Electoral Institutions, Unemployment and Extreme Right Parties: A Correction.

Matt Golder*

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Abstract

In their 1996 article in the *British Journal of Politic Science*, Robert Jackman and Karin Volpert examine the conditions favoring parties of the extreme right in western Europe. They report strong evidence that unemployment, electoral thresholds and multi-partism affect the electoral success of extreme right parties. As a result, they conclude that support for the extreme right is sensitive to factors that can be modified through policy instruments. Although the article makes important contributions by emphasizing the role of electoral institutions and the methodological problems associated with selection bias, a reanalysis shows that a number of their inferences are open to question. I successfully replicate their original analysis, critique their interpretation of the causal effects, and question their model's theoretical justification.

*Department of Politics, New York University, 715 Broadway, 4th Floor, NY 10003-6806. Fax: 212-995-4184. E-mail: mrg217@nyu.edu.

1 Introduction

In their 1996 article in this journal, Robert Jackman and Karin Volpert analyze the systematic conditions that influence the electoral success of extreme right parties in sixteen west European countries from 1970 to 1990.[1] In particular, they focus on the effects of unemployment, electoral thresholds and multi-partism. By specifying and estimating a Tobit regression model, they conclude that:

1. Higher rates of unemployment increase the electoral support of extreme right parties.
2. Increasing electoral thresholds dampen support for the extreme right as the number of parliamentary parties expands.
3. Multi-partism increasingly fosters parties of the extreme right with rising electoral proportionality.

They argue that these conclusions are encouraging since unemployment, electoral thresholds and multi-partism can be adjusted through policy intervention (517-518).[2] Without questioning the theoretical justification of their model or changing any of the statistical techniques that they use, I illustrate that their second and third conclusions are open to question. A critical reanalysis of their model's theoretical justification suggests that their first conclusion may also be misleading.

There are four sections to this research note. The first very briefly outlines Jackman and Volpert's model. I then note some of the important methodological and theoretical contributions that this article makes for the study of extreme right parties. In the third section, I replicate and interpret their results. I show that only their conclusion about unemployment is actually supported by their analysis. Finally, I raise further concerns about Jackman and Volpert's conclusions by calling the theoretical justification of their model into question.

2 The Model

I focus on Jackman and Volpert's most preferred model specification. This is given below:

$$\begin{aligned} lnERPS &= \beta_0 + \beta_1 THRESH + \beta_2 ENPP + \beta_3 (THRESH * ENPP) \\ &+ \beta_4 UNEMP + \beta_5 COUNTRY_1 + \ldots \\ &+ \beta_{19} COUNTRY_{15} + \epsilon \end{aligned} \tag{1}$$

where Greek letters are parameters to be estimated; lnERPS is the natural log of the voteshare received by extreme right parties;[3] THRESH is the effective electoral threshold;[4] ENPP is the effective number of parliamentary parties;[5] UNEMP is the level of unemployment at the national level; and COUNTRY is simply a country dummy variable.

Jackman and Volpert argue that higher levels of unemployment provide a favourable environment for extreme right parties. Since extreme right parties focus their attacks on immigrants and foreign workers, they expect that their campaigns are more successful 'when jobs are scarce than when they are plentiful' (507). The implication is that extreme right voters blame the visible immigrant population for job losses. They also predict that higher electoral thresholds 'dampen the prospects for smaller parties of the extreme right' (506). This is because voters do not want to waste their vote.[6] Their decision to include an interaction term between the effective threshold and the effective number of parties is based on Lijphart's conclusion that disproportionality and multipartism are 'loosely inter-dependent'.[7] They anticipate that 'the dampening effect of disproportionality on extreme right support will increase with multi-partism, while the positive effect of multi-partism diminishes with rising disproportionality' (507).

3 Theoretical and Methodological Contributions

Jackman and Volpert make several fruitful contributions to the study of extreme right parties. The first is their attempt to test hypotheses about extreme right parties through a cross-national statistical analysis. Much of the literature on extreme right parties is dominated by single and small-N case studies. Although this research is very helpful in generating hypotheses, it is less useful for hypothesis testing. This is because it is difficult to draw valid causal inferences from this type of work.[8] This shift towards the systematic testing of general hypotheses should be applauded. A second contribution is their emphasis on the institutional constraints posed by electoral systems. There are historical narratives that emphasize how changes to electoral laws have influenced the success of extreme right parties. There is also some more analytical work investigating the relationship between the type of electoral system and the success of these parties.[9] On the whole, though, the institutional constraints posed by electoral systems have been relatively understudied compared to the roles played by other factors such as unemployment and immigration. This is somewhat surprising given the enormous amount of interesting and successful work on electoral rules that exists in the party system literature more generally.[10]

