Economic Insecurity and Voting Behavior

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Economic Insecurity and the Rise of the Right*

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Abstract

We here take advantage of two long-running British and German individual panel datasets (BHPS and SOEP) to contribute to the literature on the determinants of political preferences. We first show that, conditional on the level of income, economic insecurity, measured by an index based on individual-level income movements over the past five years, significantly increases the probability of expressing a political preference in both countries. This greater support does not benefit all parties equally: in all time periods economic insecurity significantly increases support for Right-wing parties (the Conservative Party in the UK and the CDU/CSU in Germany) and to a lesser extent Centre parties (the Liberal Democrats in the UK and the FDP in Germany). On the contrary, Left-wing party support largely falls with economic insecurity.

Keywords: Income, Economic Insecurity, Political Preferences.

JEL Classification Codes: D72, I32.

1. **Introduction**

Political scientists traditionally emphasize the social and institutional origins of political preferences. Most models in Political Science rely on the assumption that individuals convert information from their environment into evaluations of political objects (See Druckman and Lupia, 2000, for a review of the Memory-based and On-line models in this literature). At the same time, research in Psychology has also shown that personality characteristics predict political attitudes (Malka *et al*., 2014). For instance, the need for security and the need to manage uncertainty (Jost *et al*., 2003, and Jost, 2007) are strong predictors of Conservatism. This is in line with a long history of work in which Conservative ideologies are correlated with aversion to novelty and concerns about security (Adorno *et al*., 1950, and Rokeach, 1960). Using data from the World Values Survey, Malka *et al*. (2014) recently found that valuing elements such as conformity and security predicts "*ideological self-placement on the political right*" in developed non-Eastern European nations (p.1031).

Economic insecurity now appears increasingly frequently in policy debates and academic research. In Political Science, economic insecurity has been identified as one of the key drivers of the recent election outcomes. Inglehart and Norris (2016) and Walley (2017) take a qualitative approach and relate the rise of populism to the recent economic and policy transformations in post-industrial economies, and in particular emphasize the role played by economic insecurity.

We here contribute to this broad area of research by asking how economic insecurity affects political preferences, where we use long-run panel data to calculate an individual-level empirical index of economic insecurity. To the best of our knowledge, there is no quantitative evidence of

this type in the existing research on insecurity and political preferences.[1] Based on work in Psychology and Political Science, we expect economic insecurity to be associated with a greater need for security, translating into a higher probability of supporting Conservative political parties.

Economic insecurity is a complex concept, and it is difficult to propose a comprehensive formal definition that subsumes all of its possible aspects. We here use the economic-insecurity measure developed by Bossert and D'Ambrosio (2013 and 2016). Based on individual-level panel data, their measure is a weighted sum of period-to-period income gains and losses, where the weights on losses may differ from those on gains. We relate this measure of insecurity to political preferences in two of the longest-running large-scale panel datasets. We have two main findings. First, economic insecurity significantly increases the probability of supporting a political party (and so reduces abstention) in both the UK and Germany. Second, this rise in support is not equally shared out: economic insecurity produces greater support for Right-wing parties (the Conservatives in the UK and the CDU/CSU in Germany) and to a lesser extent Centre parties (the Liberal Democrats in the UK and the FDP in Germany). On the contrary, support for Left-wing parties falls as economic insecurity rises (except in East Germany, where the support for SPD rises). These results hold over all time periods considered. Our heterogeneity analysis reveals that the relationship between economic insecurity and political preferences is stronger for the married and those with children.

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[1] Walley (2017) and Liberini *et al*. (2017) are both empirical contributions, but the measure of economic insecurity they use is subjective. Clark *et al*. (2018) consider the relationship between the economic insecurity measure that we use here and individual health and well-being outcomes.

The remainder of the paper is organized as follows. Section 2 presents the measure of economic insecurity we use in the empirical analysis, while Section 3 focuses on the data and empirical strategy. The main results appear in Section 4. Last, Section 5 concludes.

2. **<u>Measuring Economic Insecurity</u>**

While economic insecurity has received an increasing amount of attention over the past years, producing a precise definition remains a challenging task. Some aggregate measures of insecurity exist, such as the Index of Economic Insecurity of Osberg and Sharpe (2014) or that of the International Labor Organization. Measures also exist at the individual level, but most of these are based on subjective information (such as, among others, Ashford *et al*., 1989, Sverke *et al*., 2002, and Sverke *et al*., 2006). We here propose to use the economic-insecurity measure of Bossert and D'Ambrosio (2016) as *(i)* it is defined at the *individual/household* level, *(ii)* it is an objective measure of economic insecurity, and *(iii)* it can be calculated from currently available household panel data. The Bossert and D'Ambrosio (2016) index of economic insecurity is:

$$I^T(x) = l_0 \sum_{\substack{t \in \{1,\dots,T\}: \\ x_t > x_{t-1}}} \delta^{t-1}(x_t - x_{t-1}) + g_0 \sum_{\substack{t \in \{1,\dots,T\}: \\ x_t < x_{t-1}}} \delta^{t-1}(x_t - x_{t-1})$$

This index assigns a degree of insecurity to each individual/household income stream $x = (x_T,\dots,x_0) \in R(T)$. The parameters l_0 and g_0 are respectively the weights assigned to income losses and gains, and the parameter δ gives a higher weight to more recent periods than those farther in the past. To ensure that this measure of economic insecurity satisfies the properties of gain-loss monotonicity, proximity monotonicity, homogeneity, translation invariance, quasi-linearity, stationarity, resource-variation monotonicity and loss priority, we require that $\delta \in (0, g_0/l_0)$ such

that $l_0 > g_0$ for all T ϵ N and all $x \epsilon$ R(T) (See Theorem 3 in Bossert and D'Ambrosio (2013) for the technical details).[2]

Given these conditions and the examples set out in Bossert and D'Ambrosio (2013) we set $l_0 = 1$, $g_0 = 15/16$ and $\delta = 0.9$. We use the stream of annual household equalized incomes over the previous five years as the empirical counterpart of x above.[3]

3. **Data and Empirical Strategy**

3.1. **Data**

The empirical analysis is carried out using two well-known long-run panel datasets: the British Household Panel Survey (BHPS) and the German Socio-Economic Panel (SOEP).

