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The Scar Effects of Unemployment on Electoral Participation: Withdrawal and Mobilization across European Societies

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Abstract

Does unemployment increase or decrease electoral participation? A considerable body of work has examined this classic question, focusing on individual and contextual unemployment. However, this literature has scarcely examined the role of past experiences of unemployment, and not yet addressed their interaction with contextual unemployment. In this article, we extend the framework of unemployment scarring to study electoral behaviour. First, we posit that unemployment scars decrease electoral participation. Second, we formulate competing hypotheses on the macro–micro interactions between unemployment rates and scarring at the country, NUTS1 and 2 levels. We test these hypotheses relying on Rounds 4–8 (2008–2016) of the European Social Survey, for 26 countries. Results from logistic regressions with country and year fixed effects indicate that citizens with long unemployment scars are 9% less likely to vote than the non-scarred. We further find that higher unemployment rates at the sub-national levels slightly increase turnout, while there is no significant effect at the country level. For the sub-national levels, we find that lower unemployment rates exacerbate the individual scarring effect on turnout up to 13%. These findings remark that the framework of the scar effects of unemployment further illuminates the relationship between social stratification and political behaviour.

Introduction

Does unemployment increase or decrease electoral participation? Since the Marienthal study (Lipset, 1960; Jahoda and Zeisel, 2002 [1933]), this is a key question for political sociology, given that jobs shape citizens' positions in the social hierarchy (Weber, 2009 [1922]), their integration into society (Durkheim, 1933; Putnam, 2000; Brand, 2015), and their political attitudes (Lipset and Rokkan, 1967; Kitschelt and Rehm, 2014). The

relationship between unemployment and turnout is a piece of the scholarship on social stratification and political behaviour, at the forefront of research on the crisis of social democracy (Lindvall and Rueda, 2014) and the rise of ethnonationalism (Rydgren, 2007; Emmenegger, Marx, and Schraff, 2015; Gidron and Hall, 2017; Norris and Inglehart, 2019). Recently, the salience of this relationship has peaked in the public sphere due to two records: turnout in the 2020 US Presidential

Elections (the highest since 1900) and the highest monthly unemployment rate (14.7%, April) since the Great Depression (US Bureau of Labor Statistics, Unemployment Rate, 2020). Due to small margins in key states being decisive, understanding how unemployment shapes political outcomes is crucial.

Despite the salience of this issue, there is still no consensus in the scholarship on the direction of the effect. Rosenstone (1982) codified the debate into two positions: mobilization vs. withdrawal. Proponents of mobilization argue that unemployment increases voter turnout, as unemployed individuals vote to pressure the government into pro-employment policies (Lipset, 1960). In contrast, proponents of withdrawal explain that unemployment decreases voter turnout: unemployed individuals are busy keeping their '*body and soul together*' (Rosenstone, 1982: p. 26), which depresses political interest (Wolfinger and Rosenstone, 1980). The divide persists today, with Burden and Wichowsky (2014) and Aytaç, Rau and Stokes (2020) supporting mobilization and Emmenegger, Marx, and Schraff (2015, 2017), Marx and Nguyen (2016), and Rovny and Rovny (2017) finding withdrawal patterns. This literature has mainly focused on the role of social class and current employment position at the micro-level (Rovny and Rovny, 2017) and on the unemployment rate at the macro-level (Arceneaux, 2003; Charles and Stephens, 2013; Burden and Wichowsky, 2014).

However, there is scarce attention on a further aspect of unemployment: past unemployment experiences. A voluminous body of research finds that such experiences generate several hardships, which do not cease by signing a new contract. Rather, they tend to be long-term. The literature addresses these hardships as the '*scar effects of unemployment*' (Clark, Georgellis and Sanfey, 2001; Arulampalam, Gregg and Gregory, 2001; Gangl, 2006). These scar effects are multiple and include adversities in the labour market (Gangl, 2004, 2006; Dieckhoff, 2011; Mooi-Reci and Ganzeboom, 2015; Birkelund, Heggebø, and Rogstad, 2017), education (Lindemann and Gangl, 2019; Mooi-Reci *et al.*, 2019), divorce (Goñalons-Pons and Gangl, 2018), health (Korpi, 2001; Knabe and Rätzel, 2011; Ardito *et al.*, 2017), and socio-political trust (Nguyen, 2017; Giustozzi and Gangl, 2018; Schraff, 2018).

If past unemployment experiences generate scars across several social domains, they may also undermine electoral participation. Thus, the near absence of research on this focal relationship is problematic. If individuals experiencing socio-economic hardships also participate less, this may create a vicious circle between socio-economic vulnerability and political marginality

(DiPrete and Eirich, 2006). To the best of our knowledge, the only paper addressing the impact of the scar effects of unemployment on electoral participation is Emmenegger, Marx, and Schraff (2017), which focuses on life-cycle effects in Germany.

Beyond the scarcity of research on this focal relationship, there is another gap in the literature: whether contextual unemployment rates mitigate or exacerbate the individual scarring effects of unemployment experiences on electoral participation.

If macro-level unemployment amplifies the scar effects of unemployment on electoral participation, adversities may combine. Therefore, understanding how unemployment scars (micro) and rates (macro) jointly shape electoral participation is salient for the health of democracy (Lijphart, 1997). In this article, we address these gaps in three ways.