Jackman and Volpert's most important contribution is in raising the issue of selection bias in empirical analyses of extreme right parties (513).[11] They note that it is problematic to analyze the factors that influence the electoral success of extreme right parties when these parties do not exist in all countries. This is because there is good reason to believe that these factors might also be systematically related to whether an extreme right party exists in the first place. They recognize that their dependent variable (the electoral support for extreme right parties) is left-censored at zero because it cannot be observed in those countries where there is no organized extreme right party. In fact, 35 out of 103 observations in their sample are censored at zero. In these circumstances it would be wrong to drop all the censored observations since this leads to biased and inconsistent estimates. It would be equally wrong to retain the censored observations and simply code them as zero.[12] In response, Jackman and Volpert use a Tobit model that utilizes a maximum likelihood estimator for (left- or right-) censored variables. As King notes,

'the result is a much more realistic model of the process generating censored data and may be interpreted as if from a linear Normal regression with no censoring.'[13] The estimated coefficients represent the marginal effect of the independent variables on the underlying support for extreme right parties.

4 Results and Interpretation

Although these contributions are significant, a replication and critical reanalysis of their model indicates that their results and inferences are open to question. The first thing to note is that I was able to replicate their results with only minor difficulties.[14] This is somewhat of an achievement given how difficult (or impossible) it often is to replicate empirical research.[15] These results are shown in Model 1 in Table 1.[16]

(Table 1 about here)

The impact of unemployment can be interpreted directly from Model 1 in Table 1. Jackman and Volpert's conclusion that higher levels of unemployment increase the support of extreme right parties is clearly supported. However, the effect of electoral thresholds and the effective number of parties cannot be interpreted so easily. This is because the results of interaction models cannot be interpreted as in regular additive models since the coefficients are conditional.[17] For example, the marginal effect of THRESH on the dependent variable (lnERPS) is determined by taking the derivative of equation (1) with respect to THRESH. This is:

$$\frac{\partial lnERPS}{\partial THRESH} = \beta_1 + \beta_3 ENPP \tag{2}$$

It is clear from this that the effect of THRESH depends on the value of ENPP. The coefficients for electoral thresholds and the effective number of parties that appear in Model 1 are only informative in the special case when the relevant modifying variable is actually zero. In the case of electoral thresholds, this means that an increase in the threshold helps extreme right parties when the effective number of parties is zero. Although some limited information

can be learned from these figures, better inferences can be made when the full range of conditional coefficients and standard errors are estimated.

To some extent, Jackman and Volpert recognize this since they provide point estimates for the conditional coefficients at selected percentile values of the modifying variable. The problem is that it is difficult to interpret them since they do not provide the corresponding conditional standard errors. Nor do they provide the information necessary to calculate them. The standard error of THRESH conditional on ENPP is:

$$S_{\beta_1+\beta_3 ENPP} = \sqrt{var(\beta_1) + var(\beta_3)ENPP^2 + 2ENPPcov[\beta_1, \beta_3]} \quad (3)$$

The figures found in Table 1 of their article allow one to calculate the first two terms on the right-hand side of equation (3). These are simply the squares of the standard errors on the relevant variables. The problem is that the covariance in the last term cannot be derived from the information in their article. This means that it is impossible to know from their article if their conclusions about electoral thresholds and multi-partism are valid.

Given access to their data, I was able to calculate the full range of conditional coefficients and standard errors during the replication process. These are shown graphically in Figures 1 and 2. The solid sloping lines indicate how the value of the estimated causal effect of THRESH or ENPP changes across the full range of the relevant modifying variable. For example, Figure 1 indicates that electoral thresholds have a positive effect on the electoral success of extreme right parties when the effective number of parties is low, but a negative effect when the effective number of parties is high. One can see whether these conditional coefficients are statistically significant by considering the 95 per cent confidence intervals (dashed lines) that are drawn around them. The coefficients are not significant when the lower bound of the confidence interval is below the zero line and the upper bound is above it. In other words, the estimated causal effect of THRESH or ENPP is indistinguishable from zero at these points. The coefficients are only significant when the upper and lower bounds are both above or below the zero line.