BHPS

The BHPS is a general survey covering a random sample initially covering approximately 10,000 individuals in 5,500 British households. This dataset includes a wide range of information about individuals and household demographics, income and political preferences. Our main variable of interest is a measure of voting intentions, as measured by the following questions. BHPS respondents are first asked the following two questions: "*Now I have a few questions about your views on politics. Generally speaking do you think of yourself as a supporter of any one political party?*", and "*Do you think of yourself as a little closer to one political party than to the others?*". If the respondent replies "*Yes*" to one of these two questions, they are then asked to mention which political party they support. But if respondents say "*No*" to both questions, the

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[2] Well-being has been shown to be more sensitive to losses than to gains both using individual-level income data (Boyce *et al*., 2013) and GDP (De Neve *et al*., 2018).

[3] We have tested the sensitivity of our results to the choice of these different parameters: marginal changes in l_0, g_0, δ and T do not affect our qualitative conclusions.

interviewer asked: "*If there were to be a General Election tomorrow, which political party do you think you would be most likely to support?*". Our measure of political preference is based on the combination of the answers to these questions, and individuals are considered as having no political preferences if they reply "*No*" to the first two questions and "*None*" or "*Don't know*" to the hypothetical-election question. We exclude individuals who answered "*Can't vote*". We then create a categorical political-preference variable, $Party_{it}$, with the following categories: "*Conservative Party*", "*Liberal Party/SDP*", "*Labour Party*", "*Other Parties*" and "*No Political Preferences*".

The BHPS was launched in 1991 and carried out annual surveys until 2008. It was then incorporated into Understanding Society, but only starting in the second wave of interviews of the latter. BHPS respondents thus have missing values for their equalized household income in 2009, so that we cannot extend our analysis to the waves covered by Understanding Society.

SOEP

The SOEP is an ongoing panel survey with yearly re-interviews (see http://www.diw.de/gsoep). The starting sample in 1984 was almost 6,000 households based on a random multistage sampling design. A sample of about 2,200 East German households was added in June 1990, half a year after the fall of the Berlin Wall. As in the BHPS, the SOEP contains information about individual and household demographics and income. Political preferences come from the following set of questions: "*Many people in Germany lean towards one party in the long term, even if they occasionally vote for another party. Do you lean towards a particular party?*". If respondents answered "*Yes*", they were then asked: "*Toward which party do you lean?*". Our political-preference variable in Germany has the following categories: "*CDU/CSU*", "*FDP*", "*SDP*", "*Other Parties*" and "*No Political Preferences*". Later in the paper, we will explicitly

distinguish "*The Greens*" and "*Die Linke*" from the parties included in the category "*Other Parties*".

Our estimation samples cover individuals aged between 18 and 65 who are not retired and with valid information on economic insecurity, household equalized income and political preferences.[4] This produces 76,003 observations in the BHPS and 197,539 in the SOEP. We provide descriptive statistics on these samples in Tables 1 and 2. While the two samples are comparable regarding mean age, gender composition and marital status, the share of individuals reporting "*No party*" in the UK is only just over half that in Germany. We expect political preferences to be relatively stable over time at the individual level: Tables 3 and 4 present the matrixes of transition in political preferences between *t* and *t+1*. In both countries, the diagonal is heavily populated, reflecting the stability of individual political preferences over time. Figures 1 and 2 compare the change over time in mean economic insecurity in the UK and in Germany respectively to the national unemployment rate, revealing as expected a positive correlation between the two.

3.2. Empirical Model

As in much of the economic voting literature, we estimate multinomial logit regressions.[5] The general model of economic insecurity and political preferences we estimate is the following:

$$Party_{it+1} = \beta_1\, HHincome_{it} + \beta_2\, Insecurity_{it} + \beta_3 X_{it} + \lambda_t + \epsilon_{it} \qquad (1)$$

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[4] We do not use the first 1984 SOEP wave due to income measurement errors. Household income is also only available from 1992 onwards in East Germany. We then use data from 1985 to 2013 in West Germany and from 1992 to 2013 in East Germany.

[5] In the context of voting decisions, it can be argued that multinomial probit models are more appropriate. Dow and Endersby (2004) discuss the strengths and weaknesses of the multinomial logit and multinomial probit models in the economic voting literature. They conclude that while the multinomial probit model does not rely on the "Independence of irrelevant alternatives" (IIA) assumption, its relatively difficult maximum-likelihood optimization procedure may fail to converge and produce imprecise estimates.

where *Party*$_{it+1}$ is the party supported by individual i at time $t+1$, *HHincome*$_{it}$ the equalized annual household income of i at time t and *Insecurity*$_{it}$ the measure of economic insecurity of i at time t (using the formula in Section 2 above). We standardize both economic insecurity and equivalized household income in the regressions so that the estimated coefficients refer to a one standard-deviation change. The vector X_{it} includes a set of individual covariates (age, gender, years of education, marital status, employment status, dummies for past unemployment, homeownership, and region fixed effects) while λ_t controls for year fixed effects. Economic insecurity is calculated using information on household real equivalized income, as such it is at the household level and we cluster the standard errors at this level.[6] **As** we require income information over a five-year period to calculate our insecurity at time t (which is then related to political preferences at time $t+1$), our first observation on the political dependent variable in the regressions is in 1996 in the BHPS and 1990 in the SOEP.

