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# **Voters elect politicians who closely matched their preferences**

Working Paper No. 2012-10

# Voters elect politicians who closely matched their preferences<sup>\*</sup>

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## Abstract

What determines political candidates' election prospects? We match roll call votes of candidates for the majority elected upper house of parliament who were previously in the lower house with revealed preferences of their constituency. Thereby, we obtain a direct measure of past congruence. Politicians have a significantly and quantitatively important higher probability of election when they more closely matched the preferences of their constituency. This provides evidence for the direct retrospective voting rule that voters elect politicians who represented their preferences well.

**Key words:** Retrospective Voting, Voting Behavior, Representation, Constituents' Preferences.

**JEL Classification:** D72, D70.

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## **1 Introduction**

The notion that voters condition the election of political representatives on their past behavior ranks prominent in political economy models. Retrospective voting based on economic developments in inflation and unemployment appears to be common (for overviews see, among others, Nannestad and Paldam 1994 or Persson and Tabellini 2002). However, the most simple and direct retrospective voting rule “Do politicians get elected when they did what their constituents wanted?” has never been tested effectively for individual politicians as their deeds and the preferences of voters are usually not observed or compared for identical issues. We exploit a natural setting which allows doing so.

Swiss constituents reveal their preferences for legislative proposals in referenda (Frey 1994) after members of the parliament voted on the very same proposals. Thus, we derive a unique and direct measure of past congruence between the deeds of members of the National Council (lower house of Parliament) and voters’ preferences by matching the roll call votes of representatives with the preferences of the majority of their constituents referendum by referendum. We can then investigate whether the election prospects of candidates for the Council of States (upper house of Parliament) who are former members of the National Council increase when they exhibit a higher level of congruence between their parliamentary votes and their constituency’s preferences. Members of the Council of States are elected by majority rule and voters expect them to represent their constituency’s preferences.

Voters honor politicians who closely represented the preferences of their constituency: Politicians who match their constituency’s preferences in 75% of the votes are 20% points more likely to get elected than politicians who match only in 50% of the votes. Thus, our results present new evidence that retrospective voting matters with a direct congruence measure.

Section 2 describes congruence measure between the majority of constituents and politicians. Section 3 provides evidence for the basic retrospective voting mechanism and Section 4 concludes.

## **2 Identification of past congruence and estimation strategy**

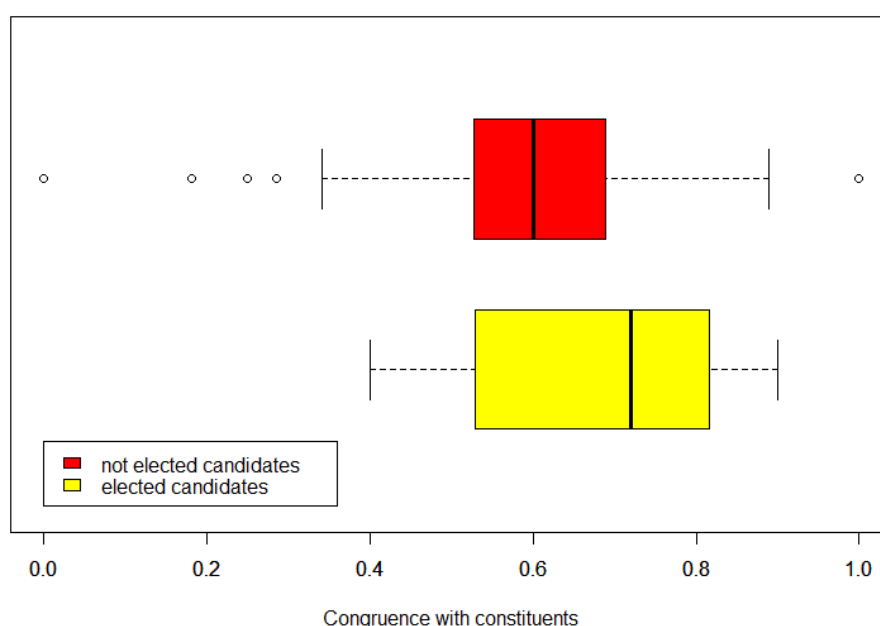
We analyze a unique setting to test whether constituents honor politicians who matched their preferences. In referenda, constituents reveal their preferences for policy outcomes by ranking them against the status quo (Schneider et al. 1981). From 1995 to

2010 politicians held 126 roll call votes in the National Council on issues which were also presented to citizens in referenda from 1996 to 2011. Thus, revealed preferences of a constituency can be matched with their representatives' roll call votes, as both, constituents and representatives decide on exactly the same issues with the identical wording (Stadelmann et al. 2012).

