Electoral support for extreme right-wing parties: A sub-national analysis of western European elections[☆]

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ABSTRACT

This paper addresses two major limitations of cross-national research on electoral support for extreme right parties (ERPs) in western Europe: its almost exclusive focus on national-level data and its failure to examine the role of the social welfare state and social capital. We employ Tobit I estimations in an additive and interactive model and compute conditional coefficients and standard errors for several interactive variables. We conclude that levels of social capital play a major role in mediating the relationships between immigration, unemployment and support for ERPs.

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The electoral successes of Jean-Marie Le Pen's National Front, Jörg Haider's Freedom Party and Umberto Bossi's Northern League, to name just a few, have generated a great deal of anxiety among those concerned about the maintenance of liberal values in European societies. In particular, many commentators point to the xenophobic rhetoric of these politicians and their supporters, including racist remarks by the Northern League's Roberto Calderoli and Le Pen's claim that France's economic problems are linked to immigration. Others suggest that these electoral successes spring from poor economic performance, a reaction to the redistributive mechanisms of the social welfare state, or declining trust in established parties and fellow citizens. Whatever the explanation, the surge of support for extreme

right parties (ERPs) since the 1980s challenges our understanding of democratic politics in Europe, presenting researchers with the task of formulating new hypotheses seeking to explain these developments and policymakers with the responsibility of developing responses that address voters' concerns without compromising democratic values.

Although existing research contributes a great deal to our understanding of the rise of ERPs, no single theory has come to dominate the academic literature. In seeking to explain electoral support for ERPs, we focus on three of the most prominent theories: ethnic prejudice, economic insecurity and welfare state backlash. We also consider whether social capital, to the extent that it is captured by the degree of income inequality, affects support for the extreme right.

One major characteristic of the work on ERPs to date is the extent to which it has been dominated by national-level analyses. However, it is well known that there is substantial cross-regional variance within countries in both votes for

extreme right parties and the major variables that have been employed to explain these votes.[1] Another limitation of previous research has been its failure to systematically examine the role of the social capital and the welfare state in explaining support for extreme right parties. In addressing these gaps in the literature, we take advantage of constituency-level electoral data to compute regional vote shares for ERPs in 14 national elections held in eight countries in the 1990s and 2000: Austria (1995, 1999), Belgium (1995, 1999), Denmark (1994, 1998), France (1995), Germany (1994), Greece (1996, 2000), Italy (1994, 1996) and the United Kingdom (1992, 1997)—144 regions in all. We have also collected regional-level data on much-studied variables like the rate of immigration into a region and the level of unemployment, as well as such less commonly examined variables as the degree of social protection provided by the state and the extent of social capital, operationalized using income inequality. In our discussion, we offer hypotheses that variously predict direct and/or conditional effects on regional vote shares for ERPs. Moreover, we emphasize the ways in which a sub-national focus helps to clarify existing theories, which have been developed primarily to explain national-level variation in electoral support for the extreme right. Finally, we are interested in predicting and explaining the conditions under which regional support for ERPs is present.

1. Review of the literature

The existing theoretical and empirical research on ERPs can be divided into two broad groups. First, there are scholars who have tried to identify unique indicators (theoretically and empirically) that foster votes for ERPs by focusing on their direct effects. In such a framework, scholars examined the direct (separate) causal effect of a specific covariate on support for ERPs, *ceteris paribus*, with mixed results. Statistically speaking, an additive model was developed and tested.

The other group of scholars has concluded that the additive model that is justified, explicitly or implicitly, by the *ceteris paribus* assumption may not fully capture a much more complex reality. In other words, they asked whether the effect of the covariate *x* on ERPs depends on other covariates (*z*, *w*). Statistically, models with various single interactions were developed and tested. The results indicated that many of the unique/conditional effects of a covariate on ERPs depend on the other covariate(s). The work of both groups is discussed below within the framework of a number of contending theories.

1.1. Ethnic prejudice

One of the most prominent theories advanced to explain the emergence of ERPs in western Europe argues that voters for these parties are primarily motivated by 'expressive' or 'ideational' concerns, whereby foreign immigration is seen as a threat to national culture (Golder, 2003a; Quillian, 1995; Sniderman et al., 2000). Since parties of the extreme right make nationalistic and sometimes explicitly racist appeals that seek to take advantage of group intolerance, it is argued that they find greater support in countries that experience higher levels of immigration. As put by Kitschelt (1997: 26), 'those regions and countries that had to swallow the heaviest load of immigrants give rise to the strongest right-wing extremist parties.'

As has been indicated, most empirical research to date on the link between immigration and support for ERPs has been based on national-level data. However, it is reasonable to argue that higher concentrations of immigrants in particular sub-national territorial units—as opposed to average levels of immigration across the nation as a whole—are most likely to inflame ethnic prejudices, and thus affect support for ERPs. If this is true, the local or sub-national context examined in this study is the most appropriate level at which to assess the relationship between immigration flows and support for ERPs.

1.2. Economic insecurity

A second explanatory tradition looks to economic insecurity. It has been widely argued that the rise of the extreme right can be traced to the end of Western Europe's 'Golden Era' as a result of the first oil shock in 1973. Unemployment in particular has been singled out as the most visible aspect of this economic crisis. While such arguments have intuitive appeal, theorizing about the linkage between unemployment levels and support for ERPs has been somewhat inconclusive. Some researchers suggest that high unemployment rates 'reveal mediocre economic performance that provides an especially propitious context for political crusades of the form favoured by the extreme right, whose electoral support we therefore expect to increase directly with unemployment' (Jackman and Volpert, 1996: 508). However, the question remains why, in the words of Golder (2003a: 439), 'voters who wish to punish incumbent parties should vote for extreme right parties over any other opposition party,' and a large debate has ensued (Dülmer and Klein, 2005; Knigge, 1998; Lewis-Beck and Mitchell, 1993; Lubbers et al., 2002; Lubbers and Scheepers, 2005). Nonetheless, a direct formulation of the economic insecurity hypothesis holds that the level of unemployment in a region, which varies widely, is positively associated with support for extreme right parties.

In addition to hypothesizing about the direct effects of immigration and unemployment rates on electoral support for ERPs as described above, much recent theorizing in this area argues that there are conditional effects such that only simultaneously higher (or lower) rates affect regional vote shares. As Dülmer and Klein (2005: 246) put it, 'if there are no immigrants to be blamed … for actually or potentially taking away scarce jobs, there is no reason why unemployment itself should cause right-wing voting' (Lubbers et al., 2002: 349; Knigge, 1998: 257). Such an approach is also more consistent with the political rhetoric of the extreme right, which often blames negative economic

[1] Even the few studies that do examine sub-national variation in support for ERPs focus on single countries (Bowyer, 2008; Coffé et al., 2007; Lubbers and Scheepers, 2000; Mayer and Perrineau, 1989) or, at most, a handful (Givens, 2002; Mudde, 1999).

conditions on foreign migrants. Indeed, when Golder (2003a) examined 165 elections in Western Europe between 1970 and 2000, he found support for the hypothesis that high unemployment stimulates support for ERPs only when immigration is also high. Accordingly, we test this hypothesis by including an interactive term in our second model.