4. **Results**

4.1. **Main Results**

Table 5 first asks whether economic insecurity at time t predicts future support for a political party at time $t+1$. We show the estimated coefficients for economic insecurity, income and homeownership (wealth). The resulting coefficients on economic insecurity are then estimated holding both income flow and stock constant, so that we do not confound insecurity with low income. The results show that economic insecurity is associated with significantly higher political support at the 1% level in both the BHPS and the SOEP. The figures in Table 5 are the marginal effects. All else constant, a one standard-deviation rise in economic insecurity at t

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[6] As shown in Tables 3 and 4, political preferences are relatively stable within individuals over time. We do not have sufficient within-variation in political preferences to estimate models that include individual fixed effects.

increases the probability of supporting a party at $t+1$ by 1.7 percentage points in the UK and 1.9 percentage points in Germany. For the sake of comparison, we also show the marginal effects of equalized household income and the homeownership dummy. The size of the marginal economic-insecurity effects are similar in both countries, and correspond to half of those of equalized household income. The marginal effects of economic insecurity on political preferences are also similar in size to those of homeownership.

Table 6 then asks whether the greater political support from economic insecurity equally benefits all parties. The estimates shown in Columns (5) and (10) of this table, on the probability of not supporting a party, are of course the mirror image of those for any party support shown above in Table 5. With respect to the actual parties supported, the results in Table 6 are similar in the BHPS and the SOEP: economic insecurity mainly benefits Right-wing parties (the Conservatives and the CDU/CSU), and to a lesser extent Centre parties (the Liberals/SDP and the FDP). There is less support for the Labour Party in the UK as economic insecurity rises, while the latter is not correlated with the support for the SDP in Germany and for the 'Other parties' in both countries. In most cases, the size of the economic-insecurity effects on support for specific parties are qualitatively comparable to the size of the estimated marginal effects from equalized household income and homeownership.

Why does economic insecurity benefit Right-wing parties? Academic work in Psychology and Political Science (Jost *et al*., 2003, Jost, 2007, Inglehart and Norris, 2016, and Walley, 2017), has underlined that individuals who value security and stability are more likely to support Conservative parties. Greater economic insecurity may increase its salience, and so shift some individuals towards support for the Right wing.

To make the comparison with the BHPS results somewhat easier, we reduced the spectrum of German political parties in Table 6. In Table 7 we relax this simplification separating out 'Alliance 90/The Greens' and 'Die Linke' from the other-party category.[7] We first present the whole-sample results in Panel A. Then, as we may expect West and East Germans to react differently to economic insecurity, we analyse these two groups separately in Panels B and C. Economic insecurity never affects Green support in any panel. However, economic insecurity does reduce Die Linke support in Panel A, and with West Germany representing 75% of the total estimation sample, similarly so in Panel B. The results in East Germany are somewhat different, as economic insecurity still benefits Right-wing parties but also to a smaller extent the SPD.

While Table 7 considered regional heterogeneity in Germany, Tables A1 and A2 consider the results by time period, pre- versus post-2000, in the BHPS and SOEP respectively. The last column of each Table indicates how economic insecurity at t affects the probability of supporting no party at $t+1$. In both Tables, this estimated coefficient is significantly negative only after 2000, with the difference from the pre-2000 effect being significant at least at the 5% level. In Table A1, economic insecurity increased support for the Conservative and Liberal Parties at the cost of the Labour Party in the earlier time period; post-2000 there was no longer a reduction in Labour-Party support. The pattern is similar in Germany: economic insecurity reduced the support for the SDP (although the coefficient is not significant at standard levels) before 2000 but not after 2000. Tables A1 and A2 also indicate that economic insecurity benefited Right-wing parties in both time periods, with some indication (at the 10% level) of a greater effect in the more recent period in both countries.

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[7] We cannot split other parties up in this way in the BHPS, as no party in this other group (like the Scottish National Party and the Green Party) individually attracts more than 2% support. We cannot look at support for the UK Independence Party either, as it did not appear in the list of the political parties in the BHPS questionnaire during this time period.

Finally, Table A3 explores potential heterogeneity in the relationship between economic insecurity and political party support at $t+1$[8] by gender, marital status and parenthood (columns (1) to (6)). The relationship is slightly larger for women, but only significantly so in Germany. Economic insecurity has a greater effect for the married and parents in both countries (at the 1% level, except for parenthood in the SOEP), reflecting perhaps the greater vulnerability of those with a family.[9]

4.2. Robustness Checks

Our main results above related political preferences at $t+1$ to economic insecurity at t. This relationship will not be causal if there is an omitted variable Z that simultaneously predicts current economic insecurity and future political preferences. To help control for this channel, we estimate a value-added model controlling for political preferences at $t-1$. The intuition is that any omitted variable Z that predicts both economic insecurity at t and political preferences at $t+1$ will be picked up by political preferences at $t-1$.[10] The equation estimated here is as follows:

$$Party_{it+1} = \alpha_1\, HHincome_{it} + \alpha_2\, Insecurity_{it} + \alpha_3 Party_{it-1} + \alpha_4 X_{it} + \lambda_t + \epsilon_{it} \qquad (2)$$

The regression results appear in columns (1) and (2) of Table 8. Compared to our baseline results in Table 5 the marginal effects of economic insecurity (as well as those of household income and homeownership) fall by about a half, but are all still significantly different from zero.