(Figure 1 about here)

(Figure 2 about here)

Figure 1 shows that electoral thresholds have no effect on extreme right parties when the effective number of parties ranges between 2.3 and 3.1.[18] About one third of the observations fall in this range. The figure also implies that increases in electoral thresholds help extreme right parties when there are few parties. This is at odds with Jackman and Volpert's theoretical argument that raising electoral thresholds should decrease the electoral support of extreme right parties. If their argument were correct, then one would expect the conditional coefficient for electoral thresholds to always be negative. This is not the case here. Figure 2 illustrates that the effective number of parties has no effect on the support of extreme right parties when the effective threshold ranges between 4.7 per cent and 19.1 per cent. Over half of the observations fall in this range. Jackman and Volpert provide no theoretical reason as to why electoral thresholds and the effective number of parties might fail to have an effect on extreme right parties in these ranges. So far I have made no modification in the data, methods or model used in the original article.

Jackman and Volpert make some data collection errors, though. For example, data for the 1971 Danish election were omitted. They also included results for elections in Ireland in 1990 and the United Kingdom in 1989, although there were no legislative elections in those years. Incorrect figures were also used for the effective number of parties and effective threshold in the Austrian election of 1970.[19] The results from the statistical model when these data errors are corrected are shown in Model 2 in Table 1. It is clear that there is still no reason to question the conclusion that higher levels of unemployment help extreme right parties. However, the conditional coefficient for the effective number of parties shown in the table is now no longer significant.[20] This means that the number of parties in a system has no effect on the electoral success of extreme right parties when the electoral threshold is zero. More information about the impact of electoral thresholds and the effective number of parties can be gathered by calculating the full range of conditional coefficients and standard errors using the corrected data. These are shown graphically in Figures 3 and 4. Again, the solid sloping lines represent the estimated causal effect of THRESH or ENPP on the success of extreme right parties across the full range of the relevant modifying variable. The 95 per cent confidence intervals indicate when this effect is significant and when it is not.

(Figure 3 about here)

(Figure 4 about here)

Figure 3 illustrates that electoral thresholds have no effect at all on the extreme right when the effective number of parties ranges between 1.6 and 3.3. Now almost 50 per cent of the observations fall in this range. Thus, Jackman and Volpert's conclusion that 'increasing electoral thresholds dampen support for the extreme right as the number of parliamentary parties expands' is extremely misleading (501). Figure 4 illustrates that the effective number of parties only has an impact on extreme right parties in single-member, plurality systems (those with electoral thresholds over 31 per cent). Less than 10 per cent of the observations fall into this category. Moreover, the coefficient on multipartism is always negative whenever it is significant. This means that multipartism never increases the support for extreme right parties. Thus, there is no evidence to support the conclusion that 'multi-partism increasingly fosters parties of the extreme right with rising electoral proportionality'(501). It is clear that Jackman and Volpert's conclusions concerning electoral thresholds and the effective number of parties need to be seriously qualified. This is the case if one uses the original data. It is even more the case when the data is amended to take account of data collection errors. The only conclusion that remains totally valid relates to unemployment.

5 Theoretical Justification of Model

Clearly the empirical evidence presented above provides reasons to doubt Jackman and Volpert's conclusions. The validity of their conclusions can be further called into question once one evaluates the theoretical justification for their model. In particular, there seems little theoretical reason to include the interaction term (THRESH*ENPP) in the first place. Jackman and Volpert state that this interaction term would not be needed if there were a perfect relationship between electoral proportionality and multi-partism (506). However, they believe that this relationship is far from perfect. As evidence for this, they cite Lijphart's simple correlation between disproportionality and the effective number of parties (-0.45).[21] They claim that 'while this

correlation has the expected sign, the association cannot be characterized as strong' (507). As a result, Jackman and Volpert use Lijphart's conclusion that disproportionality and multi-partism are 'loosely inter-dependent' to justify the inclusion of their interaction term.

The problem is that this reasoning is based on the premise that electoral system features such as disproportionality directly affect the number of parties at the national level. Whilst this is a common argument in comparative electoral studies, Cox has shown that it is theoretically unsubstantiated.[22] Indeed, Cox has illustrated that electoral systems primarily have their political impact at the district level, where district magnitude is the principal determinant of the number of parties. Strong empirical evidence for this comes from numerous analyses of different electoral systems.[23] The effective number of parties that exists at the national level depends on how well the various local party systems are 'linked' across districts.[24] There is no automatic reason why the effective number of parties at the national and district levels should be the same. Thus, Lijphart's failure to find a strong correlation between disproportionality and the number of parties at the national level should come as no surprise. One would only expect to find a strong correlation between disproportionality and the number of parties at the district level. As a result, the number of parties at the national level is not especially relevant to an investigation of the effects of electoral institutions on the success of extreme right parties. This means that Jackman and Volpert should not have added an interaction term between electoral thresholds and the number of parties at the national level in their model; instead they should only have included effective thresholds.[25] The results of such a model can be seen in Model 3 in Table 1. Although the coefficient on electoral thresholds is negative as one would predict, it is not significant. This means that there is no evidence that electoral thresholds actually influence extreme right parties at all.[26]

