other hand is diminishing over the electoral cycle, it will probably do so in other established democracies with strong political support and moderate gaps between winners and losers as well.

# A dynamic investigation of the winner-loser gap among Swedish voters

Earlier comparative studies using pooled cross-sectional data have pointed out that the difference in satisfaction with democracy among winners and losers seems to be quite stable over time. For example, Anderson and colleagues present a series of analyses indicating that although the level of satisfaction fluctuates substantially over time in the countries under analysis, supporters of the government consistently display significantly more positive evaluations of the performance of the political system than do supporters of the opposition (although the magnitude of the gap is fluctuating substantially over time) (Anderson et al. 2005).

However, without data on individual citizens' perceptions over time we cannot be certain that the gap observed at the aggregate level also manifests itself on the individual level. That is, we cannot know whether the effect of winning/losing on satisfaction is stable over time when it comes to individual winners/losers. Only individual level panel data make it possible to investigate whether the gap is substantial and stable over time, as expected by our first hypothesis, or if the gap is actually a dip in satisfaction with democracy among losers which levels out as time passes over the electoral cycle, as suggested by our second hypothesis.

Figure 2 presents average levels of satisfaction with the way democracy works among electoral winners and losers in Sweden at eight points in time – from after the election in 2010 to spring 2014 – for a period of almost four years, i.e. covering more or less a whole electoral cycle. Each point in time contains the same respondents.

*FIGURE 2. SATISFACTION WITH THE WAY DEMOCRACY WORKS AMONG ELECTORAL WINNERS AND LOSERS 2010-2014 (CITIZEN PANEL)*
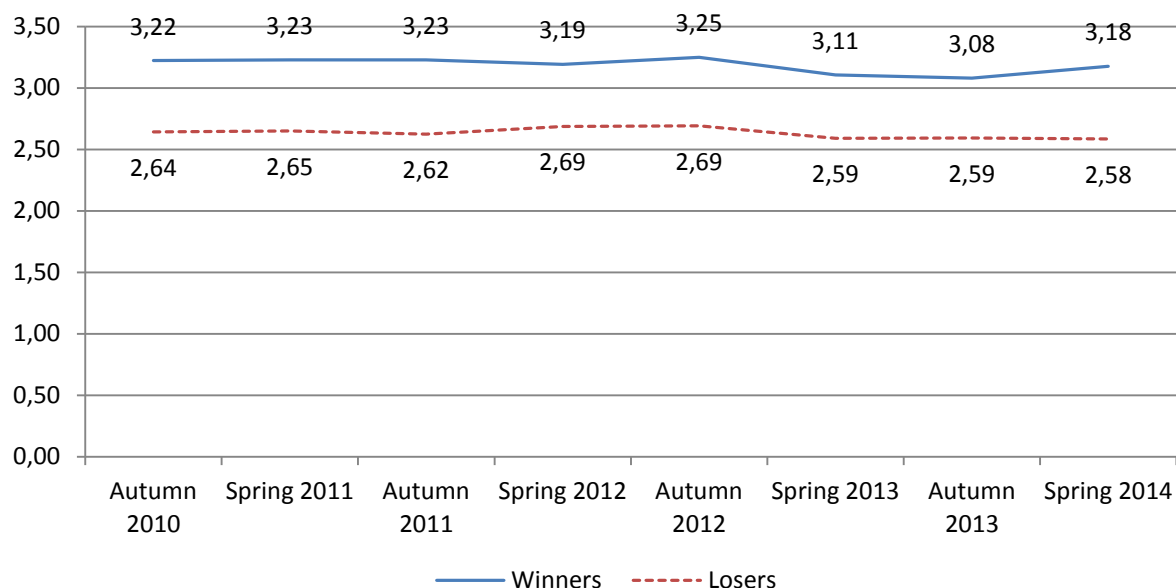


*Comment: The number of respondents in the group voting for any of the winning parties is 302 and 354 in the group voting for losing parties. The between-group differences are significantly different from zero through all time points (p<.001).*

A simple inspection shows, as expected, that those who cast their votes on a party in government express higher levels of satisfaction than the losers. And – more interestingly for our purposes – the gap is more or less constant throughout the whole period. This is an interesting finding, which confirms the clear patterns of sustainability in the winner-loser gap over time found in earlier research based on pooled cross-sectional data. Thus, at this point we find no support for the 'electoral effect hypothesis' stating that the relative dissatisfaction of losers should be fading out over the course of the electoral cycle. Rather, the pattern over time is very consistent, particularly concerning the losers, thus supporting the 'stability hypothesis'.[6]

Since the data we use were collected through a self-recruited web-panel the issue of representativeness is of course central. However, comparing the winner-loser gap between data taken from the national representative cross-sectional data collected by the SOM-institute during the autumn of 2010 and the self-selected citizen panel shows substantial face validity in the sense that there is a significant difference between electoral winners and losers in the national representative SOM data as well. As shown in Figure 3, on average the winners and the losers in both samples are about equally satisfied with the working of democracy. The average level of satisfaction among the elec-

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[6] A winner-loser gap has also been observed when it comes to other objects of political support, such as political trust (see Anderson and LoTempio 2002 in the case of the US). This seems to be the case also in Sweden, at least when it comes to trust in politicians, with a significant gap between winners and losers throughout the period. The gap is however somewhat narrower than for SWD.

toral losers are, however, somewhat lower when measured in the citizen panel (2.64 compared to 2.81 in the SOM data). From prior research we know that the respondents in the opt-in sample used in the citizen panel are on average more politically interested and ideologically more extreme, something that might explain the somewhat lower levels of satisfaction among the losers in the citizen panel (see Dahlberg et al. 2012).

Nevertheless, the results from the SOM data illustrates that the non-representative citizen panel is not too skewed compared to the country representative data collected by SOM when it comes to levels of satisfaction with the working of democracy. A more detailed comparison of the Citizen Panel and the SOM data for all other variables used throughout this paper can be found in Appendix 1.