First, we posit that past experiences of unemployment have a scarring effect on electoral participation, similar to those on other socio-economic outcomes.

Second, we examine the impact of the unemployment rate on electoral participation at different macro-levels: countries, macro socio-economic regions (NUTS1), and regions (NUTS2).

Third, we examine how the unemployment rate at different macro-levels moderates the impact of past experiences of unemployment on electoral participation.

To do so, we rely on multilevel data from Rounds 4–8 of the European Social Survey Rounds 4-8 (2008–2016). We employ logistic regressions with country and year fixed effects (FEs), country cluster-robust standard errors (SEs), and design weights. The substance of our findings is that past experiences of unemployment decrease electoral participation, while higher unemployment rates at the sub-national levels slightly increase participation. When the micro and macro-levels are combined, individual scar effects are stronger when the unemployment rate is lower. Thus, we find support for *both* mobilization and withdrawal at the macro- and micro-levels, respectively. Most importantly, we find their synthesis in mitigated withdrawal at the macro–micro level.

Previous Studies and Hypotheses

Scar Effects of Unemployment on Social and Economic Outcomes

Unemployment scarring originates from stratification research, in which it is considered a 'trigger event' (Gangl, 2004): job loss causes disruptions across several

domains (DiPrete, 1981; Ellwood, 1982; DiPrete and McManus, 2000; DiPrete, 2002). In this section, we outline the research on the scar effects of unemployment, focusing on their mechanisms.

The labour market scars from unemployment range from increased risk of further unemployment after re-employment (Arulampalam, Gregg and Gregory, 2001; Gangl, 2006; Brandt and Hank, 2014; Barbieri and Cutuli, 2016), lower re-employment chances (Luijkx and Wolbers, 2009; Schmelzer, 2011), and loss of job control after re-employment (Dieckhoff, 2011). This body of research has pointed to stigma as the driving mechanism: employers rely on past unemployment experiences to assess the quality of workers, which is affected by perceived human capital losses (Lockwood, 1991; Van Belle *et al.*, 2018). Therefore, unemployment experiences decrease re-employment chances and wages (Arulampalam, Gregg and Gregory, 2001; Gangl, 2006), potentially generating a vicious circle between unemployment and bad jobs. However, Gangl (2006) finds that this stigma mechanism is mitigated by labour market institutions such as unemployment insurance and Employment Protection Legislation. By mitigating the costs of unemployment spells, former workers can afford to wait for better-quality jobs, thus loosening the vicious circle (Gangl, 2006).

Moving to the psychological consequences of unemployment, Clark, Georgellis and Sanfey (2001) find that unemployment experiences decrease life satisfaction up to 3 years later. They derive the underlying mechanism from social psychology research (Hill, 1977; Goldsmith, Veum and Darity, 1996): unemployment harms the internal efficacy of individuals, hampering their productivity. Knabe and Rätzel (2011) further specify this mechanism: the fear of future unemployment damages life satisfaction due to external stigma by employers (Lockwood, 1991; Gangl, 2006). Mooi-Reci and Ganzeboom (2015) remark that scarring mechanisms are socio-psychological, finding that stigmatization is more prevalent among men. This points to a pattern in which unemployment drives stigmatization through societal norms: Goñalons-Pons and Gangl (2018) find that in countries where male-breadwinner norms are dominant, job losses among husbands are more likely to end in divorce than are job losses among wives. Similarly, Lindemann and Gangl (2019) find that paternal unemployment decreases children's educational attainment through a socio-psychological mechanism: reducing their optimism about success in life. However, the scar effects of unemployment are not limited to the labour market or households: Giustozzi and Gangl (2018) find that unemployment experiences generate permanent scars on trust in parliaments and identify life dissatisfaction and economic difficulties as their mediators.

Considering these streams of research, we can identify stigma in two forms as the main mechanism: external, in which the unemployment experience leads employers (or spouses) to consider the former workers to be lower in quality; and internal, in which the experience undermines workers' self-efficacy.

If through this mechanism, unemployment spells can generate lasting scars on several outcomes, including political trust, there is a clear rationale for employing them as predictors of electoral participation.

Micro: Scar Effects of Unemployment on Electoral Participation

How can we connect these mechanisms to electoral participation? Research on the political effects of economic hardships points to low internal efficacy as the key mechanism, as it leads to political alienation (Rosenstone, 1982; Emmenegger, Marx and Schraff, 2015, 2017; Marx and Nguyen, 2016). Rosenstone (1982) provides the core of this mechanism. While not explicitly addressing internal efficacy, he argued that unemployment leads individuals to focus inwardly, to '*keep their bodies and souls together, and not bother with remote concerns like politics*' while navigating difficult job searches. Additionally, Rosenstone (1982) argues that unemployment disrupts social relationships: former workers lose their interactions with former colleagues and may be stigmatized by members of other networks. Emmenegger, Marx, and Schraff (2015) further flesh out alienation by drawing from the socio-psychological literature on internal and external political efficacy (Balch, 1974; Gecas, 1989; Rosenstone and Hansen, 1993). They posit that labour market hardships disrupt individuals' self-assessed ability to influence politics (*internal* political efficacy) and decrease the perceived responsiveness of political officials to citizens (*external* political efficacy) (Emmenegger, Marx, and Schraff, 2015). In their words, if individuals '*feel like failures*' in the labour market, this will undermine their *internal* efficacy and decrease turnout. Marx and Nguyen (2016) further build on internal efficacy, explaining that current unemployment '*impairs self-concept, social contact, and material and cognitive resources*', thus depressing political engagement. Resources are also crucial in the framework of Emmenegger, Marx, and Schraff (2017), which is the only paper, to the best of our knowledge, that has ever analysed how past unemployment spells influence electoral participation.