A second theoretical issue concerns the inclusion of an unconditional unemployment variable in their model. This assumes that unemployment directly causes individuals to vote for extreme right parties. However, a causal story that implies a direct relationship such as this is not especially convincing. It is undeniable that economic conditions shape electoral outcomes.[27] The problem is that economic voting theories focus on how incumbent political parties are rewarded or punished for their economic performance. They do

not explain why voters who wish to punish incumbent parties should vote for extreme right parties over any other opposition party. Since people traditionally think of left-wing parties as more competent to deal with unemployment, it might actually be more reasonable to assume that these parties are better positioned to benefit from high unemployment levels. Although, there is little theoretical support for assuming that unemployment would have a direct and unconditional effect on the electoral success of extreme right parties, this does not mean that unemployment does not matter. Much depends on why voters think that unemployment is high. There may be little reason for people to vote for extreme right parties if they think that tight monetary policy or rigidities in the labor market cause unemployment. However, it is less difficult to see why they might do this if they think immigration is the cause of unemployment. This is likely to happen when there are large numbers of foreigners in the country. Thus, it might be the case that voters turn to extreme right parties if they think that immigrants cause unemployment.

In fact, this is exactly the type of causal story implicitly made by Jackman and Volpert (507-508). The problem is that they do not actually test this causal argument. Their model investigates whether unemployment increases the support of extreme right parties in an unconditional manner, even though their reasoning implies that this should only happen when voters think immigrants cause unemployment. A better test of their argument would be to include an interaction term between immigration and unemployment since this allows one to test the prediction that unemployment only helps extreme right parties when immigration is high. Golder examines this possibility using a similar Tobit model.[28] He distinguishes between populist and neofascist parties on the extreme right and uses a larger dataset based on 163 national elections in 19 west European countries between 1970 and 2000. He finds (i) that unemployment only increases the electoral strength of populist parties when there is a large number of foreigners in the country (more than 6.3 per cent of the total population) and (ii) that unemployment never increases the electoral support of neofascist parties. This suggests that Jackman and Volpert's conclusion regarding unemployment may be misleading.

6 Conclusion

Although Jackman and Volpert make important contributions to the study of extreme right parties, their empirical conclusions are open to question. Their claim that higher levels of unemployment help extreme right parties is valid given their model. However, it may be somewhat misleading. This is because there is theoretical reason to believe that the effect of unemployment on extreme right parties depends on the number of foreigners in a country. My reanalysis shows that their claims relating to multi-partism and electoral thresholds are not supported by their own data. It also implies that it would be much harder to contain the electoral growth of extreme right parties through policy intervention than Jackman and Volpert believe. This is because there is no convincing evidence that changing electoral rules would influence their electoral success in one way or another.

Table 1

Regressor	Model (1)	Model (2)	Model (3)
THRESHOLD	0.276*	0.165*	-0.027
	(0.059)	(0.058)	(0.019)
EFFECTIVE NUMBER OF PARTIES	1.172*	0.837	———
	(0.382)	(0.455)	
THRESHOLD*EFFECTIVE NUMBER OF PARTIES	-0.103*	-0.065*	———
	(0.019)	(0.019)	
UNEMPLOYMENT	0.066*	0.091*	0.097*
	(0.016)	(0.019)	(0.021)
COUNTRY DUMMIES	———	———	———
CONSTANT	-4.943*	-3.212	0.403
	(1.480)	(1.666)	(0.752)
R^2	0.731	0.637	0.601
STANDARD ERROR	0.373	0.458	0.499
LOG LIKELIHOOD	-40.17	-53.87	-59.23
N	103	102	102

* indicates $p < 0.05$. Standard errors given in parentheses.