1.3. Welfare state backlash

Among Kitschelt's (1997) notable contributions to our understanding of the electoral success of the extreme right is his theoretical discussion of the relationship between social welfare policies and support for ERPs (termed 'New Radical Right' by Kitschelt). Kitschelt's main thrust is that support for ERPs represents a neoliberal response to globalization; such parties and their voters are opposed to generous social welfare states and the high taxation that supports them because of the alleged economic challenges posed by global economic competition (Kitschelt, 1997: 6–11). From the neoliberal perspective, greater government redistribution within a region reflects a more generous public sector and a less competitive private sector that in turn encourages votes for ERPs. Although little empirical support is offered by Kitschelt, a recent cross-national study tests this hypothesis and concludes that support for ERPs 'tended to be stronger in advanced post-industrial countries with higher levels of welfare-state expenditure' (Veugelers and Magnan, 2005: 855). Moreover, another study, also discussed below, concludes that larger national tax burdens, which both finance the transfer system and serve as a redistributive mechanism, are associated with larger national vote shares for ERPs (Swank and Betz, 2003: 239).

In a similar vein, Kitschelt (1997) argues that another significant source of support for the extreme right arises from voters' fears about the future of the social welfare state in the face of higher levels of immigration. As he puts it, 'where the costs of including immigrants are high due to comprehensive and redistributive social policies … a substantial number of citizens will be inclined to support expulsion of immigrants … to limit redistributive expenses …. Thus racism and intolerance … may be generated by … the redistributive schemes of the social welfare state' (Kitschelt, 1997: 262). Whereas the neoliberal hypothesis predicts that greater income redistribution promotes support for the extreme right regardless of the level of immigration into a country or region, a welfare chauvinist interpretation of the hypothesis implies a conditional relationship: it predicts that regions where more income is being redistributed via fiscal policies would report higher vote-shares for ERPs only when there are immigrants present to receive the benefits.

Finally, a third theoretical perspective, which we will call welfare universalism, argues that social transfers serve to ameliorate some of the perceived negative consequences of globalization and thus reduce support for ERPs, directly challenging Kitschelt's hypotheses discussed above. One recent study finds support for this perspective, concluding that 'universalistic, generous and employment-oriented welfare states directly depress RRWP [radical right wing

populist] party political support' (Swank and Betz, 2003: 223). A weakness of previous studies, however, is that they do not directly assess income redistribution but rather the size of social benefit expenditures relative to the economy as a whole. The size of social benefits and their redistributive effect are clearly not the same thing; as put by Milanovich (2000: 370), 'a society with high taxes and transfers may have contributors and beneficiaries who are the same people.' In order to properly measure the redistributive size of the social welfare state, then, it is necessary to examine not the sheer size of social benefit expenditures but rather their redistributive effect by way of taxes and transfers. Moreover, it seems reasonable that individuals are more attuned to the actual level of government redistribution within their own region than to whether their national welfare state is classified as 'universal' or national spending levels are high relative to other countries' levels.

1.4. Social capital and inequality

Despite the vast literature on how social capital affects political democracy (Putnam, 1993, 2000, 2002; Uslaner 2002), we could only find one recent study that sought to determine whether variations in aggregate levels of social capital are associated with right-wing extremism: Coffé et al. (2007), who found that the 'effect of social capital is large' (p. 150). We operationalize the level of social capital by focusing on income inequality, which has been linked both theoretically and empirically to the formation of social capital and interpersonal trust.[2] For example, Uslaner (2002: 236) concludes that 'economic inequality is a powerful predictor of trust. Yet trust has no effect on economic inequality. The direction of causality goes only one way' (see also Putnam, 2000: 359–360). Moreover, focusing on income inequality is appropriate given the prominence of egalitarianism and national homogeneity in the rhetoric of the extreme right (Minkenberg and Perrineau, 2007: 30). Furthermore, inequality is often associated with increasing global competition and domestic downsizing, which are explicitly identified by extreme right politicians such as Haider and Le Pen as a source of economic insecurity that serves to undermine national unity (Swank and Betz, 2003: 223). Finally, as Putnam (1993) and others (Jesuit et al., 2003; Schneider et al., 2000) have shown, social capital and inequality vary widely within countries and across the regions of Western Europe.

While we cannot offer a thorough overview of the literature on social capital, a direct application of the thesis posits that higher levels of economic inequality within regions or countries inhibit the formation of social capital, which in turn promotes authoritarian rather than participatory democratic politics (Coffé et al., 2007: 145; Putnam, 1993). In addition, similar to our hypothesis about the effects of unemployment on ERP vote shares, we theorize that a wider gap between the rich and poor could have either of two effects. One is a direct effect, which would

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[2] Unfortunately, due to data limitations we could not also test this hypothesis by measuring the quantity of regional associational life, as a previous study does (Coffé et al., 2007).

support the straightforward social capital hypothesis described above. The other is a conditional effect. More precisely, Putnam (2000: 22) distinguishes between 'bridging (or inclusive)' and 'bonding (or exclusive)' social capital. The former type would be expected to reduce support for ERPs since it promotes networks that are 'outward looking and encompass people across diverse social cleavages' (Putnam, 2000). The latter type of social capital, conversely, may exacerbate xenophobia and encourage votes for ERPs. 'Bonding social capital, by creating strong in-group loyalty, may also create strong out-group antagonism … and for that reason we might expect negative external effects to be more common with this form of social capital' (Putnam, 2000: 23). Accordingly, it is useful to distinguish between these two different forms in our analysis.

In an attempt to make this distinction, we were guided by previous research suggesting that economic insecurity, specifically unemployment, fosters the production of bonding social capital over bridging. As put by Worms (2002: 169):

> Fear of unemployment … breeds an attitude of withdrawal … and the decision to opt out of any sort of work-associated social capital. For a minority it may lead to militant rejection of present society and joining radical political groups at both ends of the political spectrum representing, in both cases, self-centered and highly disconnected social capital.

We operationalize this difference between bridging and bonding social capital by creating an interaction term between unemployment and inequality, with the expectation that when both are high there will be a tendency for society to fragment, whereas when both are low broader coalitions will tend to form. As will be demonstrated in the following discussion, this interaction also requires us to take immigration, and to some extent the welfare state, into account when interpreting our findings. More broadly, we will explore whether this relationship is conditional on other variables, such as immigration and welfare state protection.