Emmenegger, Marx, and Schraff (2017) build on the civic voluntarism model of Verba, Schlozman, and Brady (1995): they posit that unemployment periods impair not only economic resources but also the civic skills associated with workplace coordination and union membership, which bolster participation (Radcliff, 1992).

Integrating these perspectives from streams of research on the socio-economic scar effects of *past* unemployment and on the participatory effects of *current* unemployment, we argue the following. Unemployment experiences *in the past* permanently undermine the internal efficacy of workers through stigma (Arulampalam, Gregg and Gregory, 2001; Gangl, 2006; Mooi-Reci and Ganzeboom, 2015) and alienation (Rosenstone, 1982; Marx and Nguyen, 2016). Additionally, they undermine trust in parliamentary institutions (Giustozzi and Gangl, 2018), decreasing voting motivations. As suggested by the literature, these effects do not cease when workers sign another contract but last throughout the long term. Thus, we argue that past unemployment experiences depress electoral participation, compounding the effects of well-established predictors of electoral participation, such as social class, education, and current employment position (Verba, Nie, and Kim, 1987; Smets and Van Ham, 2013). Therefore, we posit the following:

Hypothesis 1: Individuals with unemployment scars are less likely to vote than individuals without those scars

Macro: Does the Unemployment Rate Lead to Mobilization or Withdrawal?

At the macro-level, most contributions support the Mobilization hypothesis, highlighting three mechanisms. The first comes from Lipset (1960), who argues that macro '*pressures with which individuals cannot cope*', such as unemployment or inflation, drive citizens to vote to find an institutional solution. In his view, citizens consider voting as a last resort for problems they cannot solve personally. Another stream of research (Brody and Sniderman, 1977; Lewis-Beck and Stegmaier, 2000) identifies a second mechanism: blame attribution. When the unemployment rate is high, citizens blaming the incumbent for the adverse macro-conditions mobilize (Arceneaux, 2003), thus '*attribut*[ing] *externally the responsibility for this grievance*' (Kern, Marien, and Hooghe, 2015, p. 5). Kern, Marien, and Hooghe (2015) argue that due to this mechanism, countries with higher unemployment during the 2008–2010 crisis experienced increased political participation. Therefore, elections

provide a chance for dissatisfied citizens to punish incumbents (Burden and Wichowsky, 2014). A related mechanism is complacency: Burden and Wichowsky (2014) posit that good socio-economic conditions do not draw the attention of citizens towards politics, decreasing electoral participation.

Drawing from this scholarship, we posit the following:

Hypothesis 2: Higher unemployment rates at the macro-level **increase** voter turnout overall

On the Withdrawal side, the classic Marienthal study (Jahoda and Zeisel, 2002 [1933]) suggested that higher unemployment rates decrease electoral participation, trust and political interest. Kern, Marien, and Hooghe (2015) similarly find this holds for European countries in 2002–2008, through the civic voluntarism model (Verba, Schlozman, and Brady, 1995): when the collective resource pool is lower, citizens will focus on themselves.

A further mechanism supporting withdrawal at the macro-level comes from aggregating the mechanisms driving withdrawal at the micro-level: social stigma and the disruption of social relationships (Verba, Nie, and Kim, 1987; Wolfinger and Rosenstone, 1980; Rosenstone, 1982; Emmenegger, Marx, and Schraff, 2015; Marx and Nguyen, 2016). Theoretically, if a higher proportion of citizens in a geographical unit are exposed to unemployment, more citizens may withdraw from electoral participation, decreasing aggregate turnout. Therefore, the competing withdrawal hypothesis is as follows:

Hypothesis 3: Higher unemployment rates at the macro-level **decrease** voter turnout overall

Macro and Micro: Does the Unemployment Rate Moderate the Scar Effects on Turnout?

In the previous sections, we outlined the mechanisms linking unemployment to turnout at the micro- and macro-levels. However, analysing these mechanisms separately may limit the full picture: if macro-level unemployment rises and aggregate turnout follows, who is voting more? Are those scarred by unemployment mobilizing due to their hardships, are those who are not scarred flocking to the polls, or are both participating more? Moreover, it would be unreasonable to expect micro-level scar effects to be uniform across contexts with different unemployment rates. On this matter, Lim and Sander (2013) suggest that the directions may be opposite at the macro- and micro-levels: when examining

only individual unemployment and participation, they find support for the withdrawal hypothesis.

Therefore, we address the following question: Under what conditions do past experiences of unemployment scar electoral participation? As highlighted by Gangl (2006), how unemployment affects the work trajectories of individuals depends on national labour market characteristics. In terms of electoral participation, we have two competing possibilities: higher rates of unemployment may **mitigate** or **exacerbate** the scarring effect on turnout at the micro-level. We review the mechanisms supporting both arguments and formulate the associated hypotheses.