FIGURE 3. SATISFACTION WITH THE WAY DEMOCRACY WORKS AMONG ELECTORAL WINNERS AND LOSERS AUTUMN 2010 (CROSS-SECTIONAL REPRESENTATIVE SAMPLE OF SWEDISH CITI-ZENS)
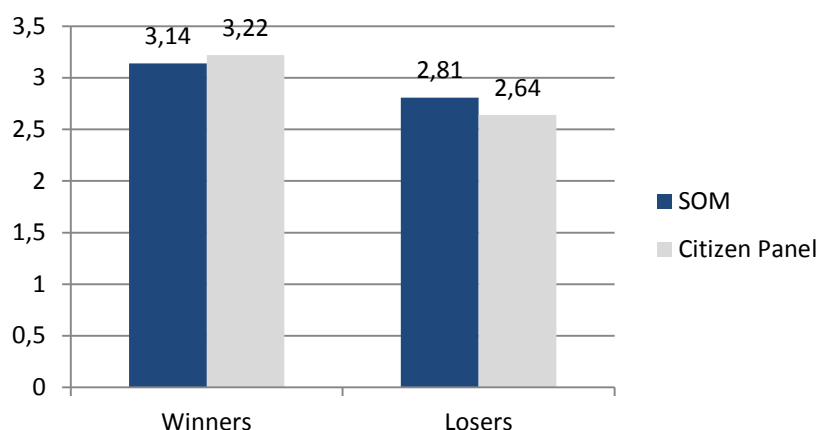


*Source*: Weibull et al. (2013) & *Citizen Panel*

## Winners, losers and Sweden Democrats

After the 2010 election, the Sweden Democrats (SD) secured representation in the Swedish *Riksdag* for the first time after receiving 5.7 per cent of the votes. SD could be described as a populist anti-immigration and anti-establishment party. Although they did not stand a chance to be included in a winning coalition, they did their best election so far, and it is not entirely clear what to expect when it comes to satisfaction with democracy among their supporters. Of course, the party's image as an anti-system party could attract people who have already lost confidence in representative democracy and the performance of the Swedish political system. From this perspective, SD voters would

still be 'losers'. On the other hand, SD performed well in the election and reached parliamentary representation and increased their possibility to influence public policy for the first time in the party's history. It is not unlikely that such an achievement could boost satisfaction with democracy, at least in the short-run after the election. In Figure 4 we take a closer look at levels of satisfaction for voters stating that they voted for the Swedish Democrats. These are plotted against the corresponding levels for those voting for one of the parties in the government coalition ('the Alliance') and those voting for one of the 'mainstream' Red-Green opposition parties (Social Democrats, Green Party and Left Party).

*FIGURE 4. SATISFACTION WITH THE WAY DEMOCRACY WORKS AMONG ELECTORAL WINNERS, LOSERS AND THE SWEDEN DEMOCRATS 2010-2014 (CITIZEN PANEL)*
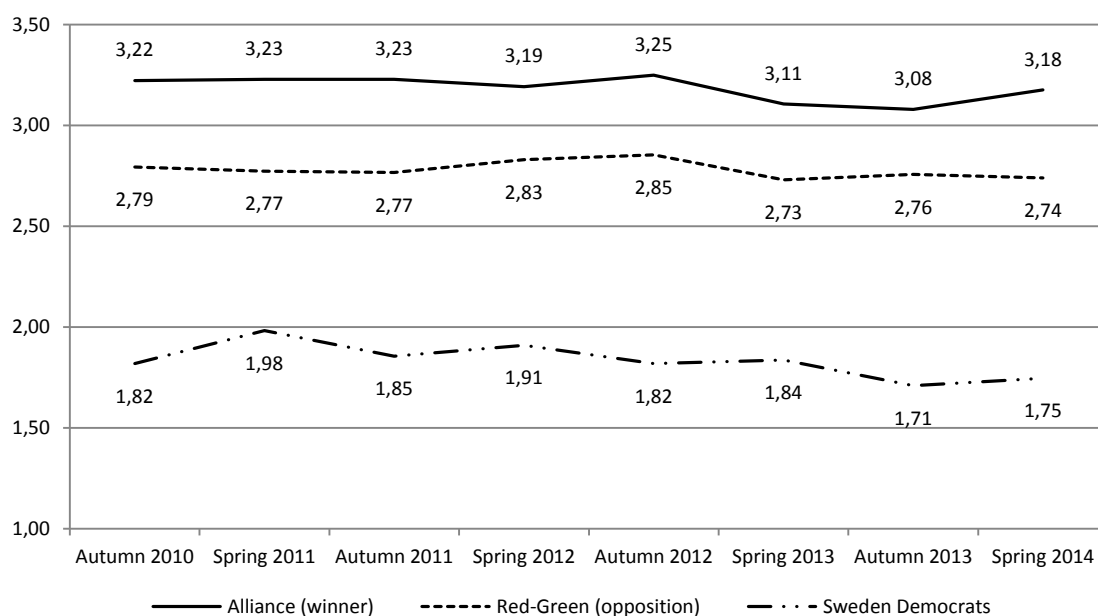


*Comment: The number of respondents in the group voting for any of the winning parties is 302. In the group voting for losing parties they reaches 299 and for the Sweden Democrats 55 respondents. The between-group differences are significantly different from zero through all time points (p<.001).*

Not very surprisingly, SD voters are more dissatisfied than the others in general. There is an increase in satisfaction among SD supporters from autumn 2010 to spring 2011, when average SWD reaches the highest recorded level (however, decreasing again after this). This might be an indication of a marginal post-election effect. However, there is no substantial variation over time and on average SD voters show a consistently lower level of SWD than the Red-Green losers and this pattern is manifested throughout the measured period of time. Interestingly for the main purpose of this paper, even when sorting out SD voters, the gap between winners and 'other losers' is still

substantial over the whole period of time. We now turn to a more thorough multilevel analysis of the winner-loser gap on the individual level.

## A multivariate analysis of the stability of the winner-loser gap

Thus far, the descriptive data presented have clearly pointed in the direction of the 'stability hypothesis.' We have seen that, on the aggregate, losers are significantly less satisfied with the way democracy works and that they continue to be so over time. In the following we will examine the stability of the winner-loser gap in a more systematic manner in order to rule out the possibility that the significant gap we find in the descriptive analyses is due to systematic differences among the groups of respondents, for example socio-economic status.

We start out by investigating the difference in satisfaction with democracy between winners and losers in Sweden at the individual level using the representative Riks-SOM data from 2010 in order to obtain a reliable benchmark for comparisons with the opt-in sample used in the Citizen Panel. The dependent variable is satisfaction with democracy. The independent variable of main interest is status as winner or loser. We use a dichotomous variable with the values 1 (loser) and 0 (winner). The first regression model in Table 1 shows that being a loser significantly decreases the likelihood of being satisfied with the way democracy works. Model 2 introduces a number of control variables that in other studies have been shown to be important determinants of SWD (Doorenspleet 2012; Dahlberg et al. 2014; Anderson and Guillory 1997).

Not surprisingly, trust in politicians – which arguably is closely related to satisfaction with democracy – comes out as highly important. When introducing the battery of control variables, the effect of losing on SWD drops somewhat, but is still statistically significant at the 99 per cent level. To control for the possibility that the significant gap between winners and losers is driven by the lower levels of SWD among supporter of the Sweden Democrats compared to other losers (Figure 4), we introduce a control for SD vote in model 3. As expected, individuals voting for SD are much less likely to be satisfied with the way democracy works. Nevertheless, the coefficient for 'loser' retains its high level of statistical significance although it becomes somewhat smaller.