In sum, using Putnam's (2000: 355) typology, we hypothesize that vote shares for ERPs will be lower in regions having high levels of social capital and low levels of unemployment (the 'civic community') but higher in regions where higher levels of social capital are combined with higher unemployment (the 'sectarian community'). Finally, we expect that greater support for ERPs will be evident when social capital is scarce and economic insecurity high (the 'anarchic' society) but expect no effect when both social capital and economic insecurity are low (the 'individualistic' society).

2. Data and sources

It has been suggested that ERPs 'present as many differences as similarities' (Schain et al., 2002: 6). Nonetheless, all such parties share a 'myth of a homogenous nation, a romantic and populist ultranationalism which is directed against the concept of liberal and pluralistic democracy' (Minkenberg, 2000: 174; see also Ignazi, 2003;

Mudde, 2000) and there is in fact considerable agreement among scholars when identifying parties that belong to this category.[3] In this study, in line with Golder (2003a) and others, we classify the following political parties as extreme right parties: The Austrian Freedom Party; the Belgian Flemish Block and National Front; the British National Front and National Party; the Danish Progress Party; the French National Front; the German Republican Party, National Democratic Party and People's Union; the Greek National Political Union and the Party of Hellenism; and the Italian Northern League and Tricolor Flame. The percentage of valid votes cast for these parties is calculated for each region from Caramani (2000) or, in the case of the Greek and French electoral results, the Greek Ministry of the Interior (2008) and Carr (2006), respectively. Ideally, we would focus on the first tier of the electoral system. Unfortunately, economic and demographic data are unavailable for most of our countries at this level. These data are, however, available according to the 'Niveaux d'Unités Territoriales Statistiques' (NUTS) scheme used by the EU, which in most cases allows us to measure support for ERPs at a somewhat higher level of aggregation. Specifically, we examine ERP vote shares in Austrian, British, Danish, French, Greek and Italian Regions; and Belgian and German Federal States.

Most previous empirical work on ERPs focuses exclusively on a single measure of immigration: the percent of the entire population that is foreign-born, also referred to as the immigration stock.[4] However, only data for annual immigration flows (which we have averaged over three years) are available at the regional level. While we would obviously have preferred to measure both flows and accumulated stocks, there are clearly some advantages to the flow figures we have employed. For example, the measures of immigration stocks used in previous work make no distinction between newly arriving immigrants and persons who arrived in earlier waves of migration, often decades ago, and have long since become citizens. Our measure, in contrast, captures the proportion of the population that has recently arrived, who are presumably the immigrants most visible to the overall population. Specifically, we have computed a regional immigration rate by calculating the number of immigrants as a proportion of the regional population, averaged over the two years preceding and the year of the national election (except in the cases of Belgium, when data were only available for a single year, and France, which averages the previous year's flows with those of the election year).[5] Immigration data were computed using Eurostat's New Chronos REGIO series (2003) and, in the case of France, Thierry (2003).

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[3] The parties that are in the most dispute with respect to being defined as 'extreme right' are Philippe de Villiers' Movement for France (MPF) and Gianfranco Fini's 'post-fascist' National Alliance (AN) in Italy. Treating these parties as extreme right has no effect on our conclusions in this study.

[4] Swank and Betz (2003) use flows of asylum seekers and refugees instead of the proportion of the population foreign-born.

[5] In the case of Germany, immigration data were unavailable for 1994, the year of the election, so we computed an average over the three preceding years.

Immigration rates for British regions were computed using the Spring 1992, 1993, 1995–1997 Quarterly British Labour Force Surveys.[6]

Regional unemployment rates, which are also from Eurostat's New Chronos REGIO series (2003), are defined as the percentage of the economically active population that is currently unemployed, as measured in the year of the national election.[7]

We estimate regional income inequality, which is a proxy for the level of social capital, using the Gini Coefficient, a frequently used summary statistic of an income distribution, which ranges from 0 when income is equally distributed across a population, to 100 when one household receives all income. More specifically, we measure the household distribution of post-tax and -transfer income, commonly referred to as 'disposable income,' which includes both private sources of income such as wages and salaries, and public sources, such as pensions, unemployment benefits, means-tested benefits and universal family allowances. Finally, we adjust household incomes to account for economies of scale or income sharing by dividing this amount by the square root of the number of members, another standard practice in this area, and weighting by household size. Data have been computed from the Luxembourg Income Study's (LIS) microdata archive, and represent the LIS survey immediately prior to the election for which ERP votes are measured.[8]

Finally, in order to compute figures for income redistribution, we first must measure the distribution of pre-tax and -transfer (market) income, which is largely comprised of wages and salaries but also includes income from self-employment, revenue from property, and income from pensions of private and public sector employees. Next, we subtract the Gini coefficient of disposable income, defined above, from this value. This figure estimates the absolute reduction of income inequality within a region resulting from government policies: Gini$_{market}$–Gini$_{disposable}$ (Kenworthy and Pontusson, 2005; Mahler and Jesuit, 2006). Again, data are from the Luxembourg Income Study.

3. The models

To assess the debate within the literature regarding the appropriate nature of the model (additive or interactive) to predict and explain votes for ERPs, we estimate a model without interactions (Model 1) and one with interactions (Model 2). Model 1 tests whether, on average, each of the covariates has a non-zero effect on the dependent variable, *ceteris paribus*. Model 2 tests whether the effect of

a particular covariate on the dependent variable varies with or depends on other covariate(s). In other words, 'the effects of variables involved in interactive terms depend upon two (or more) coefficients and the values of one (or more) other variables(s)' (Kam and Franzese, 2007: 43). Following Kam and Franzese (2007) we include all interactions in one model (Model 2) instead of including each interaction in a separate model, as has been done in most previous research.[9]

As indicated, several of our hypotheses suggest a non-additive relationship in which, for example, the effect of unemployment on votes for ERPs is conditional upon the level of immigration in a region and vice versa (the 'scapegoat' hypothesis). Accordingly, we include in Model 2 multiplicative interactions between immigration and a number of our variables, including social capital and unemployment.[10] In interpreting these findings we follow the methods recommended by Brambor et al. (2006) and Kam and Franzese (2007), computing the marginal effects of these variables for every observed conditional coefficient and standard error.

Table 1 presents the hypotheses for our pairwise interaction model (Model 2). In all equations, $y =$ support for ERPs; $x =$ the immigration rate; $z =$ the unemployment rate; $q =$ income inequality; and $w =$ government redistribution. The first row (1) indicates the null hypothesis that all coefficients are equal to zero, as tested by the standard F-test. Rows 2–5 assess the alternative hypotheses that the dependent variable is associated with each of the covariates and present the mathematical expressions and their descriptions for testing the null hypothesis. Rows 6–9 represent true interactive hypotheses (either alternative or null) where the effect of one independent variable is conditional on other independent variable(s).