Figure 1: The Impact of Effective Thresholds (THRESH) on Support for Extreme Right Parties Conditioned on the Effective Number of Parties

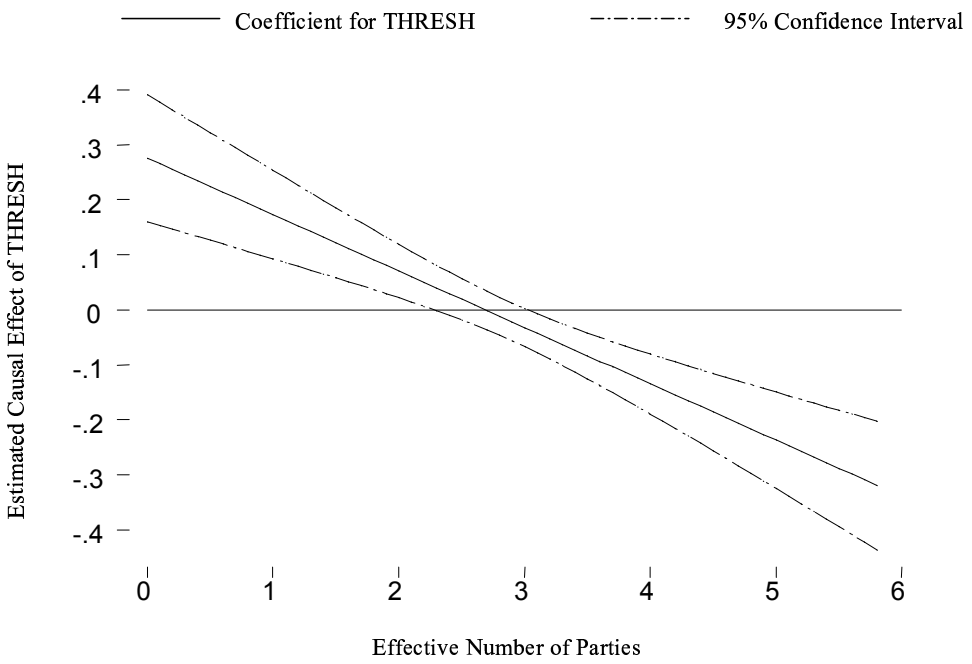


Figure 2: The Impact of the Effective Number of Parties (ENPP) on Support for Extreme Right Parties Conditioned on the Effective Threshold

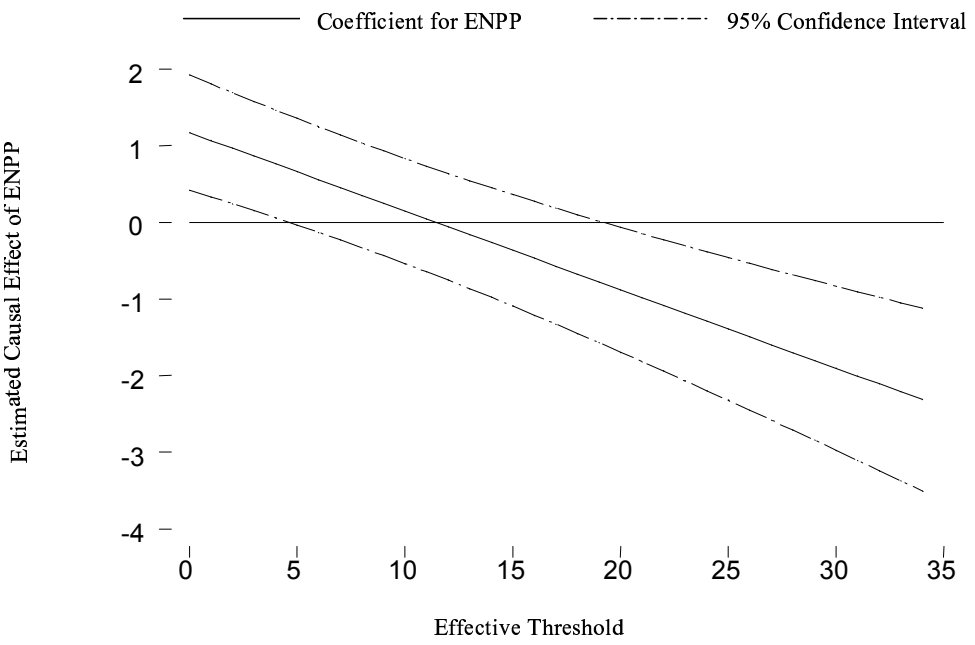


Figure 3: The Impact of Effective Thresholds (THRESH) on Support for Extreme Right Parties Conditioned on the Effective Number of Parties using Corrected Data