Liberini *et al*. (2017) and Ward (2015) have recently shown that subjective well-being predicts voting behaviour. If insecurity then affects satisfaction (as shown in Clark *et al*., 2018) and

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[8] We do not distinguish between parties in a multinomial analysis here for space reasons: Right-wing parties always benefit from economic insecurity. The multinomial logit results are available upon request.
[9] We also looked for a moderating effect of income, splitting the sample up into those above and below median income, but found no significant differences. There are equally no differences in the results for renters and homeowners.
[10] Value-added models that control for political preferences at t produce qualitatively-similar results.

satisfaction affects voting, how much of our political-participation effect is mediated by life satisfaction? Columns (3) and (4) in Table 11 re-estimate our main regression controlling for life satisfaction.[11] This does not change the estimated coefficients, so that life satisfaction is not the main channel.

The Bossert and D'Ambrosio (2016) index is not the only backward-looking individual measure of economic insecurity based on income changes. Hacker *et al.* (2010) consider insecurity as the downside risk of the tendency for incomes to fall from their previous levels. Hacker *et al.* (2012) then propose an index where a household is insecure if it experiences a sharp (over 25%) drop in available income over the past year.[12] We can also take the variance in household equalized income over five years as an alternative measure of economic insecurity. We ask whether the Bossert and D'Ambrosio (2016) index outperforms these other measures. We apply the same approach as in Clark (2001), comparing the explanatory power of each economic insecurity measure introduced in turn into a regression with the same sample and set of controls: the best model has the least negative log-likelihood. The log-likelihood in Table 5 is -43653 (-126312) in the BHPS (SOEP) with the Bossert and D'Ambrosio (2016) index. Columns (5) to (8) in Table 8 show the results for the other indices, all of which produce more negative log-likelihoods than those in Table 5: the economic insecurity index of Bossert and D'Ambrosio (2016) thus fits the data best.

Columns (9) and (10) check the robustness of our results to a different dependent variable. Respondents in both the BHPS and the SOEP are asked about their interest in politics. Table 5 showed that economic insecurity increased the probability of supporting a party at *t+1*: Does the

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[11] The BHPS sample size is smaller here as life satisfaction is only recorded in waves 6-10 and 12-18.
[12] This index also includes changes in medical expenses and financial security, but data constraints prevent us from including these dimensions in the Hacker index.

same conclusion hold for interest in politics? We thus re-estimate equation (1) with the dependent variable now being the probability of having a "*Strong interest in politics*" at *t+1* ("*Very interested*" or "*Fairly interested*" in politics in the BHPS, and having a "*Strong*" or "*Very Strong*" interest in politics in the SOEP). Economic insecurity increases interest in politics in both samples (as does equalized household income, with homeownership attracting a positive but insignificant estimated coefficient), similar to the results for political-party support in Table 5.

5. <u>Conclusion</u>

We here used data from two long-running large-scale panel datasets to show that economic insecurity, defined by income movements over the past five years, affects political preferences. Economic insecurity significantly increases the probability of supporting a political party in both the UK and Germany, with this increased participation mainly benefitting Right-wing parties (the Conservative Party in the UK and the CDU/CSU in Germany). It is worth emphasising that this consistent significant effect of individual-level economic insecurity is found conditional on individual income, homeownership, current labour-force status and past unemployment, and is also conditional on wave fixed effects. These results hold in both earlier and later time periods, are more pronounced for the married and those with children, and are not mediated by life satisfaction.

We believe that these results are important. They first help us to understand the dynamics of political outcomes, showing that income insecurity plays a role conditional on the levels of both income and wealth (as proxied by homeownership), and encourages Right-wing support. Further work in other countries beyond the UK and Germany would help to establish the external validity of this result. In addition, we have here looked at a fairly broad measure of political preferences, only considering the political party supported. Estimating the impact of economic

insecurity on more specific economic and political attitudes would seem to be a promising research area.

More generally, we have shown that the theoretical work on indices can be successfully transferred to empirical research on large-scale panel datasets. This allows the testing of the index's predictions (Does economic insecurity predict individual-level outcomes?) and the comparisons of the empirical performance of different indices. In this respect, we here found that the Bossert and D'Ambrosio (2016) index of economic insecurity is the best predictor of future political preferences. Applying this same test to other indices and individual outcomes would seem to be a promising area of future research.

Last, insecurity seems to provoke conservative responses. Our main finding is of the same nature as much of the research into terrorism and voting, which has mostly concluded that the former increases Right-wing support (See Berrebi and Klor, 2006, Akay *et al*., 2018, and Bonanno and Jost, 2006). Montalvo (2011) is an exception here, suggesting that the switch to Left-wing parties following the Madrid train bombings in 2004 was instead an indictment of the ruling (Conservative) party's handling of the event. While terrorism thankfully remains relatively rare, we have here shown that an index of economic insecurity that can be calculated for all individuals is also associated with a shift in political preferences towards the Right Wing.