For instance, row 2 tests whether immigration (x) has any effect on ERP vote shares (y). Since the effect of immigration (x) on ERP vote shares (y) depends upon the unemployment rate (z), income inequality (q) and government redistribution (w), the mathematical expression for testing y's dependence on x includes β_x, β_{xz}, β_{xq} and β_{xw}. Only if those four coefficients are equal to zero can we definitely say that y does not in any way depend on x in this model. Furthermore, row 6 presents a test of whether the effect of x on y depends on z as well as whether x modifies the effect of z on y. In other words, we test whether coefficient β_{xz} is distinguishable from zero—a null hypothesis which is rejected. In addition, the effect of x on y depends on the values of unemployment (z) or, in the same fashion, the effect of z on y is moderated by x. The same logic applies to the other rows in Table 1. Finally, it must be noticed that rejecting H_0 at a certain level of significance (in our case 0.1 level, two-tailed test) does not mean that the effect of the

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[6] In 1992, the first quarterly survey was April–June. We first computed the percentage of respondents reporting that they arrived as immigrants in the previous year. Next, we averaged these annual immigration rates over two (1992–1993) or three years (1995–1997). See Kyambi (2005: vii) for more details on this methodology.

[7] Figures for the British regions in 1992 are from the Office for National Statistics, United Kingdom (2008).

[8] Unfortunately, LIS earnings values for Italy and Greece are expressed net of direct taxes, so Italian and Greek data are not strictly comparable to those for other countries. For more information on measurement, see the discussion of LIS income variables and methods at http://www.lisproject.org/.

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[9] Compare the computation of each interaction in separate models in Swank and Betz (2003) and Golder (2003a).

[10] With the inclusion of interaction terms, however, the interpretation of their additive components reflects the special case when either component is equal to zero (Golder, 2003a: 452; Kam and Franzese, 2007: 44). Furthermore, the 'mere presentation of regression coefficients and their standard errors is inadequate for the interpretation of interactive effects' (Kam and Franzese, 2007: 60).

Table 1
Hypotheses for Model 2.

Alternative hypothesis H_1	Mathematical expressions	Description of mathematical expressions	Null hypothesis H_0	Results for testing H_0
1　y depends on x, z, w, q, $x \times z$, $x \times q$, $x \times w$, $z \times w$	$y = \beta_x x + \beta_z z + \beta_w w + \beta_q q$ $+ \beta_{xz} xz + \beta_{xq} xq + \beta_{xw} xw + \beta_{zw} zw$	All coefficients are equal to zero	$H_0: \quad \beta_x = \beta_z = \beta_w = \beta_q = \beta_{xz}$ $= \beta_{xq} = \beta_{xw} = \beta_{zw} = 0$	Fails to reject H_0
2　y depends on x	$\frac{\delta y}{\delta x} = \beta_x + \beta_{xz} z + \beta_{xq} q + \beta_{xw} w$	Effect of x on y varies with the values of z, q, and w	$H_0: \quad \frac{\delta y}{\delta x} = 0; \beta_x = \beta_{xz} = \beta_{xq}$ $= \beta_{xw} = 0$	Fails to reject H_0
3　y depends on z	$\frac{\delta y}{\delta z} = \beta_z + \beta_{xz} x + \beta_{zw} w$	Effect of z on y varies with the values of x and w	$H_0: \quad \frac{\delta y}{\delta z} = 0; \beta_z = \beta_{xz}$ $= \beta_{zw} = 0$	Fails to reject H_0
4　y depends on w	$\frac{\delta y}{\delta w} = \beta_w + \beta_{xw} x + \beta_{zw} z$	Effect of w on y varies with the values of x and z	$H_0: \quad \frac{\delta y}{\delta w} = 0; \beta_w = \beta_{xw}$ $= \beta_{zw} = 0$	Fails to reject H_0
5　y depends on q	$\frac{\delta y}{\delta q} = \beta_q + \beta_{xq} x$	Effect of q on y varies with the values of x	$H_0: \quad \frac{\delta y}{\delta q} = 0; \beta_q = \beta_{xq} = 0$	Rejects H_0
6　y's dependence on x is conditional on z	$\delta(\frac{\delta y}{\delta x})/\delta z = \beta_{xz}$	Effect of x on y depends on z; effect of z on y depends on x	$H_0: \quad \beta_{xz} = 0$	Rejects H_0
7　y's dependence on z is conditional on w	$\delta(\frac{\delta y}{\delta z})/\delta w = \beta_{zw}$	Effect of z on y depends on w; effect of w on y depends on z	$H_0: \quad \beta_{zw} = 0$	Fails to reject H_0
8　y's dependence on w is conditional on x	$\delta(\frac{\delta y}{\delta w})/\delta x = \beta_{xw}$	Effect of w on y depends on x; effect of x on y depends on w	$H_0: \quad \beta_{xw} = 0$	Rejects H_0
9　y's dependence on q is conditional on x	$\delta(\frac{\delta y}{\delta x})/\delta x = \beta_{xq}$	Effect of q on y depends on x; effect of x on y depends on q	$H_0: \quad \beta_{xq} = 0$	Rejects H_0

This table is based on Kam and Franzese (2007: 45 and 50–51). Notations: y = ERP vote share; x = immigration (mean); z = unemployment; w = social capital; q = fiscal redistribution.

covariates on the dependent variable is significant for all values of conditional covariates. Similarly, failing to reject H_0 at the 0.1 level does not mean that the covariates have no effect at all on the dependent variable. Rather, it means that the effect is not significant for some values of conditional covariates (Kam and Franzese, 2007: 56).[11] Figs. 1–4 clearly show this.