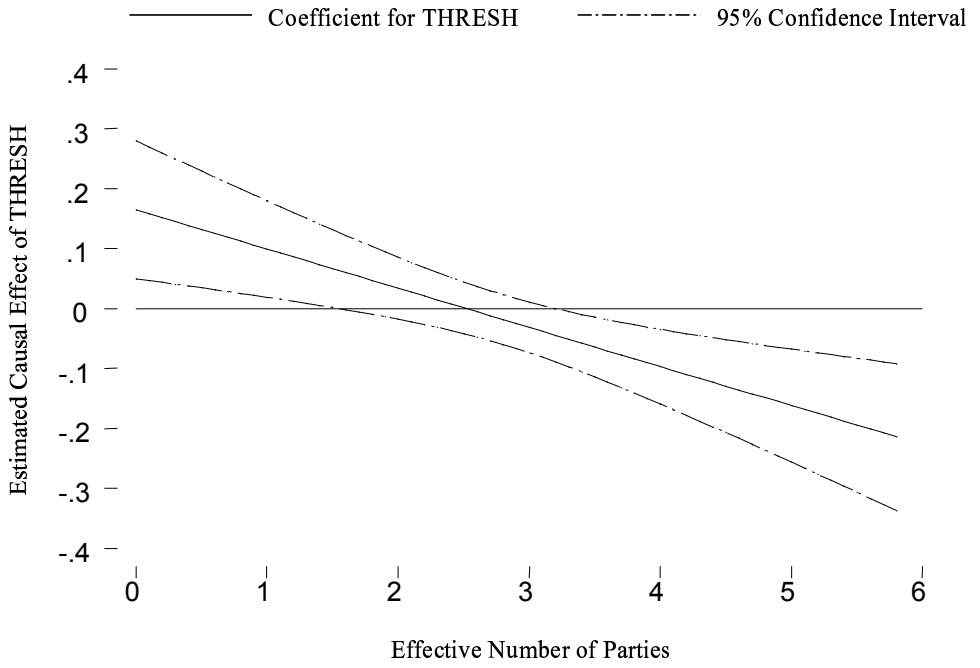
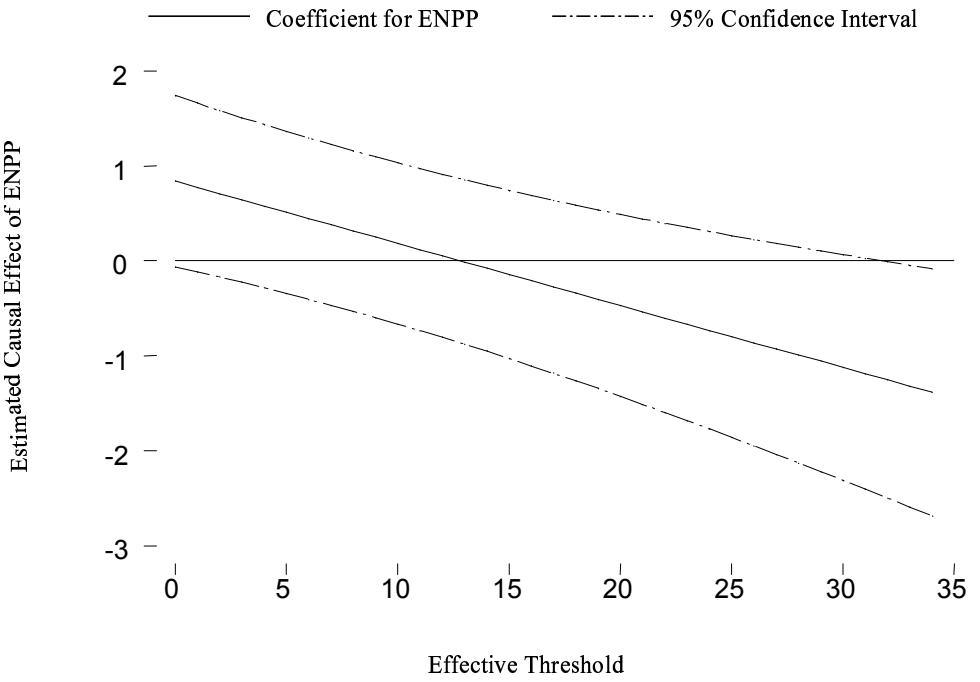


Figure 4: The Impact of the Effective Number of Parties (ENPP) on Support for Extreme Right Parties Conditioned on the Effective Threshold using Corrected Data