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Figures and Tables

Figure 1: Economic Insecurity and Unemployment over Time - BHPS
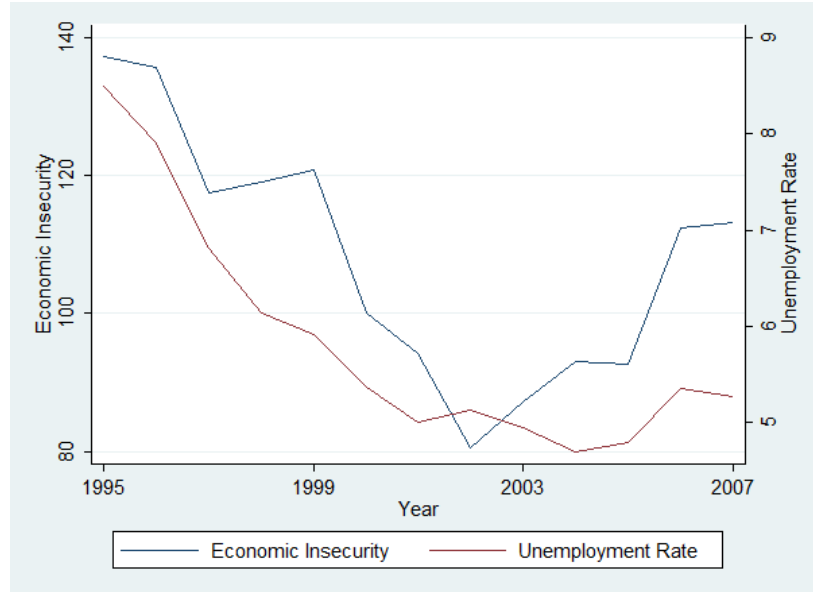
Note: Authors' Calculations. The index of economic insecurity has no natural scale so we use its value in 2000 as base 100.

Figure 2: Economic Insecurity and Unemployment over Time - SOEP
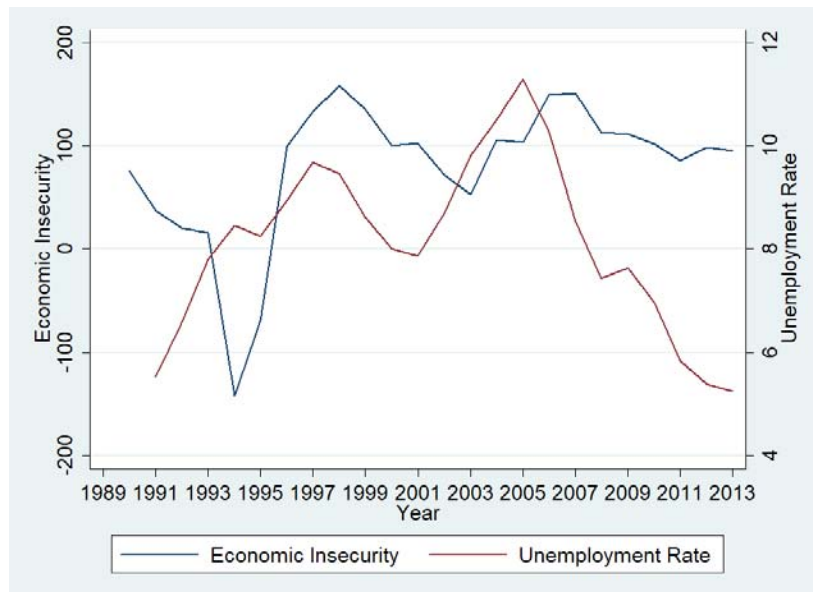
Notes: Authors Calculations. We do not separate East and West Germany here, as they have similar levels of and changes in economic insecurity. The index of economic insecurity has no natural scale so we use its value in 2000 as base 100.

Table 1: Descriptive Statistics - BHPS

	Observations	Mean	SD	Min	Max
Political Preferences:					
Conservatives [R]	76003	0.173	0.378	0	1
Liberal/SDP [L]	76003	0.103	0.305	0	1
Labour [L]	76003	0.305	0.461	0	1
Other Party	76003	0.096	0.294	0	1
No Party	76003	0.322	0.467	0	1
Sociodemographic Variables:					
Economic Insecurity	76003	1903.7	5383.3	-14999.8	14999.4
Hacker's Insecurity Index	76003	0.127	0.333	0	1
Variance in Equalized HH income (/1000)	76003	318442.8	1146625	5.121	9971874
Equalized HH Income (log)	76003	10.224	0.683	2.721	12.903
Homeowner	76003	0.784	0.412	0	1
Age	76003	42.025	12.5	20	65
Female	76003	0.538	0.499	0	1
Married	76003	0.580	0.493	0	1
Number of Children in HH	76003	0.736	1.064	0	8
Employed	76003	0.779	0.426	0	1
Unemployed	76003	0.032	0.176	0	1
Out of the Labour Force	76003	0.188	0.390	0	1

Notes: [R] and [L] respectively indicate whether the party is Right- or Left-wing based on the average position of the party in terms of its overall ideological stance and the classification in Hix and Lord (1997). (Source: 1999-2014 Chapel Hill Expert Survey).

Table 2: Descriptive Statistics - SOEP

	Observations	Mean	SD	Min	Max
Political Preferences:					
CDU/CSU [R]	197539	0.143	0.360	0	1
FDP [R]	197539	0.016	0.127	0	1
SDP [L]	197539	0.169	0.370	0	1
The Greens [L]	197539	0.049	0.216	0	1
Die Linke [L]	197539	0.021	0.142	0	1
Other Party	197539	0.015	0.123	0	1
No Party	197539	0.574	0.493	0	1
Sociodemographic Variables:					
Economic Insecurity	197539	1721.3	6208.7	-29978.7	29979.4
Hacker's Insecurity Index	197539	0.088	0.282	0	1
Variance in Equalized HH income (/1000)	197539	318554.8	1786235	0	9999947
Equalized HH Income (log)	197539	10.357	0.575	0.693	12.939
Homeowner	197539	0.494	0.500	0	1
Age	197539	42.2	11.7	20	65

Female	197539	0.519	0.500	0	1
Married	197539	0.676	0.468	0	1
Number of Children in HH	197539	0.726	0.996	0	10
Employed	197539	0.767	0.423	0	1
Unemployed	197539	0.065	0.247	0	1
Out of the Labour Force	197539	0.168	0.374	0	1

Notes: [R] and [L] respectively indicate whether the party is Right- or Left-wing based on the average position of the party in terms of its overall ideological stance and the classification in Hix and Lord (1997). (Source: 1999-2014 Chapel Hill Expert Survey).