4. Methodology

Tobit models are frequently applied to data-censoring problems. It is true that our data are not truly censored, because there is no issue of data observability. Yet Tobit models can also be utilized as a functional form for a corner solution response that implies a dependent variable that has the value of zero for some fraction of the population and is roughly continuously distributed over positive values (Wooldridge, 2002: 518). Specifically, we estimate vote shares for extreme right parties at the regional level where some regions recorded no votes for ERPs, either because voters chose not to support them or because there were no such parties competing within that region, while others recorded positive numbers of votes.[12] Of 144 regions, 14 recorded zero votes for ERPs. For the 130 regions

reporting positive votes for ERPs, the range is from 0.01 to 33.6. The ML estimator for the Tobit I model is well suited for this kind of dependent variable. The formal Tobit I model for a corner solution response is comprised of the binomial probit as well as the regression model and looks as follows:

$$y_i^* = x_i \beta + \varepsilon_i, \quad \varepsilon_i \sim N(0, \sigma^2) \quad i = 1, ..., n \rightarrow y_i^* \sim N(x_i\beta, \sigma^2)$$

$$y_i = y_i^* \quad \text{if} \quad y_i^* > 0$$

$$y_i = 0 \quad \text{if} \quad y_i^* = 0$$
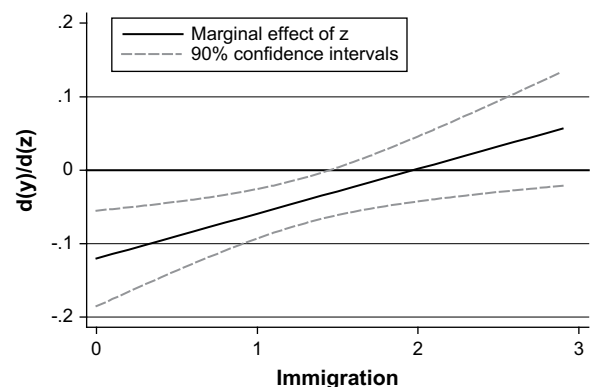
Fig. 1. Marginal effects of unemployment (z) as a function of immigration (x) at median value of social capital (w).

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[11] For the purposes of presentation, Figs. 1–4 in our results portray several, but not all, of these relationships. The remaining figures are available upon request.

[12] As noted by Jackman and Volpert (1996: 513) and later by Golder (2003b: 526–527), if we were to drop those observations where there were no ERPs present or receiving votes we would introduce selection bias into our models.
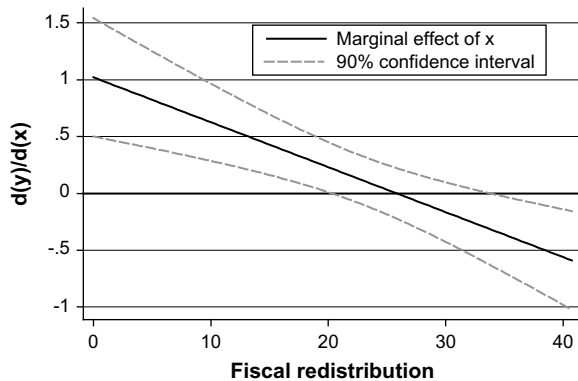
Fig. 2. Marginal effects of immigration (x) as a function of fiscal redistribution (q) at median values of social capital (w) and unemployment (z).

Fig. 3. Marginal effects of immigration (x) as a function of social capital (w) at 25th and 75th percentiles of unemployment (z) and median fiscal redistribution (q).

where the latent error term has variance constant across i observations, y_i^* is a latent dependent variable, and y_i contains either zeros or positive values.[13]

In the literature on ERPs, it has become a common practice to use the Tobit I estimation technique (Golder, 2003a, b; Jackman and Volpert, 1996).[14] However, rather than employing the Tobit I estimator, a recent study (Coffé et al., 2007: 148) applied Tobit II in its analysis of ERPs, arguing that 'previous empirical results on the popularity of extreme right parties based on Tobit I estimators should … be treated with caution.' We argue that whether or not a researcher utilizes the Tobit I or Tobit II model is determined by the research question as well as by the efficiency of both estimations. For example, Coffé et al. (2007) estimate two equations: a 'selection equation,' which estimates whether or not an ERP participated in an election, as well as an 'outcome equation,' which estimates the vote shares ERPs received in districts where they actually recorded votes. In other words, they test two distinct research questions. In doing so, they reject the Tobit I estimator and instead utilize Tobit II, which is a Heckit estimator.[15] This decision is justified by arguing that the 'selection mechanism of party participation is ignored in the Tobit I model which is used in most earlier studies on the subject … [h]ence, false conclusions may be drawn when using Tobit I' (Coffé et al., 2007: 147). However, this statement is only partially true. It is indeed the case that previous researchers
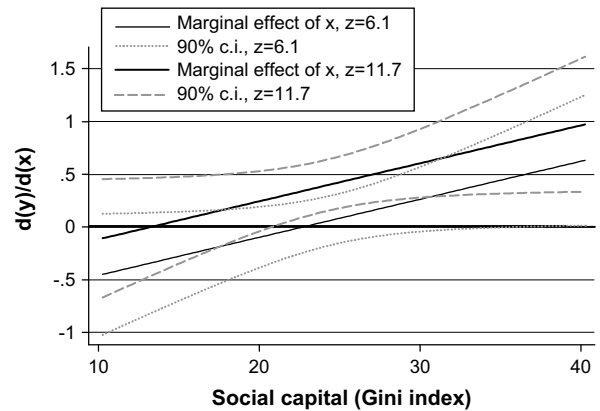
did not focus on or report this distinction between whether an ERP received any votes at all and how many votes an ERP received. Yet, this distinction is not completely lacking when utilizing Tobit I: it is possible to calculate the partial effects of a change in x_i on the probability of observing a zero outcome $P(y_i = 0)$, if a researcher is interested in such a probability.[16] Furthermore, Tobit I allows the estimation of the partial effect of the covariates (x_i) on the observed outcome y_i by calculating the partial derivative of the expected value of the dependent variable (y_i) conditional on the covariates (x_i). Simply, if a researcher is concerned only with explaining the votes ERPs received in a specific region (if such a party existed), then Tobit I is more appropriate than Tobit II.[17] In this research, for a mean value of x_i we estimate the marginal effect on the truncated expected value of y_i where y_i is positive $E(y_i|y_i > 0, x_i)$. Thus, the Tobit I estimation is well suited to our research question.[18]

Despite the advantages of using the Tobit I, there are some potential problems with its application. For example, Tobit assumes that the distribution of the error term is normal and homoscedastic. These strong assumptions may not always hold in practice. In the case of misspecification of the error distribution, Tobit maximum likelihood estimates are not robust, but rather both inconsistent and

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[13] For more information on Tobit models see Cameron and Trivedi (2005) and Johnston and DiNardo (1997).

[14] The Tobit model provides more realistic functional forms for $E(y_i|x_i)$ and $E(y_i|y_i > 0, x_i)$ than a linear OLS model for y (see Long, 1997). Following Wooldridge (2002) we compared linear estimation of the entire sample with partial effects of the entire sample. The obtained results indicate that partial effects of the explanatory variable on the conditional expectations where $\delta E(y|x_i)/\delta x_i = \beta_i \Phi(x_i\beta_i/\sigma)$ (Φ is standard normal cdf) are comparable to OLS estimates. More precisely, the coefficients have the same signs and p-values have similar magnitude. Of course, a linear model cannot be the same as Tobit unless $y_i > 0$ for all i's. This test indicates that we are safe employing Tobit estimation.