The first mechanism supporting mitigation is habituation, which comes from considerable research across economic sociology, social psychology, and labour economics. The habituation hypothesis posits that the negative effects of unemployment on well-being are mitigated when the experience is widely shared within the reference group of the individual and are exacerbated when it is not (Clark, 2003). The driving mechanism is differential social stigma: Danckert (2017) finds that personal or familial unemployment experiences reduce subjective stigma. As this psychological mechanism is not directly linked to the unemployment rate that held when the unemployment scar occurred, we posit that a lower stigma can mitigate the effects of scarring even after it has taken place. Focusing on self-rated health, Heggebø and Elstad (2018) further link habituation to societal norms, drawing from Clark and Oswald (1994: p. 647): 'it is harder to put up with unemployment if one lives in a place where few people are without a job'. In such a situation, the unemployed 'would be more likely to attribute their job loss to some personal failing' (Turner, 1995). Empirical findings on the habituation hypothesis are mixed: Clark (2003) finds that it holds in British regions with relatively high unemployment rates, while Oesch and Lipps (2013) find no effect in Germany and Switzerland.

Despite this lack of consensus, habituation is a mechanism well-suited to our mitigation hypothesis: past unemployment experiences may be less stigmatized internally and externally when the unemployment rate is high, even after the unemployment spell has taken place. Therefore, if the experience is widely shared, unemployment spells may not have a powerful effect on turnout.

In the same vein, additional mechanisms are blame attribution (Brody and Sniderman, 1977) and voting as a last resort (Lipset, 1960): when the unemployment rate is higher, scarred individuals may shift blame to the government and consider government action to be the only solution to a common predicament, and thus vote

more. In terms of existing evidence on current unemployment status, one study relying on blame attribution is that of Aytaç, Rau and Stokes (2020). They find that in the United States, unemployed individuals mobilize when macro-level unemployment is high and withdraw when it is not. They explain this as follows: when macro-level unemployment is high, the challenger inflames the anger of the jobless to defeat the incumbent. Adapting these mechanisms to past experiences of unemployment, the below hypothesis follows:

Hypothesis 4: Higher unemployment rates **mitigate** the scar effects of unemployment on turnout

The opposite is also possible: high unemployment rates combined with individual scars may further depress turnout. Paul and Moser (2009) remark that higher contextual unemployment worsens labour market difficulties, which could further alienate scarred citizens from politics (Rosenstone, 1982). In terms of empirical findings, Marx and Nguyen (2016) find that in Europe, the withdrawal effects of current unemployment are exacerbated by higher country-level unemployment rates. In line with Radcliff (1992), Marx and Nguyen (2016) find that while micro unemployment depresses internal political efficacy, better socio-economic conditions at the country-level (lower unemployment, lower income inequality, higher economic development, and more generous welfare regimes) moderate the withdrawal effect of individual unemployment. Drawing on this literature, that the below hypothesis follows:

Hypothesis 5: Higher unemployment rates **exacerbate** the scar effects of unemployment on turnout

Summary of Mechanisms and Hypotheses

A key element emerging in the review of the contrasting hypotheses is the geographic unit used for the level of analysis: the evidence supporting mobilization at the macro-level mostly relies on sub-national contexts, whether states (Burden and Wichowsky, 2014; Aytaç, Rau and Stokes, 2020) or regions (Clark, 2003). On the other hand, the evidence in favour of withdrawal is at the country-level (Marx and Nguyen, 2016). Clark (2003) refers explicitly to the local context as a key locus for the habituation mechanism, as it constitutes the most immediate reference group. Therefore, we need to account for the possibility that the moderating effect of the unemployment rate varies across different macro-levels. To do so, we specify sub-hypotheses for *Hypotheses 2–5*: *a* for the country level, *b* and *c* for the

NUTS1 and 2 levels. We summarize the mechanisms and hypotheses in Table 1.

Dataset

The European Social Survey is administered biennially to approximately 50,000 individuals and has been administered in a total of 34 countries across Europe as of the latest round (2018). In this paper, we rely on the entire set of available multilevel rounds of the ESS (round 4, 2008 to round 8, 2016). These datasets provide information on micro- and macro-level variables. The latter refer to countries, macro-regions (NUTS1), and regions (NUTS2). We provide descriptive statistics in Table 2.

Turnout

Our dependent variable is the reported voter turnout of the respondent in the last national election, drawn from the variable *vote* in the ESS. The variable *vote* has been recoded as a binary variable (1—voted, 0—did not vote), dropping respondents not eligible to vote. Furthermore, we have restricted the sample to individuals over 18 years old, the most common threshold for eligibility to vote in national elections. To ensure that only citizens were included, we dropped all non-citizens by using the *ctzcntr* variable. The dependent variable turnout comes with a *caveat*, as it tends to be over-reported in surveys. We carefully address this issue in Section 6 of the Supplementary Materials. After three robustness checks, we find that the results of the main analysis are robust to the issue of over-reporting.

Unemployment Scarring

To measure unemployment scars, we rely on the variables *uemp3m* and *uemp12m*, capturing whether the respondent has been unemployed for over 3 months or over 12 months. The *uemp12m* variable refers only to those who have experienced unemployment for more than three months. Therefore, we build a single variable that takes on three values: 0 if the respondent has not experienced unemployment for more than 3 months ('No Scar'), 1 if the respondent has experienced unemployment for more than 3 months but less than 1 year ('Short Scar'), and 2 if the respondent has experienced unemployment for over 1 year ('Long Scar'). A further variable captures whether the respondents experienced those spells within the 5 years preceding the survey, or earlier. We rely on this variable for further robustness checks.