The office of member of the Council of States is generally seen as more prestigious and rewarding than that of the National Council. Many National Councilors run for the Council of States whose members are elected by majority rule<sup>1</sup> and who are expected to follow their constituency's interests. Electoral districts of both houses coincide. We collected the names of candidates to the Council of States who have formerly served as National Councilors. We know how well these candidates matched the preferences of the majority of their constituents prior to the election date. While it is generally hard to test retrospective voting due to incumbency effects and economic or social shocks, we analyze National Councilors who are not yet incumbents in the Council of States. Moreover, they already hold an office in the federal assembly. Candidates are therefore directly comparable to each other. We calculate average congruence levels for 110 candidates before they presented themselves for election.

Figure 1 illustrates the central motivation of the paper.

**Figure 1: Congruence with majority of elected and not elected candidates**



Notes: The Box-Whisker-Plot is based on congruence between the preferences of the majority of constituents and of individual political representatives to the National Council who run for the Council of States. The whiskers extend to the most extreme data points which are no more than 1.5 times the interquartile range from the box. Dots represent observations outside the interquartile range.

<sup>1</sup> An expectation is the Canton of Jura but excluding it from the estimates does not affect results.

The upper boxplot shows the distribution of congruence between politicians and the majority of constituents for candidates who were not elected while the lower boxplot stands for candidates who were elected. We observe that the past level of congruence is generally higher for candidates who were actually elected. Even the median of elected representatives matches the majority of constituents better than the third quartile of unsuccessful candidates.

We use the following logistic specification to evaluate if constituents vote retrospectively:

$$P(elected) = \Lambda(\alpha_1 MatchConstituents + \sum_j \alpha_j x_j + \varepsilon). \quad (1)$$

$\Lambda$  denotes the logistic function  $\Lambda(X) = e^X / (1 + e^X)$  (with  $X$  a design matrix). *MatchConstituents* gives the percentage match of candidates with the preferences of the majority of their constituents over four years prior to election. If retrospective voting matters in its direct form, then  $\alpha_1$  should be positive and significant.  $x_j$  stand for other controls which ensure that the effect captured by  $\alpha_1$  is not driven by specific personal characteristics, party effects, competition or district characteristics.

**Table 1: Election probability and past match with constituency's preferences**

	(1)	(2)	(3)	(4)
MatchConstituents	4.562** (1.873)	4.963*** (1.864)	4.903** (1.956)	5.313** (2.096)
Female		0.061 (0.456)	0.028 (0.435)	0.107 (0.443)
Children		-0.228* (0.126)	-0.228* (0.128)	-0.213 (0.133)
UniversityEducation		0.637 (0.564)	0.628 (0.578)	0.655 (0.581)
PublicSector			0.095 (0.402)	0.122 (0.383)
CompetingCandidates				-0.141** (0.068)
Intercept	-4.073** (1.595)	-4.468** (1.864)	-4.448** (1.886)	-3.875* (1.979)
Legislature Fixed Effects	YES	YES	YES	YES
Discrete change: 50% to 75% in MatchConstituents	0.200*** (0.056)	0.221*** (0.071)	0.216*** (0.083)	0.205** (0.087)
(Pseudo) R2	0.1200	0.1750	0.1750	0.2040
Brier	0.1660	0.1580	0.1580	0.1540
n. Obs.	110	110	110	110

**Notes:** Robust standard error estimates for logistic models with district clustering are given in parenthesis. The "Discrete change: 50% to 75% MatchConstituents" represents the change of the predicted probability that a representative is elected when her congruence level increases from 50% to 75% while all other variables are evaluated at the median value. \*\*\*, \*\*, and \* indicate significance level of <1 %, 1%-5%, and 5%-10%, respectively.

### 3 Empirical evidence for retrospective voting

The majority of voters honor politicians who matched their preferences more closely by electing them to the Council of States.

Specification (1) of Table 1 shows that a higher congruence level leads to a higher probability of election. We calculate the discrete effect for a change in the level of congruence from 50 to 75%<sup>2</sup> in the lower panel of Table 1. A 25% point higher match with the majority of constituents increase the election probability by approximately 20% points. As not all members of the National Council are candidates for the Council of States these results represent conservative estimates for the importance of retrospective voting: If candidates reacted to the election constraint by trying to better match the preferences of their constituency, any effect found would represent a lower bound.<sup>3</sup>

We include a number of personal characteristics (gender, number of children, education) in specification (2) and control for employment in the public sector (Brändle and Stutzer 2010) in specification (3). Personal characteristics and public sector employment do not systematically influence the probability of election for majority elected politicians. Most importantly, if the past match with their constituent's majority was high, the probability of election is by over 20% points higher, i.e. voters elect candidates who matched the preferences of their constituency more closely.