Table 3: Transition Matrix - BHPS

| | | **Party supported at _t+1_** |
		Conservatives [R]	_Liberal/SDP_ [L]	_Labour_ [L]	_Other Party_	_No Party_	_Total_
Party supported at _t_	_Conservatives_ [R]	**10498** **(79.79)**	349 (2.65)	544 (4.13)	205 (1.56)	1561 (11.86)	13157
	Liberal/SDP [L]	448 (5.70)	**5048** **(64.22)**	852 (10.84)	283 (3.60)	1229 (15.64)	7860
	Labour [L]	578 (2.49)	882 (3.80)	**18207** **(78.43)**	498 (2.15)	3049 (13.13)	23214
	Other Party	201 (2.77)	407 (5.60)	213 (2.93)	**5328** **(73.37)**	1113 (15.33)	7262
	No Party	2743 (11.19)	1579 (6.44)	4288 (17.49)	1361 (5.55)	**14539** **(59.32)**	24539
	Total	14468	8265	24104	7675	21491	76003

Note: The parentheses contain the row percentages.

Table 4: Transition Matrix - SOEP

		Party supported at t+1							
		CDU/ CSU [R]	FDP [R]	SPD [L]	The Greens [L]	Die Linke [L]	Other Party	No Party	Total
Party supported at t	CDU/ CSU [R]	**22888 (75.58)**	366 (1.21)	459 (1.52)	106 (0.35)	45 (0.15)	207 (0.68)	6214 (20.52)	30285
	FDP [R]	435 (13.14)	**1884 (56.90)**	86 (2.60)	33 (1.00)	12 (0.36)	36 (1.09)	825 (24.92)	3311
	SPD [L]	486 (1.45)	106 (0.32)	**23762 (71.08)**	789 (2.36)	227 (0.68)	272 (0.81)	7790 (23.30)	33432
	The Greens [L]	99 (1.04)	107 (1.12)	689 (7.23)	**6758 (69.00)**	106 (1.11)	196 (2.06)	1759 (18.45)	9534
	Die Linke [L]	36 (0.88)	14 (0.34)	192 (4.71)	185 (4.54)	**2572 (63.05)**	66 (1.62)	1014 (24.86)	4079
	Other Party	20 (1.34)	0 (0.00)	0 (0.00)	176 (11.76)	89 (5.95)	**1211 (80.95)**	0 (0.00)	1496
	No Party	6160 (5.52)	714 (0.64)	7198 (6.45)	1763 (1.58)	1004 (0.90)	1015 (0.91)	**93736 (84.00)**	111590
	Total	29980	3213	32600	9816	4109	3096	115042	197539

Note: The parentheses contain the row percentages.

Table 5: Economic Insecurity and Probability of Supporting a Party: logit results - BHPS and SOEP

	BHPS	SOEP
	(1)	(2)
Standardized Economic Insecurity	0.017***	0.019***
	(0.004)	(0.003)
Standardized eq. HH income (log)	0.029***	0.041***
	(0.002)	(0.004)
Homeowner (dummy)	0.021***	0.028***
	(0.005)	(0.007)
Observations	76003	197539
Log Likelihood	-43653	-126312

Notes: The standard errors in parentheses are clustered at the household level. The figures are marginal effects. The control variables include age dummies, gender, education, marital status, the number of children, wave dummies, region dummies, labour-force status and dummies for past unemployment over 4 years. *, ** and *** stand for $p<0.1$, $p<0.05$ and $p<0.01$.

Table 6: Economic Insecurity and Voting Behaviour: multinomial results - BHPS and SOEP

	BHPS					SOEP				
	Conserv.	Liberal/ SDP	Labour	Other Party	No Party	CDU CSU	FDP	SDP	Other Party	No Party
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Standardized Economic Insecurity	0.022***	0.008***	-0.010**	-0.003	-0.017***	0.017***	0.003***	-0.001	-0.000	-0.019***
	(0.004)	(0.003)	(0.004)	(0.002)	(0.004)	(0.002)	(0.001)	(0.002)	(0.002)	(0.003)
Standardized eq. HH income (log)	0.033***	0.007***	-0.007***	-0.005***	-0.029***	0.038***	0.008***	0.000	-0.005**	-0.041***
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.004)	(0.001)	(0.003)	(0.003)	(0.004)
Homeowner (dummy)	0.049***	0.018***	-0.049***	0.003	-0.021***	0.068***	0.003***	-0.025***	-0.018***	-0.028***
	(0.004)	(0.003)	(0.005)	(0.003)	(0.006)	(0.006)	(0.001)	(0.006)	(0.004)	(0.007)
Observations			76003					197539		
Log Likelihood			-94611					-223962		

Notes: The standard errors in parentheses are clustered at the household level. The figures are marginal effects and sum up to zero. The control variables include age dummies, gender, education, marital status, the number of children, wave dummies, region dummies, labour-force status and dummies for past unemployment over 4 years. *, ** and *** stand for $p<0.1$, $p<0.05$ and $p<0.01$.