TABLE 1: THE WINNER-LOSER GAP AND SATISFACTION WITH DEMOCRACY (SOM CROSS-SECTION)

| Satisfaction with Democracy | Model 1 | Model 2 | Model 3 |
|---|---|---|---|
| Loser | -0.396*** | -0.211*** | -0.168*** |
| | (0.039) | (0.038) | (0.038) |
| Trust in politicians | | 0.264*** | 0.254*** |
| | | (0.021) | (0.020) |
| Left-right extremism | | 0.002 | 0.002 |
| | | (0.002) | (0.002) |
| Political interest | | 0.046* | 0.054** |
| | | (0.025) | (0.025) |
| Gender | | 0.061* | 0.064* |
| | | (0.036) | (0.035) |
| Age | | 0.020* | 0.017 |
| | | (0.010) | (0.010) |
| Education (eight categories) | | 0.034*** | 0.028*** |
| | | (0.011) | (0.011) |
| Employment (1=employed) | | 0.072* | 0.074* |
| | | (0.041) | (0.040) |
| Voted for SD | | | -0.529*** |
| | | | (0.088) |
| Intercept | 3.167*** | 3.526*** | 3.560*** |
| | (0.026) | (0.145) | (0.143) |
| Observations | 1,162 | 1,162 | 1,162 |
| R-squared | 0.084 | 0.229 | 0.253 |

*Source: Weibull et al. (2013), Riks-SOM 2010.*
*Note: OLS regression with standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.*

Trust in politicians is a survey question about trust at the national level and is measured on a five-point scale where 1=low trust, 3=neither high not low, and 5=high trust. Left-right extremism is operationalized as the absolute distance from the midpoint towards the end-points on a five point left-right scale. Political interest is based on an item coded 1=not interested at all, 2=not very interested, 3=somewhat interested and 4=very interested . Gender is coded as 1 for women and 2 for men. Age is based on seven categories: (18/21=1) (22/30=2) (31/40=3) (41/50=4) (51/60=5) (61/70=6) (71/max=7). Education is based on a question with eight categories where higher numbers indicate higher levels education. Employment enters as a dichotomy where 0=unemployed and 1=employed. Voted for the Sweden Democrats is coded 1 for SD vote and 0 for others.

In Table 2 we are again turning to the citizen panel, this time focusing on the individual level in order to explain the dynamics in political support among electoral winners and losers over time.

Model 1 shows the results from a mixed random effect model where we interact winner/loser status with time in order to evaluate our initial hypotheses. More specifically, we are here applying a growth curve model with random intercepts and slopes where the latter simply allows the individuals to have different rates of growth.

TABLE 2. THE WINNER LOSER GAP AND SATISFACTION WITH DEMOCRACY (MIXED MODELS WITH RANDOM INTERCEPTS AND SLOPES)

| Satisfaction with Democracy | Model 1 Electoral loser | Model 2 Electoral loser | Model 3 Electoral loser | Model 4 Dynamic loser |
|---|---|---|---|---|
| Loser | -0.583*** | -0.455*** | -0.356*** | -0.256*** |
| | (0.057) | (0.050) | (0.049) | (0.044) |
| Time | -0.015*** | -0.013*** | -0.013*** | -0.003 |
| | (0.005) | (0.004) | (0.004) | (0.005) |
| Loser*Time | 0.008 | 0.008 | 0.008 | 0.002 |
| | (0.006) | (0.006) | (0.006) | (0.007) |
| Trust in politicians | | 0.320*** | 0.303*** | 0.378*** |
| | | (0.015) | (0.015) | (0.018) |
| Left-right extremism | | -0.002 | -0.014 | -0.011 |
| | | (0.009) | (0.009) | (0.011) |
| Political interest | | 0.140*** | 0.105*** | 0.146*** |
| | | (0.037) | (0.035) | (0.035) |
| Gender | | 0.000 | 0.051 | 0.073* |
| | | (0.043) | (0.041) | (0.040) |
| Age | | 0.002 | 0.001 | 0.001 |
| | | (0.001) | (0.001) | (0.001) |
| Education (eight categories) | | 0.059*** | 0.045*** | 0.048*** |
| | | (0.014) | (0.013) | (0.013) |
| Employment (1=employed) | | 0.025 | 0.029 | 0.019 |
| | | (0.044) | (0.042) | (0.041) |
| Voted for Sweden Democrats | | | -0.675*** | -0.277*** |
| | | | (0.072) | (0.051) |
| Intercept | 3.264*** | 1.671*** | 1.812*** | 1.367*** |
| | (0.042) | (0.190) | (0.181) | (0.179) |
| var(time) | .002 | .001 | .001 | .001 |
| var(intercept) | .352 | .222 | .200 | .189 |
| cov(time,intercept) | -.005 | -.005 | -.006 | -.005 |
| var(e) | .177 | .175 | .175 | .187 |
| Log likelihood | -3787.723 | -3592.7797 | -3550.4797 | -2555.5647 |
| Observations | 5,040 | 5,040 | 5,040 | 3,322 |
| Number of groups | 639 | 639 | 639 | 659 |
| Time points | 8 | 8 | 8 | 8 |

*Source: Citizen Panel 2010-2014.*
*Note: Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.*

For coding rules, see Table 1. In the first three models the winner-loser variable is based on which party one voted for in the parliamentary election 2010, which means that it enters as a dichotomized over time constant variable. In the fourth model we are instead using a party preference survey item asked at each time-point that makes it dynamic so a voter that is changing his/her party preference from an opposition party to a governmental party is thus coded as a winner at that specific time-point. There is one drawback in this respect and that is that for the first four time points the survey question asked about which party one would vote for if there was an election today (for the second time-point the question is missing and is extrapolated from the first and the third panel steps). From time-point three and onwards the survey question was altered and asks for which party one intend to vote for in the upcoming election in 2014. Of course, these questions are not identical which is unfortunate but still the only thing we have. One could however argue that vote intention in the future is a good proxy for one's political preferences today (the correlation between the today vote intention at time-point 4 and the prospective vote intention in panel step five is .64).

Remember that according to our first hypothesis the winner-loser gap should be a *lasting aspect of how voters regard the functioning of the democratic system and the winner loser gap will thus be stable over time,* while our alternative hypothesis argues that the winner-loser gap is an *emotionally driven short-time effect of experiencing electoral loss.* If latter hypothesis is correct we should expect a significant effect of the interaction term between the winner-loser-dummy and the time component. If, on the other hand, the first hypothesis is correct, there should be no such effect because the gap is not getting narrower (widened) over time.