Finally, we include in specification (4) a control for the number of competing candidates. As expected, the more intense competition, the lower the probability of election. Nevertheless, a higher level of congruence with the majority of constituents ensures a significantly higher election probability and the magnitude of the effect is similar to earlier estimates.<sup>4</sup>

Table 2 provides a number of robustness tests. Although, the Council of States is elected by majority rule, party affiliation may influence the chances of election. In specification (1) and (2) we control for a candidate's average match with the official party line and for whether the candidate is from a right wing (Swiss People's Party) or left wing party (Socialists). *MatchConstituents* is not affected by the inclusion of these additional controls.<sup>5</sup>

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<sup>2</sup> 50% corresponds to a coin toss and 100% is the maximum possible. The first quartile of the distribution of congruence amounts to 52.9 % and the third quartile is 73.4%.

<sup>3</sup> Generally, we observe only minor differences in congruence between candidates and non-candidates. In column (4) and Table 2 we control for the total number of candidates and the results remain unchanged.

<sup>4</sup> Restricting the sample to politicians with more than 15% ex-post vote share, i.e. effective candidates, leads almost identical results (results available on request).

<sup>5</sup> Similarly, we observe that a higher level of congruence leads to higher election probability when analyzing center and wing parties separately.

**Table 2: Robustness tests - Election probability and past match with constituency's preferences**

	(1)	(2)	(3)	(4 - OLS)
MatchConstituents	4.749** (1.889)	4.545** (1.777)	6.003** (2.898)	0.561** (0.230)
Personal characteristics and competing candidates	YES	YES	YES	YES
PartyMatch	6.420 (4.893)	6.343 (4.855)	14.401** (6.205)	0.983** (0.452)
WingParty		-0.194 (0.474)	-0.683 (0.680)	-0.023 (0.071)
Intercept	-9.261* (5.202)	-8.882* (5.122)	-10.809* (6.387)	-0.565 (0.596)
Legislature Fixed Effects	YES	YES	YES	YES
District Fixed Effects	NO	NO	YES	YES
<i>Discrete change: 50% to 75% in MatchConstituents</i>	<i>0.197*** (0.079)</i>	<i>0.180*** (0.064)</i>	<i>0.183* (0.109)</i>	<i>0.140*** (0.057)</i>
(Pseudo) R2	0.2240	0.2250	0.5350	0.3120
Brier	0.1530	0.1520	0.1020	-
n. Obs.	110	110	110	110

**Notes:** as for Table 1. Specification (4) represent OLS estimates.

In specification (3) we take account of district fixed effects. Again, we note that specification (3) produces virtually the same coefficients and standard errors as earlier estimates without district fixed effects. Fixed effects in logit models may induce an incidental parameter problem and render estimators inconsistent. Therefore, we also estimated a linear probability model in specification (4) which produces similar results. Finally, rolling regressions (results available on request) leaving out one district at a time also lead to similar results. Thus, voters honor a high level of congruence by electing politicians to an office where they are expected to represent the constituency's preferences.

## 4 Conclusion

Referendum results indicate whether a majority of constituents prefers a policy proposal to the status quo. Politicians from the Swiss National Council who are candidates for the majority elected Council of States decide on precisely the same legislative proposals in Parliament as their constituents in referenda. By matching politicians' decisions in the National Council with constituents' revealed preferences in referenda, we obtain a direct measure of past congruence. We then use this measure to test whether voters elect politicians to office based on their past record of congruence.

Evidence strongly supports retrospective voting, i.e. if politicians match their constituency's preferences more closely they have a significantly higher election



probability. The positive influence of past congruence on the election probability is large in magnitude and robust to the inclusion of personal characteristics, parties, the number of competing candidates and district fixed effects.

## **Bibliography**

Brändle, T. & Stutzer, A. (2010), 'Public Servants in Parliament: Theory and Evidence on Its Determinants in Germany', *Public Choice* **145**(1-2), 223-252.

Frey, B. S. (1994), 'Direct Democracy: Politico-economic Lessons from Swiss Experience', *American Economic Review* **84**(2), 338-42.

Nannestad, P. & Paldam, M. (1994), 'The VP-Function: A Survey of the Literature on Vote and Popularity Functions after 25 Years', *Public Choice* **79**(3-4), 213-245.

Persson, T. & Tabellini, G. (2002), *Political Economics: Explaining Economic Policy*, MIT Press, Cambridge (MA).

Schneider, F.; Pommerehne, W. W. & Frey, B. S. (1981), Politico-economic interdependence in a direct democracy: The case of Switzerland, in Hibbs & Fassbender, ed., 'Contemporary Political Economy, Studies on the Interdependence of Politics and Economics', North Holland, Amsterdam.

Stadelmann, D.; Portmann, M. & Eichenberger, R. (2012), 'Quantifying Parliamentary Representation of Constituents' Preferences with Quasi-Experimental Data', *Journal of Comparative Economics*, forthcoming.