Table 7: Economic Insecurity and Voting Behaviour: multinomial results – West and East Germany

| | SOEP | | | | | | |
	CDU CSU (1)	FDP (2)	SDP (3)	The Greens (4)	Die Linke (5)	Other Party (6)	No Party (7)
Panel A: Whole Sample							
Standardized Economic Insecurity	0.017***	0.003***	-0.001	0.001	-0.002***	-0.000	-0.019***
	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.003)
Standardized eq. HH income (log)	0.038***	0.008***	0.000	0.001	-0.004***	-0.002***	-0.041***
	(0.004)	(0.001)	(0.003)	(0.002)	(0.001)	(0.001)	(0.004)
Homeowner (dummy)	0.068***	0.003***	-0.025***	-0.005*	-0.010***	-0.001	-0.028***
	(0.006)	(0.001)	(0.006)	(0.003)	(0.002)	(0.001)	(0.007)
Observations				197539			
Log Likelihood				-231896			
Panel B: West Germany							
Standardized Economic Insecurity	0.020***	0.003***	-0.000	-0.000	-0.001**	-0.001	-0.021***
	(0.003)	(0.001)	(0.003)	(0.002)	(0.001)	(0.001)	(0.004)
Standardized eq. HH income (log)	0.042***	0.009***	0.002	0.002	-0.002***	-0.002***	-0.054***
	(0.004)	(0.001)	(0.004)	(0.002)	(0.001)	(0.001)	(0.005)
Homeowner (dummy)	0.070***	0.003	-0.022***	-0.006*	-0.005***	-0.001	-0.027***
	(0.006)	(0.002)	(0.007)	(0.004)	(0.001)	(0.001)	(0.008)
Observations				153940			
Log Likelihood				-183958			
Panel C: East Germany							
Standardized Economic Insecurity	0.022***	0.002	0.008**	0.002	-0.003	0.003	-0.034***
	(0.006)	(0.002)	(0.004)	(0.002)	(0.003)	(0.002)	(0.007)
Standardized eq. HH income (log)	0.029***	0.007***	0.014***	0.002	-0.008*	0.000	-0.047***
	(0.007)	(0.003)	(0.005)	(0.003)	(0.004)	(0.001)	(0.008)
Homeowner (dummy)	0.049***	-0.002	-0.015**	-0.008*	-0.030***	-0.003	0.010
	(0.010)	(0.003)	(0.007)	(0.004)	(0.008)	(0.003)	(0.013)
Observations				43599			
Log Likelihood				-47328			

Notes: The standard errors in parentheses are clustered at the household level. The figures are marginal effects and sum up to zero. The control variables include age dummies, gender, education, marital status, the number of children, wave dummies, region dummies, labour-force status and dummies for past unemployment over 4 years. *, ** and *** stand for $p<0.1$, $p<0.05$ and $p<0.01$.

Table 8: Robustness Checks – Logit results

	Controlling for Political Preferences at *t-1*		Controlling for life satisfaction		Using other definitions of economic insecurity				Using "Strong interest in politics" as dependent variable	
	BHPS	SOEP	BHPS	SOEP	BHPS	BHPS	SOEP	SOEP	BHPS	SOEP
	(1)	(2)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Standardized Economic Insecurity$_t$	0.009***	0.008***	0.017***	0.018***					0.022***	0.013***
	(0.003)	(0.002)	(0.004)	(0.003)					(0.005)	(0.003)
Standardized eq. HH income (log)$_t$	0.015***	0.019***	0.030***	0.039***	0.024***	0.024***	0.037***	0.033***	0.053***	0.038***
	(0.002)	(0.002)	(0.002)	(0.004)	(0.002)	(0.002)	(0.004)	(0.003)	(0.003)	(0.004)
Homeowner (dummy)$_t$	0.016***	0.011***	0.027***	0.026***	0.025***	0.025***	0.029***	0.030***	0.009	0.005
	(0.004)	(0.003)	(0.006)	(0.007)	(0.005)	(0.005)	(0.007)	(0.007)	(0.006)	(0.006)
Political Preferences$_{t-1}$:										
No Vote	*Ref.*	*Ref.*								
Conservative	0.460***									
	(0.004)									
Liberal/SDP	0.437***									
	(0.005)									
Labour	0.438***									
	(0.006)									
CDU/CSU		0.476***								
		(0.012)								
FDP		0.539***								
		(0.005)								
SDP		0.532***								
		(0.006)								
Other Party	0.477***	0.563***								
	(0.005)	(0.005)								
Hacker's Economic Insecurity$_t$ Index					-0.000		0.033***			
					(0.006)		(0.005)			
Variance of Eq. HH income$_t$						0.004*		0.015***		
						(0.002)		(0.006)		
Observations	76003	197539	64038	197539	76003	76003	197539	197539	54540	197109
Log Likelihood	-36231	-96899	-43676	-126312	-43665	-43662	-126328	-126326	-34513	-110470

Notes: The standard errors in parentheses are clustered at the household level. The figures are marginal effects. The control variables include age dummies, gender, education, marital status, the number of children, wave dummies, region dummies, labour-force status and dummies for past unemployment over 4 years. "Strong political interest" is a dummy for the individual being "Very interested" or "Fairly interested" in politics in the BHPS and having a "Strong" or "Very Strong" interest in politics in the SOEP. *, ** and *** stand for p<0.1, p<0.05 and p<0.01.