The results in Model 1 in Table 2 confirm the pattern found in the descriptive data (Figure 2), namely that the winner-loser gap is not decreasing over time but seems to be a relatively stable phenomenon. However, also here we might run the risk in that the winner-loser effect actually is a result of socio-economical differences where we find less politically interested, low educated blue-collar workers with initial lower levels of SWD on the losing side and more interested and highly educated, middle class citizens with higher levels of SWD among the winners. For this reason we are in Model 2 controlling for political trust, political interest, ideological extremism, education, gender and employment. When these factors also are taken into account, the initial effect of being a loser of SWD among is somewhat dwarfed but the winner-loser gap is still both substantial and statistically significant.

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Since we initially found substantially lower levels of satisfaction with democracy among those who voted for the Sweden Democrats, we have in Model 3 also included a dummy for the SD voters. The inclusion of this variable shows that the SD voters have a rather large impact on the average effect on SWD in the sample. We also find a small, on the marginal, significant decrease in general on SWD over time. However, the most interesting result is the fact that we do not obtain a significant decrease in the winner-loser gap over time. The interaction between going from a 'winner' to a 'loser' and time does not reach statistical significance in any of the models. The effect seems to be particularly stable through all models, which lends strong support to our first hypothesis. Taken together, this implies that losers in fact are equally dissatisfied throughout the electoral cycle while the significant over-time decrease in SWD in general implies that it is actually the winners that are becoming somewhat less satisfied as time goes by, although they are till significantly more satisfied than the losers.

In the fourth model in Table 2, we are using a dynamic variable for winners and losers. Here we are using vote intention at each specific time-point. Theoretically, voting for a losing party in an election may not automatically make one to a loser during the whole electoral cycle in a relative sense. We know from the voting studies literature that voters have become more and more likely to shift party preferences over time (Narud and Aalberg 1999) so shifts in preferences during the electoral cycle are not very unlikely. By using a dynamic variable we thus let the respondents to be able to shift from losers to winners in relative terms, which makes for an even stronger test of our hypotheses. What occurs though is that although the initial effect of being a loser on satisfaction with the way democracy works drops somewhat it is still substantial and significant. Of greater importance is however the still insignificant interaction between time and winner-loser. This shows that the initial results still are stable and confirmed.

This pattern appears clearly in figure 5 where the marginal effect of losing and winning on SWD over time is plotted. As can be seen the gap becomes somewhat narrower over time but when comparing the winner-loser gap at the earliest time-points with the later ones, the effect is far from cancelling out. In this respect, the results clearly point in favour of the 'stability hypothesis', indicating that the winner-loser gap, although it is relatively small, is something more than a short-time electoral effect. In the Swedish case, thus, the winner-loser gap shows considerably consistency over time.[7]

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[7] In Appendix 4, Model 3 in Table 2 is estimated with alternative techniques (simple OLS with robust standard errors, random intercepts only, random intercepts and slopes and with a lagged dependent variable included; and finally as a multilevel ordinal logit). The results are in general robust and it does not seem to matter which estimation procedure is being used. However, when estimating a multi-level ordinal logit model, the interaction effect between winner-loser and time is significant on the marginal, which means that there is, on the .10-level, a significant decrease in SWD among the
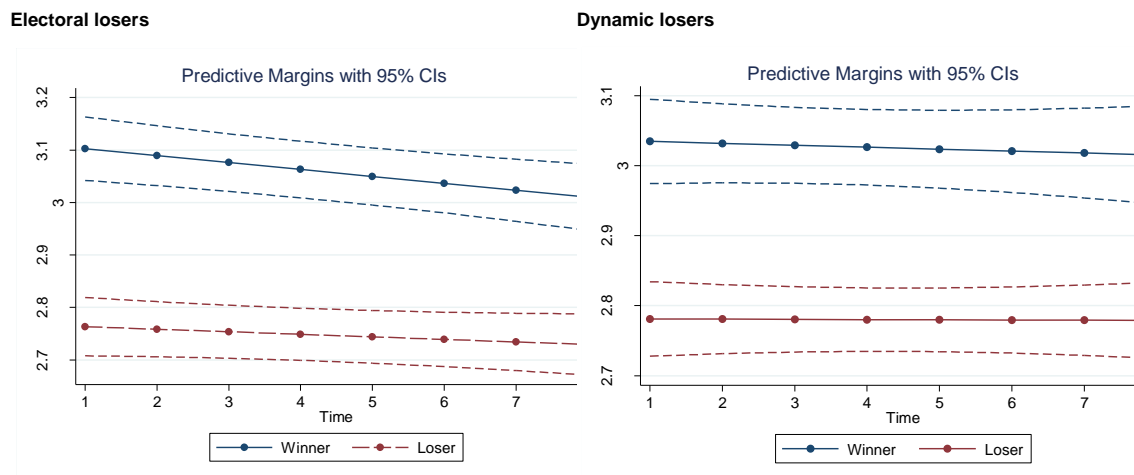
*Comment: The marginal effects are based on Model 3 and 4 in Table 2.*

Ideally, when investigating the effect of voting for winning or losing parties on SWD we would have been better off if we had access to one or more pre-election measurements in order to be able to test the validity of the 'electoral effect hypothesis' in a more systematic manner. As discussed earlier, the respondents in the Citizen Panel were recruited before the national election in 2010 into a Campaign Panel, where the respondents in last survey were asked if they would like to continue to participate in a continuing Citizen Panel. The Campaign Panel did in fact include the question on satisfaction with democracy. Unfortunately, the Campaign Panel and the Citizen Panel differ in some important aspects, both in design and items included.

These obstacles affect the comparability between surveys although the respondents are the same. The design-problem concerns in particular the fact that in the Campaign Panel the survey questions were randomized to the respondents in order to limit the length of the surveys. This in turn implies that only 209 of the respondents in the Citizen Panel received the SWD question in the pre-election surveys.[8] When merging the Campaign and Citizen Panels, this implies that when using list-wise deletion it leaves us with 209 respondents (or actually 194 respondents due to missing data on some key variables). However, if we instead base the analyses on the Citizen Panel only, the same proce-dure leaves us with 695 respondents (or actually 639 respondents due to missing data). A second

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electoral winners over time. This decrease is, however, not closing the gap between winners and losers during the electoral cycle.