Notes

[1]Robert Jackman and Karin Volpert, 'Conditions Favouring Parties of the Extreme Right in Western Europe', *British Journal of Politics*, 26 (1996), 501-521. The countries included in their analysis are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

[2]These conclusions are often cited in subsequent research on extreme right parties. See Duane Swank and Hans-Georg Betz, 'Right-Wing Populism in Western Europe: The Impact of Structural Change, Political Institutions, and Economic Performance on Party Electoral Fortunes in 16 Nations', Paper presented at the Annual Meeting of the American Political Science Association, Chicago (1995); Duane Swank and Hans-Georg Betz, 'Internationalization and Right-Wing Populism in Western Europe', Paper presented at the Conference on Globalization and Labour Markets, Workshop on Political Economy, University of California, Los Angeles (1996); Pia Knigge, 'The Ecological Correlates of Right-Wing Extremism in Western Europe', *European Journal of Political Research*, 34 (1998), 249-279; Terri Givens, 'The Role of Socio-Economic Variables in the Success of Radical Right Parties', Mimeo, University of California, Los Angeles.

[3]In order to transform this variable logarithmically they added one to the voteshare received by extreme right parties.

[4]The effective threshold is the mean of the threshold of representation and exclusion. It is calculated as $\frac{50\%}{M+1} + \frac{50\%}{2M}$, where M is the district magnitude. See Arendt Lijphart, *Electoral Systems and Party Systems: A Study of Twenty-Seven Democracies, 1945-1990* (Oxford, Oxford University Press, 1994), p. 27. For more information on electoral thresholds, see Rein Taagepera, 'Effective Magnitude and Effective Threshold', *Electoral Studies*, 17 (1998), 393-404; Rein Taagepera, 'Nationwide Inclusion and Exclusion Thresholds of Representation', *Electoral Studies*, 17 (1998), 405-417; Rein Taagepera, 'Nationwide Threshold of Representation', Mimeo, Department of Political Science, University of California, Irvine.

[5]The effective number of parties is calculated as $1/\Sigma s_i^2$, where s_i is the percentage of seats won by the i^{th} party. This is the reciprocal of the Hirschman-Herfindahl index used in economics to measure industrial concentration. See Markku Laakso and Rein Taagepera, 'Effective Number of Parties: A Measure with Application to Western Europe', *Comparative Political Studies* (1979), 3-27.

[6]Maurice Duverger, *Political Parties: Their Organization and Activity in the Modern State* (New York, Wiley, 1963)

[7]Lijphart, *Electoral Systems and Party Systems*, p. 77.

[8]See James Fearon, 'Counterfactuals and Hypothesis Testing in Political Science', *World Politics*, 43 (1991), 169-195; Gary King, Robert Keohane and Sidney Verba, *Designing Social Inquiry: Scientific Inference in Qualitative Research* (Princeton, Princeton University Press, 1994); Stanley Lieberson, 'Small N's and Big Conclusions: An Examination of the Reasoning in Comparative Studies Based on a Small Number of Cases', *Social Forces*, 70 (1991), 307-320.

[9]See Herbert Kitschelt, *The Radical Right in Western Europe: A Comparative Analysis* (Ann Arbor, University of Michigan Press, 1997).

[10]See William Riker, 'The Two-Party System and Duverger's Law: An Essay on the History of Political Science', *American Political Science Review*, 76 (1982), 753-766; Rein Taagepera and Matthew Shugart, *Seats and Votes: The Effects and Determinants of Electoral Systems*, (New Haven, Yale University Press, 1989); Gary Cox, 'Centripetal and Centrifugal Incentives in Electoral Systems', *American Journal of Political Science*, 34 (1990), 903-935; Gary Cox, *Making Votes Count: Strategic Coordination in the World's Electoral Systems*, (New York, Cambridge University Press, 1997); Gary Cox, 'Electoral Rules and Electoral Coordination', *Annual Review of Political Science*, (1999), 145-161.

[11]The fact that selection bias can seriously damage one's ability to make valid causal inferences is increasingly well understood and accepted. See James Heckman, 'Sample Selection Bias as a Specification Error', *Econometrica*, 47 (1979), 153-161; Barbara Geddes, 'How the Cases you Choose Affect the Answers you get: Selection Bias in Comparative Politics', in James Stimson (ed.), *Political Analysis*, (Ann Arbor, University of Michigan Press, 1990), pp.131-150; Adam Przeworski and Fernando Limongi, 'Selection, Counterfactuals and Comparisons', Mimeo, University of Chicago, (1992); King, Keohane and Verba, *Designing Social Inquiry*.