Table A1: Economic Insecurity and Voting Behaviour: multinomial results by time period in the BHPS

	BHPS				
	Conserv.	Liberal/ SDP	Labour	Other Party	No Party
	(1)	(2)	(3)	(4)	(5)
Panel A: Before 2000					
Standardized Economic Insecurity	0.019***	0.010*	-0.026***	-0.005*	0.002
	(0.007)	(0.005)	(0.008)	(0.003)	(0.007)
Standardized eq. HH income (log)	0.043***	0.010***	-0.023**	-0.006***	-0.023***
	(0.004)	(0.003)	(0.004)	(0.001)	(0.003)
Homeowner (dummy)	0.055***	0.018***	-0.049***	-0.007*	-0.017***
	(0.008)	(0.006)	(0.011)	(0.004)	(0.009)
Observations			25973		
Log Likelihood			-35726		
Panel B: After 2000					
Standardized Economic Insecurity	0.033***	0.010***	-0.000	-0.012***	-0.027***
	(0.004)	(0.003)	(0.002)	(0.004)	(0.005)
Standardized eq. HH income (log)	0.047***	0.014***	-0.004	-0.021***	-0.039***
	(0.004)	(0.002)	(0.005)	(0.002)	(0.005)
Homeowner (dummy)	0.050***	0.020***	-0.061***	0.014***	-0.023***
	(0.006)	(0.004)	(0.007)	(0.005)	(0.007)
Observations			44903		
Log Likelihood			-66038		

Notes: The standard errors in parentheses are clustered at the household level. The figures are marginal effects and sum up to zero. The control variables include age dummies, gender, education, marital status, the number of children, wave dummies, region dummies, labour-force status and dummies for past unemployment over 4 years. *, ** and *** stand for $p<0.1$, $p<0.05$ and $p<0.01$.

Table A2: Economic Insecurity and Voting Behaviour: multinomial results by time period in the SOEP

	SOEP						
	CDU CSU (1)	FDP (2)	SDP (3)	The Greens (4)	Die Linke (5)	Other Party (6)	No Party (7)
Panel A: Before 2000							
Standardized Economic Insecurity	0.013***	0.003*	-0.007	0.000	-0.001	0.001	-0.009
	(0.005)	(0.001)	(0.005)	(0.002)	(0.001)	(0.001)	(0.006)
Standardized eq. HH income (log)	0.031***	0.007***	-0.009*	-0.002	-0.002***	-0.002***	-0.022***
	(0.006)	(0.002)	(0.005)	(0.002)	(0.001)	(0.001)	(0.006)
Homeowner (dummy)	0.092***	0.006***	-0.031***	0.001	-0.007***	0.000	-0.060***
	(0.008)	(0.002)	(0.008)	(0.003)	(0.002)	(0.001)	(0.009)
Observations				74278			
Log Likelihood				-86069			
Panel B: After 2000							
Standardized Economic Insecurity	0.023***	0.004***	0.003	0.001	-0.002*	-0.001	-0.027***
	(0.003)	(0.001)	(0.003)	(0.002)	(0.001)	(0.001)	(0.004)
Standardized eq. HH income (log)	0.046***	0.010***	0.009***	0.004*	-0.005***	-0.002**	-0.063***
	(0.004)	(0.001)	(0.003)	(0.002)	(0.001)	(0.001)	(0.004)
Homeowner (dummy)	0.052***	0.002	-0.022***	-0.009**	-0.012***	-0.002	-0.008***
	(0.006)	(0.002)	(0.006)	(0.004)	(0.003)	(0.001)	(0.007)
Observations				123261			
Log Likelihood				-149605			

Notes: The standard errors in parentheses are clustered at the household level. The figures are marginal effects and sum up to zero. The control variables include age dummies, gender, education, marital status, the number of children, wave dummies, region dummies, labour-force status and dummies for past unemployment over 4 years. *, ** and *** stand for p<0.1, p<0.05 and p<0.01.

Table A3: Economic Insecurity and Probability of Supporting a Party: logit results – Heterogeneity in BHPS and SOEP

Panel A: BHPS

	Gender		Marital Status		Children	
	Males	Females	Married	Not Married	No Children	Children
	(1)	(2)	(3)	(4)	(5)	(6)
Standardized Economic Insecurity	0.012**	0.022***	0.027***	0.004	-0.002	0.044***
	(0.005)	(0.005)	(0.005)	(0.006)	(0.005)	(0.006)
Standardized eq. HH income (log)	0.024***	0.032***	0.034***	0.024***	0.017***	0.043***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.006)
Homeowner (dummy)	0.014**	0.036***	0.030***	0.020***	0.022***	0.031***
	(0.007)	(0.007)	(0.007)	(0.008)	(0.006)	(0.010)
Observations	35092	40911	44115	31888	41921	34082
Log Likelihood	-18506	-22459	-24651	-18917	-23462	-20103

Panel B: SOEP

	Gender		Marital Status		Children	
	Males	Females	Married	Not Married	No Children	Children
	(1)	(2)	(3)	(4)	(5)	(6)
Standardized Economic Insecurity	0.010***	0.025***	0.026***	0.011**	0.017***	0.022***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)
Standardized eq. HH income (log)	0.034***	0.049***	0.072***	0.019***	0.037***	0.057***
	(0.005)	(0.005)	(0.006)	(0.004)	(0.005)	(0.007)
Homeowner (dummy)	0.027***	0.028***	0.043***	-0.013	0.015*	0.038
	(0.008)	(0.008)	(0.008)	(0.009)	(0.009)	(0.009)
Observations	94987	102552	133486	64053	112916	84623
Log Likelihood	-138152	-116080	-84957	-40839	-73393	-52693

Notes: The standard errors in parentheses are clustered at the household level. The figures are marginal effects. The control variables include age dummies, gender, education, marital status, the number of children, wave dummies, region dummies, labour-force status and dummies for past unemployment over 4 years. *, ** and *** stand for p<0.1, p<0.05 and p<0.01.