An additional concern for *Hypotheses 2–5* is differential selection into unemployment depending on the contextual unemployment rate (Burden and Wichowsky 2014; Emmenegger, Marx, and Schraff, 2017). We discuss this with additional analyses in Section 8 of the Supplementary Materials, in which we find that the country FE and stratification variables control for these selection effects.

Socio-Demographic Controls

We include controls for labour market marginality dimensions, such as social class and labour market position (Rovny and Rovny, 2017), as well as traditional predictors of voter turnout: level of education, age, religiosity, migrant and ethnic status, and gender (Smets and Van Ham, 2013). For social class, we transform the ISCO-08 measures (*isco08*) into social classes according to the European Socio-Economic Classification (ESEC) of Rose and Harrison (2007). To do so, we rely on the *iscogen* Stata package from Jann (2019).[1] The *mnactic* variable captures labour market position. We control for household income decile, which is a well-established predictor of turnout (Smets and Van Ham, 2013), as well as a potential mediator for unemployment

Table 1. Summary of mechanisms and hypotheses

Variable(s)	Level	Mechanism	Turnout effect
Unemployment scarring	Micro	Low internal political efficacy	Withdrawal (*H1*)
		Social stigma and alienation	
Unemployment rate	Macro	Blame attribution/complacency	Mobilization (*H2*)
		Voting as a last resort	
		Shrinking collective resources	Withdrawal (*H3*)
		Aggregation of micro effects	
Unemp. rate and scarring	Macro-micro	Habituation	Mitigate Withdrawal (*H4*)
		Blame attribution/complacency	
		Voting as a last resort	
		Combination of adversities	Exacerbate Withdrawal (*H5*)

Table 2. Descriptive statistics

Variable	N	Mean/percent	St. dev	Minimum	Maximum
Turnout	78,718	79.4%	0.404	0	1
Unemployment scarring	78,718	0.416	0.706	0	2
No scar	56,034	71.18%			
Short scar (>3 months)	12,644	16.06%			
Long scar (>12 months)	10,040	12.75%			
Social class (ESEC)	78,718	4.727	2.875	1	9
Large employers, higher Mgrs/professionals	13,068	16.60%			
Higher supervisors, lower Mgrs/professionals	14,685	18.66%			
Intermediate occupations	6,950	8.83%			
Small employers and self-employed	4,979	6.33%			
Small employers and self-employed (Agri)	2,947	3.74%			
Lower supervisors and technicians	5,777	7.34%			
Lower sales and service	12,411	15.77%			
Lower technical	8,479	10.77%			
Routine	9,422	11.97%			
Income decile	78,718	4.344	3.236	0	10
Top decile	5,332	6.77%			
Ninth decile	5,231	6.65%			
Eight decile	6,129	7.79%			
Seventh decile	6,618	8.41%			
Sixth decile	6,849	8.70%			
Fifth decile	7,127	9.05%			
Fourth decile	7,121	9.05%			
Third decile	7,183	9.12%			
Second decile	6,825	8.67%			
First decile	5,778	7.34%			
Missing income	14,525	18.45%			
Level of education (ES-ISCED)	78,718	3.735	1.996	0	7
Higher tertiary (ES-ISCED V2)	8,972	11.40%			
Lower tertiary (ES-ISCED V1)	8,541	10.85%			
Vocational training (ES-ISCED IV)	9,995	12.70%			
Upper secondary, higher (ES-ISCED IIIa)	15,240	19.36%			
Upper secondary, lower (ES-ISCED IIIb)	13,440	17.07%			
Lower secondary (ES-ISCED II)	10,664	13.55%			
Less than lower secondary (ES-ISCED I)	7,382	9.38%			
Not possible to harmonize	4,484	5.70%			
Labour market position	78,718	2.379	1.686	1	6
Paid work	43,631	55.43%			
In education	2,385	3.03%			
Unemployed or inactive	4,660	5.92%			
Retired	20,790	26.41%			
Housework or community service	1,796	2.28%			
Sick or disabled	5,456	6.93%			
Age	78,718	50.578	17.204	18	99
Religious	78,718	0.638	0.480	0	1
Gender	78,718	0.482	0.500	0	1
Native	78,718	0.933	0.250	0	1
Minority	78,718	0.045	0.207	0	1
Unemployment rate (country)	73,362	9.60%	4.94	3.1%	30.5%
Unemployment rate (NUTS1)	32,817	9.06%	5.44	2.95%	31.53%
Population Size (thousands) (NUTS1)	32,817	5764.938	3387.262	657.391	17,872.76
Population density (NUTS1)	32,817	280.920	514.547	5.9	5570.6
GDP per capita—PPP (NUTS1)	32,817	57.981	54	0.87	206

(continued)

Table 2. (Continued)

Variable	N	Mean/percent	St. dev	Minimum	Maximum
Unemployment rate (NUTS2)	40,697	9.49%	4813	2.1%	31.5%
Population size (thousands) (NUTS2)	40,697	2220.724	1780.929	69.699	11,916.98
Population density (NUTS2)	40,697	246.674	495.277	3.3	5211.6
GDP per capita—PPP (NUTS2)	40,697	67.558	55.487	2.094	279.775

Notes: Descriptive statistics with design weights. *Source*: European Social Survey, Multilevel Rounds 4–8 (2008–2016).

scarring.[2] We rely on *hinctnta*, adding a decile for missing responses (18.45% of the sample).