[8] The Citizen Panel, which was carried out a couple of months after the election, was not designed in this way. Instead, all respondents received all survey questions.

caveat to be made is that in the Campaign panel a seven-point scale was used for the SWD item while the Citizen Panel uses the standard four-category SWD item. In order to obtain comparability we have tried different strategies where we have recoded the seven-point SWD item into different versions of the four-point scale used in the Citizen panel but none of them were entirely satisfactory.[9] We therefore decided to keep the analyses based on the Citizen Panel alone in the paper since our main interest is in the *stability* of the winner-loser gap and since the actual winner-loser effect in pre- and post-election studies is already well documented (Anderson et. al. 2005).

As a compromise we have instead included the results from the combined panel datasets in Appendix 2. The models presented in the appendix are the same as in Table 2 with the difference that they are run on a merged dataset containing the pre-election measures, i.e. one additional panel step but containing only 194 respondents. The conclusion drawn from these analyses is that the results still are robust and highly comparable with the results in Table 2 above. The standard errors are of course much larger due to the limited amount of independent observations in the merged dataset but the winner-loser gap is both significant and stable over time.

## Concluding remarks

This paper presents a first attempt to investigate the winner-loser gap in satisfaction with democracy from a dynamic perspective. Focusing on the consistency of the gap over the course of an almost full electoral cycle in Sweden (autumn 2010 to spring 2014), two contradicting hypotheses are tested on data from the Swedish Citizen Panel. The analysis reveals a substantial consistency of the winner-loser gap throughout the whole time period under investigation. At all points in time, the group of electoral winners shows higher levels of political support than the losers, and the magnitude of the gap is surprisingly stable. The substantial gap in satisfaction between winners and losers is also evident when controlling for other possible explanatory factors in an individual level multivariate analysis.

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[9] We have elaborated with multiple imputation and interpolation of values for the missing cases in the Campaign Panel. We tried different strategies but none of them delivered reliable results, or rather, the imputations were actually driving the results to an unreasonable extent when we compared it with the original smaller-N study. A problematic aspect of the imputation procedure in this respect is that since we are interested in the effect of the specific time-points, we need to impute the missing values with information from the valid cases at the very same time-point. The relatively small number of cases in this respect made it difficult to make more fine-grained predictions. This may however not be a problem *per se* but in this case we cannot be sure whether the differences are a result due to the imputations or of the different scales being used. The SWD measure in the Campaign Panel used, as mentioned, a seven point scale while the Citizen Panel presents the respondents with the more frequently used SWD item, which reads: 'On the whole, are you very satisfied, fairly satisfied, not very satisfied, or not at all satisfied with the way democracy works in [country]?' This implies that the original measures are not fully comparable. In order to make it somehow comparable we have recoded the seven point scale into four categories, such as (1=1, 2/3=2, 4=., 5/6=3, 7=4) (results from the different coding rules can also be found in Appendix 3).

Thus, the data and our analyses lend strong support for the 'stability hypothesis'. In Sweden, the experience of losing does not seem to be a temporary disappointment with the election outcome but a relatively long-lasting aspect of how voters regard the functioning of the democratic system. Nothing in our data speaks in favour of the 'electoral effect hypothesis', i.e. that the winner-loser gap is an emotionally driven short-time effect of experiencing electoral loss and that the drop in satisfaction should level out as time passes after an election. The individual-level analyses demonstrate that the winner-loser gap in SWD is very stable over time, even when controlling for theoretically relevant variables used to explain political support in earlier studies. This result is robust to alternative specifications using different statistical techniques. The present study thus adds new and important knowledge about the effects of experiencing electoral loss or victory, a theme empirically investigated in many studies covering a broad range of democracies. To our knowledge, however, this study is the first to investigate the *dynamics* of the winner-loser gap using panel data of this magnitude, featuring several surveys of the same individuals over the course of a whole electoral cycle.

The robust results indicate that there are good reasons to believe that if this is the case in Sweden, which is a country with a comparatively small winner-loser gap and relatively high levels of support among losers, it is very likely that the same pattern would be found in other stable democracies where the difference in political support between winners and losers is more pronounced. The results are also interesting in relation to political legitimacy in a more general way. In Sweden, although losers express lover levels of satisfaction with democracy than winners, they are nonetheless relatively content with the way democracy works. This means that the effect of experiencing electoral loss in terms of lower levels of SWD does not, on average, seem to affect system legitimacy in a substantially harmful way. However, if the pattern found here also are evident in less mature democracies, where levels of political support most often are substantially lower (Norris 2011; Dahlberg et al. 2014), a negative long-term effect of losing on support might in fact have negative consequences for the legitimacy of the political system, since a democratic regime in the long-run is dependent on the consent of not only political wines but also a substantial share of those ending up on the losing side.

# REFERENCES

Anderson, Christopher J. and Guillory, Christine A. (1997) 'Political Institutions and Satisfaction with Democracy: A Cross-National Analysis of Consensus and Majoritarian Systems', *American Political Science Review* 91(1): 66-81.

Anderson, Christopher J. and Yuliya V. Tverdova (2003) 'Corruption, Political Allegiances, and Attitudes Toward Government in Contemporary Democracies', *American Journal of Political Science* 47(1): 91-109.

Anderson, Christopher J. and Yuliya V. Tverdova (2001) 'Winners, Losers, and Attitudes about Government in Contemporary Democracies', *International Political Science Review* 47(1): 321-338.

Anderson, Christopher J. and Andrew J. LoTempio (2002) 'Winning, Losing and Political Trust in America', *British Journal of Political Science* 32(2): 335-351.

Anderson, Christopher J., André Blais, Shaun Bowler, Todd Donovan and Ola Listhaug (2005) *Losers' Consent: Elections and Democratic Legitimacy*. Oxford: Oxford University Press.

Bernauer, Julian and Adrian Vatter (2012) 'Can't get no satisfaction with the Westminster model? Winners, losers and the effects of consensual and direct democratic institutions on satisfaction with democracy', *European Journal of Political Research* 51(4): 435–468.

Blais, André and François Gélineau (2007) 'Winning, Losing and Satisfaction with Democracy', *Political Studies* 55(2): 425–441.

Bowler, Shaun and Todd Donovan (2007) 'Reasoning About Institutional Change: Winners, Losers and Support for Electoral Reforms', British Journal of Political Science 37(3):455-476.

Campbell, Ross (2013) 'Winners, losers and the Grand Coalition: Political satisfaction in the Federal Republic of Germany', *International Political Science Review* (doi: 10.1177/0192512113505246).

Canache, Damarys, Jeffery J. Mondak and Mitchell A. Seligson (2001) 'Meaning and Measurement in Cross-National Research on Satisfaction with Democracy', *Public Opinion Quarterly* 65(4): 506–528.