[15] Unfortunately, when Coffé et al. (2007) apply the Tobit II estimation, they include the same set of variables in both the selection and the outcome equations, despite the fact that the Heckman procedure is known to be inefficient when doing so (Kennedy, 2003: 291).

[16] We choose not to report marginal effects for Tobit I where $P(y_i = 0)$.

[17] For more information on Tobit specification and how it relates to the research question, see Sigelman and Zeng (1999).

[18] With respect to the efficiency of estimation, the Monte Carlo simulation study of Tobit models such as Tobit I, Tobit II, and the double-hurdle model, conducted by Flood and Grasjo (2001: 581) indicates that 'a simple Tobit I method can produce results that are similar to and in some cases better than much more sophisticated methods.' Long (1997: 204) is even more skeptical about Tobit II, arguing that Heckman's two-stage estimator 'is less efficient and no easier to estimate then the ML estimator [Tobit I].' Finally, Kennedy (2003: 291) notes that 'Monte Carlo studies … find that … the Heckman procedure does not work well when the errors are not distributed normally, the sample size is small, and the amount of censoring is small.'
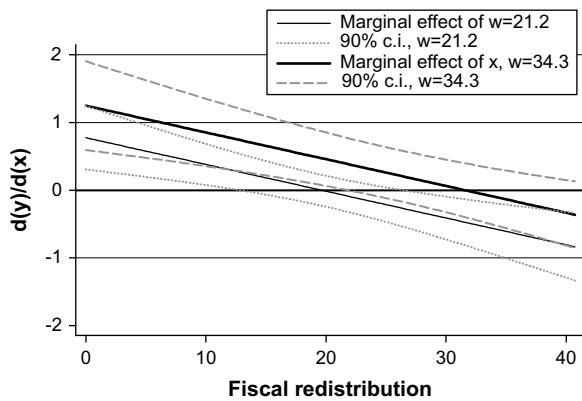
Fig. 4. Marginal effects of immigration (x) as a function of fiscal redistri-bution (q) at 10th and 90th percentiles of social capital (w) and median unemployment (z).

inefficient.[19] One way to ameliorate heteroscedastcity and the non-normality of the error term is to transform the dependent variable using the inverse hyperbolic sine (IHS) function that approximates a logarithm.[20] We formalize IHS as follows.

$$\sin^{-1} y = \ln\left(y + \sqrt{1+y^2}\right) \approx \ln 2 + \ln y$$

To the best of our knowledge, this transformation has not previously been applied in analyses of ERPs using the Tobit models. Table 2 presents the dependent variable statistics before and after IHS transformation and clearly shows that the stabilization of variance was achieved by employing IHS. Finally, we included in our model country dummies and compute Huber–White robust standard errors.

5. Results

5.1. Descriptive statistics

Table 3 reports summary statistics for the percentage of votes cast for extreme right parties for our countries. The number of regions examined within each country is also reported.[21] As shown in this table, there was considerable variation in the level of support for ERPs both between and within countries in the 1990s and 2000. For example, there was no support at all for ERPs in 14 regions during this period. In Austria, on the other hand, ERPs averaged nearly 29 percent of the vote across the three regions, ranging from 23 percent in the East in 1999 to almost 34 percent in South Austria in 1995, which was the Freedom Party's electoral stronghold.[22] Intra-regional differences in support for ERPs were highest in

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[19] Arabmazar and Schmidt (1982) provide Monte-Carlo evidence on the fragility of Tobit models under distributional misspecifications. See also Lee and Maddala, 1985.
[20] See Burbidge et al. (1988) and Hoyle (1973).
[21] Consistent with LIS survey data, we had to combine the German Länder of Rhineland-Palatinate and Saarland in our analysis.
[22] The national averages of the regions do not equal the national percentage vote total since we do not weight regions by population size.

Table 2
Dependent variable before and after inverse hyperbolic sine transformation.

Dependent variable	Mean	Standard deviation	Variance	Skewness
Before hyperbolic sine transformation	7.339	8.246	67.989	1.32
After hyperbolic sine transformation	1.948	1.392	1.937	−0.187

Italy, ranging from no votes to almost a third of the votes (for the Northern League) in Veneto in 1996. The average percentage of valid votes cast for ERPs across the 144 regions we examine is 7.3 percent.

Table 4 reports the results of our Tobit estimations. Our results from the additive specifications of the hypotheses being tested are presented in the first model while the conditional hypotheses are presented in the second. The Tobit coefficients are reported in the first sub-column for each model while the second reports the partial (marginal) effects coefficient. We report coeffi-cients and standard errors for Tobit latent variable y^* as well as partial (marginal) effects for the conditional expectation of y given that y is positive. Reporting the Tobit coefficient allows our results to be more directly compared to previous studies such as Golder (2003a) and Jackman and Volpert (1996) while displaying the partial (marginal) effects allows us to more intuitively interpret the linear relationship between our indepen-dent variables and vote shares for ERPs. As shown in the first model, it is evident that greater inflows of immi-grants do not automatically lead to corresponding levels of support for ERPs in the countries we have examined. Thus, we can confidently reject the ethnic prejudice hypothesis at the regional level, at least with respect to an additive formulation of this hypothesis.

The results of the first model also indicate that unem-ployment is negatively associated with support for ERPs ($p < 0.001$). Those regions having better labor markets are actually more likely to experience higher vote shares for ERPs than those in which unemployment is higher. Thus, we can firmly reject the economic security hypothesis, predicting the opposite relationship. However, the partial (marginal) effect indicates that this relationship is not very strong since a 1 percent increase in the unemployment rates results in a 0.085 percent decrease in vote shares for

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Table 3
Summary statistics for extreme right parties (ERPs) vote.

Country and election year(s)	Regional observations	Mean	Standard deviation	Minimum	Maximum
Austria 1995, 1999	6	28.6	3.97	23.3	33.6
Belgium 1995, 1999	6	9.9	4.33	4.1	15.4
Denmark 1994, 1998	28	7.0	1.39	3.9	9.3
France 95	21	15.1	4.68	6.4	25.4
Germany 1994	15	1.7	0.64	1.0	3.1
Greece 1996, 2000	8	0.3	0.19	0.1	0.7
Italy 1994, 1996	38	9.5	9.71	0.0	32.9
UK 1992, 1997	22	0.1	0.11	0.0	0.5
Total	144	7.3	8.25	0.0	33.6

Table 4
Tobit results: dependent variable is percent vote for extreme right parties.