For education, we rely on the ES-ISCED classification present in the ESS (*eisced*). To measure respondents' age, religiosity, native/migrant background, and gender, we rely on *agea*, *rlgblg*, *brncntr*, *blgetmg*, and *gndr*. All variables are binary except age. As Emmenegger, Marx, and Schraff (2017) argue, life-cycle socialization processes may influence turnout. Therefore, we conduct additional analyses interacting age with scarring (baseline and within the 5-year timeframe) in the Supplementary Materials (Section 7).

Macro Variables

Finally, we rely on the variables *cntry*, *nuts1*, and *nuts2* to identify geographical units. There are 26 countries: Austria, Bulgaria, Cyprus, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Hungary, Ireland, Israel, Lithuania, the Netherlands, Norway, Poland, Portugal, Slovenia, Slovakia, Spain, Sweden, Switzerland, and Turkey.[3] We list the included NUTS1 (macro-regions) and 2 (regions) in Supplementary Materials Section 1. NUTS stands for Nomenclature of Territorial Units for Statistics and is used by Eurostat to harmonize hierarchical levels across the European Union and the UK.

We exclude units that have a single NUTS1 macro-region for each country from the NUTS1 regressions, as they do not feature sub-national variation. Thus, the countries included in the NUTS1 regressions are Austria, Bulgaria, Croatia, France, Germany, Great Britain, Greece, Hungary, the Netherlands, Poland, Spain, Slovakia, and Sweden. Similarly, we exclude countries with a single NUTS2 region from the NUTS2 regressions. Therefore, the included countries are Austria, Bulgaria, the Czech Republic, Denmark, Finland, France, Greece, Hungary, Ireland, the Netherlands, Poland, Slovenia, Slovakia, Spain, and Sweden.

Our second focal covariate is the unemployment rate, measured at each contextual level. Unemployment rates in the multilevel ESS dataset are provided by

Eurostat for each year. Therefore, we measure the unemployment rate in the year immediately preceding the year of the latest national election in each country for each round. For instance, for the 2014 wave for Germany, we rely on 2012 unemployment rates when referring to the 2013 elections.

The descriptive statistics for the unemployment rate at the NUTS 1 and 2 levels are presented in Table 2, along with those for population size, population density (per km^2), and GDP per capita in purchasing power parity (PPP).

We provide descriptive statistics for the unemployment rate at the three contextual levels in Supplementary Materials Section 1.

Analytical Strategy

Timing is the first key issue: given that the surveys are administered after the elections, there is a risk of capturing unemployment that occurs after the elections but before the survey is fielded. To avoid this, we restrict the analysis to countries where the survey was administered at most 1 year after the last national election to ensure that long unemployment spells had already been experienced before the elections took place. The full list of country-years by electoral distance is available in Section 2 of the Supplementary Materials. This main analysis is corroborated by two further robustness checks: restricting the dataset to countries in which the survey was administered in the same year as the last national election and leveraging a variable capturing whether the unemployment experience took place more than 5 years before the survey or during the 5 years leading up to the survey. This last robustness check was also conducted by restricting the data to countries with either 1 year or zero years of distance between elections and survey waves. We report the results of these robustness checks in Supplementary Materials Section 5, which are in line with those of the main analysis. Due to this restriction, the number of countries available in which surveys took place at sub-national levels at most 1 year

after the last national election are 13 and 15 for the NUTS 1 and 2 regressions, respectively.

To study how our explanatory variables affect voter turnout, we fit logistic regressions to the ESS data. As voter turnout is a binary dependent variable, logistic regressions are preferable to OLS estimation. We rely on robust SEs using countries as clusters to mitigate heteroskedasticity and design weights to account for group differences in the probability of being interviewed. We present exponentiated coefficients in the form of odds ratios (ORs), which represent the probability of voting relative to a selected baseline.

For *Hypothesis 1*, the purpose of the country FEs is to control for unobserved heterogeneity at the country-level, as the electoral system and cultural characteristics. However, as the unemployment rate is measured multiple times per country during the study period, it is time-variant. Therefore, it is not fully captured by the country FEs but shows the within-country variation in the probability of voting as the unemployment rate changes. Similarly, we rely on year FEs to capture common time trends.

For *Hypotheses 2–5*, the presence of different levels may call for multilevel models. We carefully considered the choice between logistic regressions with country and year FE and linear multilevel models. We ultimately decided to rely on the former after having replicated the entire analysis with MLM, and the results are very similar to those of the baseline specification. We report the discussion and the MLM robustness checks in Supplementary Materials Section 4.