Chang, Eric, Yun-han Chu and Wen-chin Wu (2014) 'Consenting to Lose or Expecting to Win? Inter-temporal Changes in Voters' Winner-Loser Status and Satisfaction with Democracy', in Jaques Thomassen, ed, *Elections and Democracy: Representation and Accountability*. Oxford: Oxford University Press.

Craig, Stephen C., Michael D. Martinez and Jason Gainous (2006) 'Winners, Losers, and Election Context: Voter Responses to the 2000 Presidential Election', *Political Research Quarterly* 59(4): 579-592.

Curini, Luigi, Willy Jou and Vincenzo Memoli (2012) 'Satisfaction with Democracy and the Winner/Loser Debate: The Role of Policy Preferences and Past Experience', *British Journal of Political Science* 42(2): 241–261.

Cutler, Fred, Andrea Nuesser and Ben Nyblade (2013) 'Evaluating the Quality of Democracy with Individual Level models of Satisfaction: Or, A Complete Model of Satisfaction with Democracy', Paper presented at the ECPR General Conference, Bordeaux, 4-7 September 2013.

Dahlberg, Stefan; Sebastian Lundmark and Johan Martinsson. (2012) 'How representative is a self-selected web-panel? - The effect on representation of different sampling procedures and survey modes'. Paper presented at the American Association for Public Opinion Research (AAPOR) Conference in Orlando, May 17–May 20, 2012.

Dahlberg, Stefan, Jonas Linde and Sören Holmberg (2014) 'Democratic Discontent in Old and New Democracies: Assessing the Importance of Democratic Input and Governmental Output', *Political Studies*, early view online, doi: 10.1111/1467-9248.12170.

Diamond, Larry (1999) *Developing Democracy: Toward Consolidation.* Baltimore and London: The Johns Hopkins University Press.

Doorenspleet, R. (2012) 'Critical Citizens, Democratic Support and Satisfaction in Africal Democracies', *International Political Science Review*, 33(3): 279–300.

Esaiasson, Peter (2011) 'Electoral Losers Revisited – How Citizens React to Defeat at the Ballot Box', *Electoral Studies* 30(1): 102–113.

Klingemann, Hans-Dieter (1999) 'Mapping Political Support in the 1990s: A Global Analysis', in Pippa Norris (ed.) *Critical Citizens: Global Support for Democratic Governance.* Oxford: Oxford University Press.

Linde, Jonas and Joakim Ekman (2003) 'Satisfaction with democracy: A note on a frequently used indicator in comparative politics', *European Journal of Political Research* 42(3): 391–408.

Lühiste, Kadri (2006) 'Explaining Trust in Political Institutions: Some Illustrations from the Baltic States', *Communist and Post-Communist Studies* 39(4): 475-496.

Moehler, Devra C. (2009) 'Critical Citizens and Submissive Subjects: Election Losers and Winners in Africa', *British Journal of Political Science* 39(2): 345–366.

Narud, Hanne Marthe and Toril Aalberg (1999) *Challenges to Representative Democracy: Parties, Voters and Public Opinion*. Bergen: Fagbokforlaget.

Norris, Pippa (1999) 'Introduction: The Growth of Critical Citizens?'', in Pippa Norris (ed.) *Critical Citizens: Global Support for Democratic Government*. Oxford: Oxford University Press.

Norris, Pippa (2011) *Democratic Deficit: Critical Citizens Revisited*. Cambridge: Cambridge University Press.

Weibull, Lennart, Sören Holmberg, Henrik Ekengren Oscarsson, Johan Martinsson and Elias Markstedt (2013) *Super-Riks-SOM 1986-2011, v2013.1.2*. Göteborgs Universitet: SOM-institutet, www.som.gu.se.

# Appenix 1

TABLE A1.1. COMPARING THE SOM SURVEY AND THE CITIZEN PANEL ON THE VARIABLES USED IN THE ANALYSES

|  |  | SOM | Citizen Panel 1-8 |
|---|---|---|---|
| **Gender** | Women | 53 | 31 |
|  | Men | 47 | 69 |
| **Age** | 18-21 | 6 | 0 |
|  | 22-30 | 10 | 7 |
|  | 31-40 | 14 | 19 |
|  | 41-50 | 18 | 21 |
|  | 51-60 | 18 | 25 |
|  | 61-70 | 19 | 20 |
|  | <71 | 15 | 8 |
| **Education** | Low | 36 | 7 |
|  | Medium | 30 | 21 |
|  | High | 34 | 72 |
| **Employment** | Yes | 58 | 70 |
|  | No | 45 | 30 |
| **Political interest** | Very interested | 13 | 47 |
|  | Fairly interested | 43 | 46 |
|  | Not very interested | 36 | 7 |
|  | Not at all interested | 8 | 0 |
| **Party Choice** | Left Party | 6 | 14 |
|  | Social Democratic Party | 29 | 17 |
|  | Center Party | 7 | 5 |
|  | Liberal Party | 8 | 11 |
|  | Moderate Party | 32 | 23 |
|  | Christian Democratic party | 6 | 7 |
|  | Green Party | 8 | 15 |
|  | Sweden Democrats | 4 | 8 |
| **Satisfaction with Democracy** | Very satisfied | 18 | 19 |
|  | Fairly satisfied | 63 | 56 |
|  | Not very satisfied | 15 | 18 |
|  | Not satisfied at all | 4 | 7 |
| **Trust in Politicians** | Very high | 2 | 3 |
|  | Fairly high | 47 | 57 |
|  | Fairly low | 41 | 31 |
|  | Very low | 10 | 9 |
| **Left-Right Self-placement** | Left | 31 | 39 |
|  | Middle | 25 | 23 |
|  | Right | 44 | 38 |
| **N:** |  | 5000 | 695 |

# Appenix 2

TABLE A2.1. THE WINNER LOSER GAP AND SATISFACTION WITH DEMOCRACY (MIXED MODEL)