	Model 1		Model 2	
Immigration rate (x)	0.062 (0.124)	0.060 (0.119)	−0.517 (0.596)	−0.500 (0.576)
Unemployment rate (z)	−0.088 (0.023)****	−0.085 (0.022)****	−0.168 (0.123)	−0.162 (0.118)
Income inequality (w)	−0.005 (0.031)	−0.005 (0.03)	−0.047 (0.061)	−0.045 (0.059)
Fiscal redistribution (q)	0.016 (0.014)	0.016 (0.013)	0.059 (0.026)**	0.057 (0.024)**
Immigration × unemployment ($x \times z$)			0.061 (0.027)**	0.059 (0.026)**
Immigration × redistribution ($x \times q$)			−0.040 (0.013)***	−0.038 (0.012)***
Immigration × income inequality ($x \times w$)			0.036 (0.022)*	0.035 (0.021)*
Unemployment × income inequality ($z \times w$)			0.002 (0.004)	0.002 (0.004)
Constant	0.65 (1.005)		1.308 (1.811)	
Sigma	0.747 (0.077)		0.727 (0.076)	
Log likelihood	−164.32		−160.547	
McKelvey and Zavoina R^2	0.731		0.746	

Both models are estimated with country dummies. The first numbers in the left and right columns are Tobit and marginal effect coefficients (calculated at mean values), respectively. The number in parentheses is the robust standard error. $N = 144$, 14 left-censored observations. *$p \leq 0.10$, **$p \leq 0.05$, ***$p \leq 0.01$, ****$p \leq 0.001$ two-tailed test. $y = \beta_x x + \beta_z z + \beta_w w + \beta_q q + \beta_{xz} xz + \beta_{xq} xq + \beta_{xw} xw + \beta_{zw} zw + e$ where x is the immigration rate, z is the unemployment rate, w is income inequality, q is fiscal redistribution.

the extreme right in those regions where these parties received votes ($p < 0.001$).

There are at least two ways to interpret the above finding. Lubbers et al. (2002: 371) theorize that in regions with lower unemployment rates relative to the average rate in their country, voters are actually more likely to demonstrate support for ERPs since 'people in these circumstances are afraid to lose what they have gained in times of economic prosperity.' However, upon further consideration, a somewhat different interpretation seems at least as plausible: in the highest-unemployment regions voters who are most concerned with jobs will not 'waste' their votes on ERPs but will instead support social democratic parties, which are more likely to participate in a governing coalition that places a priority on job creation. This is, in fact, confirmed by a supplementary fixed-effects regression we have constructed predicting left party vote shares. In this regression, which employs a slightly different regional dataset (we include 86 regions in a cross-section and use French electoral data from the 1997 legislative election rather the 1995 presidential contest), each one percent increase in unemployment is associated with about a half a percent increase in support for leftist parties ($b = 0.47$ (0.19), $t = 2.44$; $R^2 = 0.36$). More specifically, it is notable that ERPs tend to be more prominent in the richer countries we examine (e.g., Austria as opposed to Greece) and in the richer regions within those countries (e.g., northern as opposed to southern Italy).

Next, we find no support for the social capital hypothesis, since income inequality is unrelated to vote shares for ERPs. Finally, there is no evidence that greater income redistribution either directly promotes (the neoliberal hypothesis) or curtails (welfare universalist hypothesis) support for the extreme right. As discussed previously and shown in Table 1, however, including interaction terms in the second model allows us to test several conditional hypotheses. Such models, though complex and thus somewhat more cumbersome to interpret, will be shown to offer a better understanding of the processes underlying mass support for ERPs.[23]

Fig. 1 allows us to test the scapegoat hypothesis and reports the conditional marginal effects of unemployment (z) as immigration rates (x) change and social capital is equal to its median value (w). We also report 90 percent confidence intervals (the dotted lines) and thus conclude that a relationship is statistically significant when both interval lines are above or below the zero line (Brambor et al., 2006: 76). As shown in the figure, since the lower confidence interval never crosses zero and becomes positive, unemployment never fosters support for ERPs at any level of immigration. In fact, similar to our finding in Model 1 we find that unemployment reduces support for ERPs when immigration is relatively modest. In this case, the upper confidence interval in this figure crosses zero when the mean immigration rate is less than about 1.4 percent, which is true for 130 of our 144 regions. It is important to note that had we merely relied on the coefficients reported in Table 3, we would not have been able to report this finding.

On the one hand, these findings suggest rejection of the scapegoat hypothesis, which predicts that higher rates of unemployment foster votes for the extreme right when immigration is also high (and vice versa). On the other hand, the fact that, as immigration into a region increases and levels of social capital are at their median the effect of unemployment on votes for ERPs is no longer negative, might also be interpreted as support for the notion that unemployment becomes an issue that is better exploited by leaders of the extreme right when immigration is also high. That being said, as we will see, our results also suggest that when social capital is scarce, the combination of high unemployment and immigration will be shown to increase vote shares for ERPs. In short, we will argue that social capital provides a vital link in understanding how ethnic prejudices and economic insecurities engender support for the extreme right. Before doing so, however, we turn to a test of welfare chauvinism.

Fig. 2 reports the marginal effects of immigration as levels of income redistribution change and when social capital and unemployment are at their median values. In examining the marginal effects for this variable in Table 4, one might initially be inclined to support the welfare

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[23] OLS results for Models 1 and 2 produced nearly identical results.

universalist hypothesis, since the sign of the conditional marginal effect is negative and statistically significant ($p < 0.01$). However, such an interpretation would not be accurate. More specifically, when levels of fiscal redistribution are equal to or below about 20.0 Gini points, which is the case in 108 of our 144 regions, immigration promotes votes for the extreme right. Since 75 percent of our cases report such levels of redistribution, our results do offer some support to the welfare chauvinist hypothesis. However, Fig. 2 also indicates that the effects of immigration on right-wing voting diminish in magnitude as levels of fiscal redistribution increase. Moreover, at very high levels of fiscal redistribution, values above 34.0, the redistributive function of the social welfare state, when both transfers and taxes are accounted for, does seem to reduce xenophobic responses to immigration, as suggested by welfare universalism. We must, though, be very cautious in accepting this latter hypothesis since only two of our regions report such high levels of redistribution. Regardless, we will see shortly that taking levels of social capital into account does help to clarify this relationship.