To capture the role of macro-level unemployment while controlling for time-invariant unobserved heterogeneity at the country-level, we also examine the effect of the unemployment rates at the macro-regional (NUTS1) and regional (NUTS2) levels, focusing on structural (between-region) differences rather than those within regions or over time. Structural variation in unemployment rates between sub-regions can be considerable, with countries such as Germany and Spain featuring regions at the opposite ends of the spectrum: Bavaria-DE2 (2.95%, below the 5th percentile of the NUTS1 distribution) vs. Berlin-DE3 (11.45%, above the 75th percentile) and Navarre-ES22 (4.8%, above the 10th percentile of the NUTS2 distribution) vs. Andalucìa-ES61 (31.5%, the maximum). Therefore, the sub-national contexts of the 26 European countries provide an adequate setting to examine the role of unemployment rates at the NUTS1 and 2 levels. In the associated models, we rely on FEs for countries and years and control for established predictors of turnout that may confound the effect of the unemployment rate,

such as population size, density, and GDP per capita (Franklin, 2004; Blais, 2006). For our statistical analyses, we rely on the following Stata 16.1 commands: *logistic*, *margins*, *marginsplot*, and *mixed*.

Results

Micro—Unemployment Scarring and Electoral Participation

Table 3 reports the logistic regressions with ORs for electoral participation on unemployment scarring with country and year FEs, country cluster-robust SEs, and design weights. Starting with *Hypothesis 1*, short (>3 months) and long (>12 months) unemployment scars decrease the probability of voting by 12.8% ($P < 0.001$) and 12.9% ($P < 0.01$), respectively, against the baseline of those without unemployment scars longer than 3 months. The results for the socio-economic controls are in line with the findings from the literature on turnout: the odds of voting are lower among lower social class members, those who are less educated, those currently unemployed or inactive, younger individuals, the non-religious individuals, women, migrants, and members of ethnic minorities. To better interpret the ORs for unemployment scarring, Figure 1 depicts the marginal effects at the means (MEMs) with 95% confidence intervals (CIs) for the focal variable.

Non-scarred individuals have a probability of voting of 85.07%, which is 9.02% higher than the 76.05% probability among long-scarred individuals. The probability of voting among short-scarred individuals is 79.19%, which is statistically significantly different from the probabilities among both the non-scarred and the long-scarred, as the 95% CIs do not overlap. In terms of effect size, an increase of 1 SD in the independent variable corresponds to an increase of 7.87% of a standard deviation (SD) in the dependent variable.

Therefore, these results support *Hypothesis 1*: controlling for the established predictors of turnout, unemployment scarring decreases electoral participation, albeit with a limited effect size.

Macro—Unemployment Rate and Electoral Participation

Regarding the competing *Hypotheses 2* and *3*, the *Baseline* columns of Table 4 report the results of the logistic regressions with country and year FEs, as in Table 3, adding the unemployment rates at the three geographic levels. Furthermore, we include controls for population size (in thousands), density, and GDP per capita (PPP) at the NUTS levels. For graphical clarity, we do

Table 3. Unemployment scarring and electoral participation.

Variable	Odds of voting
Unemployment scarring—baseline: no scar	
Short scar (>3 months)	0.872***
	(0.027)
Long scar (>12 months)	0.871**
	(0.037)
Social class (ESEC)—baseline: large emps. and higher Mgrs/professionals	
Higher supervisors and lower Mgrs/professionals	0.878**
	(0.043)
Intermediate occupations	0.873*
	(0.055)
Small employers and self-employed	0.802***
	(0.051)
Small employers and self-employed (Agri.)	0.753*
	(0.087)
Lower supervisors and technicians	0.734***
	(0.045)
Lower sales and service	0.641***
	(0.031)
Lower technical	0.628***
	(0.046)
Routine	0.578***
	(0.042)
Income decile—baseline: top decile	
Ninth decile	0.961
	(0.051)
Eight decile	0.848**
	(0.052)
Seventh decile	0.853*
	(0.057)
Sixth decile	0.775***
	(0.059)
Fifth decile	0.718***
	(0.058)
Fourth decile	0.708***
	(0.055)
Third decile	0.656***
	(0.053)
Second decile	0.552***
	(0.045)
Bottom decile	0.498***
	(0.042)
Missing income	0.650***
	(0.050)
Level of education—baseline: less than lower secondary (ES-ISCED I)	
Not harmonizable into ES-ISCED	2.104***
	(0.318)
Lower secondary (ES-ISCED II)	1.239***
	(0.075)
Upper secondary, lower (ES-ISCED IIIb)	1.467***
	(0.102)
Upper secondary, higher (ES-ISCED IIIa)	1.938***
	(0.149)

(continued)

Table 3. (Continued)

Variable	Odds of voting
Advanced vocational (ES-ISCED IV)	2.214***
	(0.211)
Lower tertiary education (ES-ISCED V1)	2.627***
	(0.220)
Higher tertiary education (ES-ISCED V2)	2.935***
	(0.272)
Labour market position—baseline: paid work	
In education	1.230*
	(0.111)
Unemployed or inactive	0.805***
	(0.048)
Retired	0.837**
	(0.048)
Sick or disabled	0.741***
	(0.049)
Housework or community service	0.984
	(0.047)
Age	1.032***
	(0.003)
Religious	1.420***
	(0.063)
Gender—baseline: woman	1.061
	(0.036)
Native	1.663***
	(0.136)
Minority	0.909
	(0.083)
Country and year fixed effects	Yes
Pseudo-R^2	10.9%
N	78718

Notes: Coefficients shown are odds ratios. Logistic regressions with design weights. Country cluster-robust standard errors in parentheses. *Source*: European Social Survey, Multilevel Rounds 4–8 (2008–2016). Data restricted to Countries where survey took place at most 1 year after the last national election. $*P < 0.05$, $**P < 0.01$, $***P < 0.001$.

not include the socio-demographic controls here, the results for which are in line with those in Table 3 (socio-demographic controls results in Supplementary Material Section 3).