[12]Paul Kennedy, *A Guide to Econometrics*, (Cambridge, MIT Press, 1998), p. 251.

[13]Gary King, *Unifying Political Methodology: The Likelihood Theory of Statistical Inference*, (New York, Cambridge University Press, 1994), p. 210.

[14]The default settings for the maximum likelihood optimizers used by STATA did not converge. However, if the tolerance for the log-likelihood is changed to ltolerance (1e-5) then full convergence is achieved. Convergence is declared when the relative change in the log-likelihood from one iteration to the next is equal to ltolerance $(\cdot)$.

[15]William Dewald, Jerry Thursby and Richard Anderson, 'Replication in Empirical Economics: *The Journal of Money, Credit and Banking Project*', *American Economic Review*, 76 (1986), 587-603; Gary King, 'Party Platforms, Mandates, and Government Spending', *American Political Science Review*, 87 (1993), 744-780; Gary King, 'Replication, Replication', *PS: Political Science and Politics*, (1995).

[16]Model 1 is equivalent to Model 2 in Jackman and Volpert's article (514). They actu-

ally calculate three models. I focus purely on Model 2 since this is their most-preferred specification and it is the model from which their conclusions are drawn.

[17]For a good discussion of interaction effects in linear and non-linear models see Robert Friedrich, 'In Defense of Multiplicative Terms in Multiple Regression Equations', *American Journal of Political Science*, (1982) and Jeff Gill, 'Interpreting Interactions and Interaction Hierarchies in Generalized Linear Models: Issues and Applications', Paper presented at the Annual Meeting of the American Political Science Association, San Francisco, (2001).

[18]One can see this because the upper bound of the confidence interval is above the zero line in this range whereas the lower bound is not.

[19]The correct figures were taken from Lijphart, *Electoral Systems and Party Systems*, p. 33, 160, which is the same source that Jackman and Volpert cite for their data.

[20]The coefficient on the constant is also no longer significant.

[21]Lijphart, *Electoral Systems and Party Systems*, p. 76.

[22]Gary Cox, *Making Votes Count*; Gary Cox, 'Electoral Rules and Electoral Competition', 145-161.

[23]See Steven Reed, 'Structure and Behaviour: Extending Duverger's Law to the Japanese Case', *British Journal of Political Science*, 29 (1991), 335-356; Gary Cox, 'Strategic Voting Equilibria under the Single Non-Transferable Vote', *American Political Science Review*, 88 (1994), 608-621; Pradeep Chhibber and Ken Kollman, 'Party Aggregation and the Number of Parties in India and the United States', *American Political Science Review*, 92 (1998), 329-342; John Hsieh and Richard Niemi, 'Can Duverger's Law be Extended to SNTV? The Case of Taiwan's Legislative Yuan Elections', *Electoral Studies*, 18 (1999), 101-116; Neil Jesse, 'Candidate Success in Multi-Member Districts: An Investigation of Duverger and Cox', *Electoral Studies*, 18 (1999), 323-340.

[24]Empirical evidence suggests that the extent to which local party systems are 'linked' in national party systems is related to factors such as cleavage structures and the degree of fiscal and political centralization. See Octavio Amorim Neto and Gary Cox, 'Electoral Institutions, Cleavage Structures, and the Number of Parties', *American Journal of Political Science*, 41 (1997), 149-174; Pradeep Chhibber and Ken Kollman, 'Party Aggregation and the Number of Parties in India and the United States', 329-342; Allen Hicken, 'Political Parties and Linkage: Strategic Coordination in Thailand', Paper presented at the Annual Meeting of the American Political Science Association, Atlanta (1999).

[25]Since the electoral system endogenously determines the number of parties at the district level, Jackman and Volpert could conceivably use the average effective number of parties at the district level instead of effective thresholds. However, it is unclear how this would be an improvement.

[26]I also calculated two other variants of Model 3. In one I replaced electoral thresholds with the effective number of parties. In the other I included both electoral thresholds and the effective number of parties, still without an interaction term. There was no evidence that either of these factors ever have an influence on extreme right parties. These results are not shown, but are available from the author on request.

[27]Michael Lewis-Beck and Mary Stegmaier, 'Economic Determinants of Electoral Outcomes', *Annual Review of Political Science* (2000), 183-219.

[28]Matt Golder, 'Explaining Variation in the Electoral Success of Extreme Right Parties in Western Europe', Paper presented at the Annual Meeting of the Midwest Political Science Association, Chicago (2001).