Unlike the previous figures, in testing the hypotheses derived from Putnam's discussion of social capital and tolerance Fig. 3 includes 'high' and 'low' values for the conditional coefficients. Specifically, we report the marginal conditional effects of immigration (x) as levels of social capital (w) change for high and low levels of unemployment (z) and a median rate of fiscal redistribution (q). As shown in this graph, it is evident that declining levels of social capital tend to promote xenophobia and right wing extremism. However, the level at which such a response occurs is dependent upon the unemployment rate within a region. More specifically, when unemployment is greater than 11.7 percent (the 75th percentile), and the Gini index is more than about 21.0, which is true for all but ten of our regions, immigration promotes support for the extreme right. In short, this situation depicts Putnam's 'anarchic' society such that higher levels of economic insecurity and lower levels of social capital foster scapegoating of immigrants and votes for ERPs. This result reinforces our discussion of Fig. 1, in which we also find support for the scapegoat hypothesis. Yet when unemployment is low, only Gini values equal to or greater than about 35.0, which is the case for 12 regions, prompt such support. Thus, when social capital is scarce even low levels of unemployment foster support for the extreme right. This scenario depicts an 'individualistic' society, according to Putnam's typology.

Similarly, when unemployment is low and there are adequate levels of social capital we find that immigration has no effect on support for ERPs: Putnam's 'civic' community curbs right wing extremism. Finally, we find no evidence supporting the notion that an abundance of social capital combined with economic insecurity promotes votes for ERPs, leading us to reject Putnam's depiction of a 'sectarian' society. It might be the case, as Putnam also suggests, that 'under many circumstances both bridging and bonding social capital can have powerfully positive social effects' (Putnam, 2000: 23). In sum, our results suggest that the absence of social capital facilitates right wing extremism. Apparently, appeals by leaders of such parties find greater electoral support when there is a dearth

of social capital such that even relatively moderate levels of unemployment within a region prompt voters to support right wing extremism.

Finally, in an effort to better understand the role of the social welfare state in fostering right wing extremism as depicted in Fig. 2, we display the marginal effects of immigration (x) on vote shares for ERPs as a function of income inequality (w) for the 10th and 90th percentiles of fiscal redistribution and for the median unemployment rate (z) in Fig. 4. For example, when social capital is plentiful (Gini is equal to 21.2) the level at which fiscal redistribution prompts voters to support ERPs is much lower. More specifically, only 32 of our regions have values of fiscal redistribution less than 12.5, which is the value at which the lower confidence interval of the marginal effects of high social capital crosses the zero line. In fact, when fiscal redistribution is greater than 26.0 and social capital is abundant we find evidence to support a welfare universalist interpretation of results. Once again, however, very few regions—only eight to be precise—have such high levels of welfare generosity.

Examining the marginal effects of immigration when inequality is high and thus social capital is low, we find that fiscal redistribution never diminishes support for ERPs. Moreover, we find that welfare chauvinism is much more likely when social capital is limited. For example, 123 of our 144 regions report levels of fiscal redistribution below 22.0, which is the point at which the lower confidence interval for the marginal effects of immigration crosses zero when social capital is equal to the 90th percentile. On balance, we conclude that the results portrayed in Figs. 2 and 4 suggest conditional acceptance of the welfare chauvinist hypothesis, supporting Veugelers and Magnan's (2005) conclusion that greater social spending is associated with more votes for ERPs as well as Swank and Betz's (2003) finding that larger tax shares encourage larger vote shares for the extreme right. However, given the relationship between fiscal redistribution and income inequality, which is our proxy for social capital, we must urge caution when formulating a policy response to such a finding. Indeed, when fiscal redistribution and social capital are both very high, we do find some evidence that the redistributive function of the social welfare state diminishes support for right wing extremism.

6. Conclusions

There are a number of broader implications of our findings. Most importantly, we find that the processes fostering electoral support for extreme right parties in western Europe are complex; simple additive models do not help us better understand this phenomenon. In particular, we find evidence that social capital plays an important role in mediating the effects of other factors, such as immigration and unemployment, on support for the extreme right.

There are also several narrower implications. First, there does not appear to be a sociological process whereby larger numbers of immigrants automatically trigger ethnic prejudice. Rather, political expressions of ethnic intolerance must be understood relative to other factors such as

unemployment, social capital and fiscal redistribution. For example, we find that as immigration into a region increases, the effect of unemployment on votes for ERPs is no longer negative, lending support to the notion that unemployment becomes an issue that can be exploited by leaders of the extreme right only when there are immigrants nearby to be blamed.

Second, there is no evidence that higher unemployment within a region directly and positively affects vote shares for ERPs. Indeed, the opposite relationship is evidence. One explanation of this finding supports previous sub-national research suggesting that ERPs fare better in more economically secure regions within European countries, such as in northern as opposed to southern Italy. An alternative interpretation is indicated in our supplementary analysis, which finds that voters in high-unemployment regions are more likely to vote for parties of the left.

Third, we find no evidence that greater fiscal redistribution directly reduces support for the extreme right. On the contrary, our results lend some support to the welfare chauvinist hypothesis positing that the redistributive schemes of the social welfare state tend to encourage support for the extreme right. This finding contradicts the conclusion of one recent study (Swank and Betz, 2003) but is consistent with the results of another (Veugelers and Magnan, 2005). Some defenders of the social welfare state may find this conclusion troubling in that it seems to place 'blame' for the surge of support for ERPs on the generous social protections many European have come to enjoy. However, in light of our findings with respect to income inequality, others may view it as neutral, since it suggests that government redistribution that narrows income inequalities may promote the accumulation of social capital, which we have found to reduce support for ERPs across the regions of western Europe.

Finally, we find substantial support for the notion that a lack of social capital within a region promotes electoral support for the extreme right, which suggests that the decline in levels of social capital observed in many European countries (Putnam, 2002) may be linked to the surge in support for extreme right parties—a hypothesis that has been excluded in most previous explanations, and which has far-reaching political consequences.[24] This relationship is not direct, however. Rather, social capital mediates the association between immigration and right wing

extremism such that even fairly moderate levels of unemployment foster xenophobia when social capital is scarce, as in Putnam's 'anarchic' society. Likewise, when social capital is abundant even high levels of unemployment fail to stir support for ERPs. More generally, these findings also suggest that those wishing to reduce the appeals of extreme right political parties and movements should view with concern the growth of income inequality within many advanced market economy countries over the last two decades.

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[24] Coffé et al. (2007) also conclude that lower levels of social capital foster vote shares for ERPs, supporting our findings. However, they also find that income inequality is negatively associated with support for the Vlaams Blok in Belgium, which contradicts our finding. Regardless, research by McCarty et al. (2006) and Pontusson and Rueda (2005) suggest an alternative explanation for our result with respect to income inequality. Namely, they conclude that higher levels of income inequality are associated with ideological polarization such that right-leaning voters tend to move further to the right. This would result in larger numbers of voters choosing an extreme-right party over parties in the center or moderate right ideological positions. In order to test this proposition, we performed a supplementary analysis correlating national level Gini coefficients with a measure of ideological polarization developed by Kim and Fording (1998, 2003) and with national ERP vote shares for our countries. We found no evidence that income inequality is associated with ideological polarization or that ideological polarization is related to ERP vote shares.

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