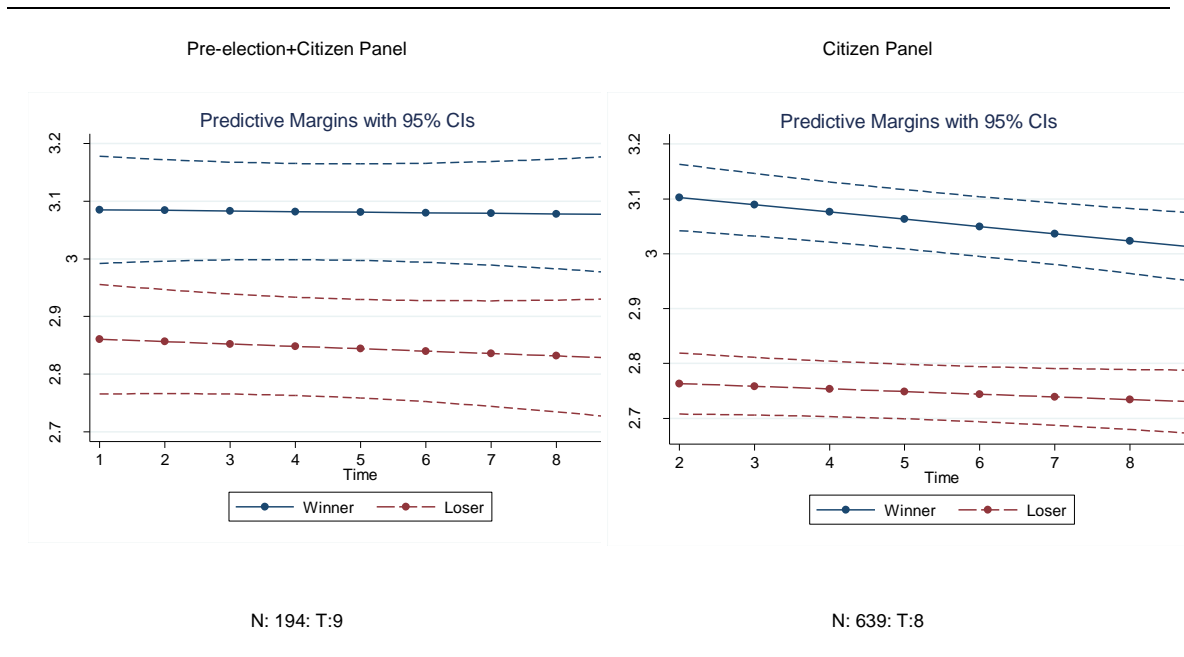| Satisfaction with Democracy | Model 1 (pre-elec inc.) | Model 2 (pre-elec inc.) | Model 3 (pre-elec inc.) | Model 4 No pre-elec. | Model 5 No pre-elec. | Model 6 No pre-elec. |
|---|---|---|---|---|---|---|
| Loser | -0.502*** | -0.330*** | -0.222*** | -0.583*** | -0.455*** | -0.356*** |
| | (0.090) | (0.078) | (0.074) | (0.057) | (0.050) | (0.049) |
| Time | 0.000 | -0.001 | -0.001 | -0.015*** | -0.013*** | -0.013*** |
| | (0.007) | (0.006) | (0.006) | (0.005) | (0.004) | (0.004) |
| Loser*Time | -0.002 | -0.004 | -0.003 | 0.008 | 0.008 | 0.008 |
| | (0.010) | (0.009) | (0.009) | (0.006) | (0.006) | (0.006) |
| Trust in politicians | | 0.354*** | 0.338*** | | 0.320*** | 0.303*** |
| | | (0.025) | (0.025) | | (0.015) | (0.015) |
| Left-right extremism | | -0.023 | -0.035** | | -0.002 | -0.014 |
| | | (0.015) | (0.015) | | (0.009) | (0.009) |
| Political interest | | 0.158** | 0.108* | | 0.140*** | 0.105*** |
| | | (0.064) | (0.059) | | (0.037) | (0.035) |
| Gender | | -0.018 | 0.039 | | 0.000 | 0.051 |
| | | (0.068) | (0.063) | | (0.043) | (0.041) |
| Age | | -0.003 | -0.002 | | 0.002 | 0.001 |
| | | (0.003) | (0.002) | | (0.001) | (0.001) |
| Education (eight categories) | | 0.050** | 0.040* | | 0.059*** | 0.045*** |
| | | (0.023) | (0.021) | | (0.014) | (0.013) |
| Employment (1=employed) | | -0.046 | -0.017 | | 0.025 | 0.029 |
| | | (0.074) | (0.068) | | (0.044) | (0.042) |
| Voted for Sweden Democrats | | | -0.775*** | | | -0.675*** |
| | | | (0.119) | | | (0.072) |
| Intercept | 3.215*** | 1.902*** | 1.967*** | 3.264*** | 1.671*** | 1.812*** |
| | (0.063) | (0.316) | (0.290) | (0.042) | (0.190) | (0.181) |
| var(time) | .002 | .001 | .001 | .002 | .001 | .001 |
| var(intercept) | .294 | .184 | .147 | .352 | .222 | .200 |
| cov(time,intercept) | -.000 | -.003 | -.003 | -.005 | -.005 | -.006 |
| var(e) | .157 | .152 | .152 | .177 | .175 | .175 |
| Log likelihood | -1156.2278 | -1070.4778 | -1051.1193 | -3787.723 | -3592.7797 | -3550.4797 |
| Observations | 1,679 | 1,679 | 1,679 | 5,040 | 5,040 | 5,040 |
| Number of groups | 194 | 194 | 194 | 639 | 639 | 639 |
| Time points | 9 | 9 | 9 | 8 | 8 | 8 |

*Source: Election Campaign Panel 2010 & Citizen Panel 2010-2014.*
*Note: Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. For coding rules, see Table 1.*

Models 1-3 are based on data with the pre-election survey included, which gives us nine time-points with a balanced panel of 194 respondents. Models 4-6 is the same as in Table 2 and include only respondents from the Citizen Panel based on the 639 respondents. Clearly, when comparing models 1-3 with 4-6, the results are very similar and robust, although the time-component is not signifi-

cantly different from zero in the low-N study. Figure A2.1 plots the marginal effect of being winner or loser on satisfaction with democracy over time. The first graph is based on model 3 in Table A2.1 (i.e. using both the pre-election Campaign Panel and the Citizen Panel). The right hand graph is the same as in Figure 5, using only the Citizen Panel and thus increasing the number of respondents from 194 to 639.

*FIGURE A2.1. MARGINAL EFFECT OF BEING WINNER AND LOSER ON SATISFACTION WITH DE-MOCRACY OVER TIME*



Pre-election+Citizen Panel

Citizen Panel

N: 194: T:9

N: 639: T:8

## Appenix 3

Different coding rules of the seven-point scale (the pre- and post-election 2010 panels) into four points and its effect on satisfaction with democracy among electoral winners and losers.

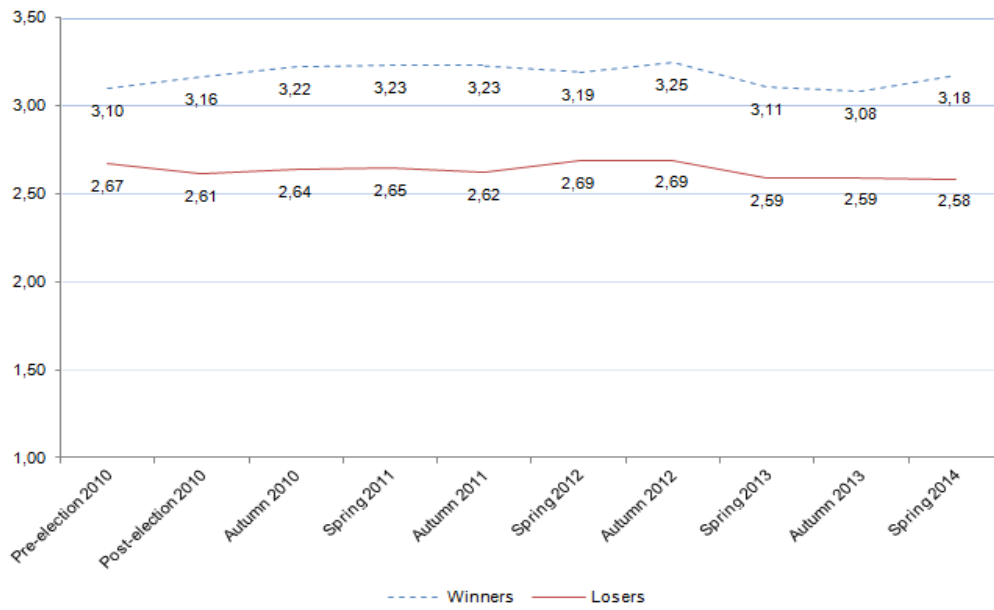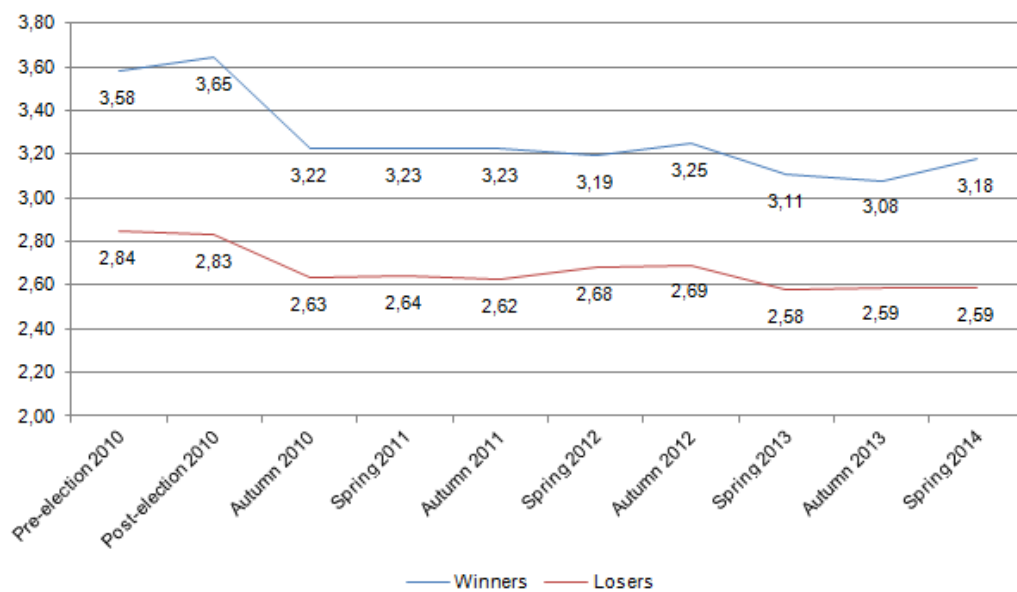*FIGURE A3.1. CODING: (1=1) (2/3=2) (4=.) (5/6=3) (7=4)*



*FIGURE A3.2. CODING: (1/2=1) (3=2) (4=.) (5=3) (6/7=4)*

# Appendix 4

TABLE A4.1. ROBUSTNESS CHECKS USING DIFFERENT ESTIMATION TECHNIQUES.

| Satisfaction with Democracy | OLS (robust) | Random intercepts only | Random intercepts & slopes | Random inter-cepts & slopes (LDV) | ML-Ordered Logit (GLM) |
|---|---|---|---|---|---|
| **Loser** | -0.309*** | -0.359*** | -0.356*** | -0.303*** | -2.099*** |
| | (0.050) | (0.050) | (0.049) | (0.048) | (0.263) |
| **Time** | -0.011** | -0.013*** | -0.013*** | -0.015*** | -0.081*** |
| | (0.005) | (0.004) | (0.004) | (0.005) | (0.025) |
| **Loser*Time** | 0.008 | 0.008 | 0.008 | 0.008 | 0.056* |
| | (0.007) | (0.005) | (0.006) | (0.007) | (0.034) |
| **Trust in politicians** | 0.554*** | 0.327*** | 0.303*** | 0.317*** | 1.790*** |
| | (0.013) | (0.015) | (0.015) | (0.016) | (0.099) |
| **Left-right extremism** | -0.015** | -0.014 | -0.014 | -0.015 | -0.083 |
| | (0.007) | (0.009) | (0.009) | (0.009) | (0.052) |
| **Political interest** | 0.130*** | 0.105*** | 0.105*** | 0.089*** | 0.497** |
| | (0.016) | (0.032) | (0.035) | (0.032) | (0.201) |
| **Gender** | 0.054*** | 0.050 | 0.051 | 0.052 | 0.318 |
| | (0.019) | (0.037) | (0.041) | (0.036) | (0.230) |
| **Age** | 0.001** | 0.001 | 0.001 | 0.002 | 0.006 |
| | (0.001) | (0.001) | (0.001) | (0.001) | (0.008) |
| **Education (eight categories)** | 0.032*** | 0.044*** | 0.045*** | 0.040*** | 0.245*** |
| | (0.006) | (0.012) | (0.013) | (0.012) | (0.073) |
| **Employment (1=employed)** | 0.003 | 0.027 | 0.029 | 0.031 | 0.108 |
| | (0.019) | (0.038) | (0.042) | (0.037) | (0.236) |
| **Voted for Sweden Democrats** | -0.464*** | -0.656*** | -0.675*** | -0.556*** | -3.233*** |
| | (0.035) | (0.066) | (0.072) | (0.066) | (0.413) |
| **Satisfaction with Democracy t-1** | - | - | - | 0.107*** | - |
| | - | - | - | (0.014) | - |
| **Intercept** | 1.165*** | 1.759*** | 1.812*** | 1.465*** | - |
| | (0.096) | (0.166) | (0.181) | (0.166) | - |
| **R2** | .45 | .46 | - | - | 639 |
| **Observations** | 5,040 | 5,040 | 5,040 | 4,378 | 5,040 |
| **Number of groups** | (639) | 639 | 639 | 639 | 639 |