Starting with the country-level, the results show that higher unemployment rates increase electoral participation. However, this effect is not statistically significant. To further clarify this, Figure 2 depicts the MEMs for the unemployment rate at the country level at the 5th, 25th, 50th, 75th, 90th, and 95th percentiles.

The MEMs corroborate the results in Table 4: while there is an increase, it is not statistically significant, as the 95% CIs overlap. Therefore, neither Hypothesis 2a nor 3a is supported.

Regarding the subnational levels, at both the NUTS1 and 2 levels, variation in the unemployment rate increases the probability of voting by 1.13%

$(P < 0.05)$ and 1.14% $(P < 0.05)$, respectively. As before, we depict the MEMs for the probability of voting in Figure 3.

The y-axis is identical to that of Figure 2, while the x-axes report the 5th, 25th, 50th, 75th, 90th, and 95th percentiles of the unemployment rates at each level. In both levels, variation in the unemployment rates (from the 5th to 95th percentiles) leads to statistically significant increases in the probability of voting: for NUTS1 macro-regions, the probability of voting grows by 2.82%. NUTS2 regions exhibit a similar pattern, with the probability of voting growing by 2.68%. Effect sizes are very limited (2.14% and 2.24% of a SD in the dependent variable). The direction of the effect is positive, but the 95% CIs overlap, suggesting that the statistically significant OR in Table 4 may be driven by outliers in the extreme 10% of the distribution. Therefore, we find
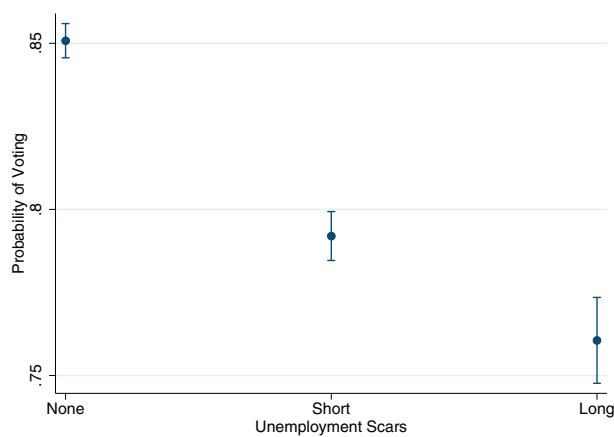
Figure 1. Marginal effects of unemployment scars on electoral participation

Notes: Graph depicting marginal effects at the means with 95% confidence intervals for the impact of unemployment scars (none: <3 months; short: ≥3 months; long: ≥12 months) on probability of voting. Computed with *margins* and depicted with *marginsplot* in STATA 16.1, after the logistic regression in Table 3 with country cluster-robust standard errors and design weights.

Source: European Social Survey, Rounds 4–8. Multilevel datasets.

only weak evidence supporting the mobilization *Hypotheses 2b* and *2c*.

Macro and Micro—Joint Impact of Unemployment Rates and Scarring on Electoral Participation

Having examined both the micro- and macro-levels, we next analyse their joint impact on electoral participation. The *interaction* columns in Table 4 report the interactions between micro-level unemployment scarring and the unemployment rate in the year before the last elections for each geographic level. First, we assess whether the interactions are warranted. We do so by comparing the Bayesian information criteria for each pair of specifications. The BICs are consistently 32, 25, and 22 points lower in the interaction models than in the baseline models. These values are at least twice as large as the threshold of 10 set by Raftery (1995) as '*very strong support*' for model selection. The pseudo-R^2 values corroborate this pattern, as they are slightly higher in the interaction models. At the country-

Table 4. Unemployment scarring and rates, at the country, NUTS1 and 2 levels

Variable	Country	Country	NUTS1	NUTS1	NUTS2	NUTS2
	Baseline	Interactions	Baseline	Interactions	Baseline	Interactions
Unemployment scarring—baseline: no scar						
Short scar (>3 months)	0.865***	0.752***	0.922	0.740**	0.885***	0.700***
	(0.027)	(0.057)	(0.046)	(0.086)	(0.031)	(0.064)
Long scar (>12 months)	0.866***	0.667***	0.859**	0.630***	0.836***	0.637***
	(0.035)	(0.067)	(0.042)	(0.074)	(0.041)	(0.077)
Unemployment rate (in %)	0.994	0.985*	1.013*	1.000	1.014*	1.001
	(0.005)	(0.007)	(0.006)	(0.009)	(0.006)	(0.008)
Unemp. rate × unemployment scarring						
Unemployment rate (in %) × short scar		1.016*		1.023**		1.025**
		(0.008)		(0.009)		(0.009)
Unemployment rate (in %) × long scar		1.027**		1.031*		1.028*
		(0.010)		(0.013)		(0.011)
NUTS population size (thousands)			1.000	1.000	1.000	1.000
			(0.000)	(0.000)	(0.000)	(0.000)
NUTS population density			1.000	1.000	1.000	1.000
			(0.0001)	(0.0001)	(0.0001)	(0.0001)
NUTS GDP per capita—PPP			0.999	0.999	1.000	1.000
			(0.001)	(0.001)	(0.001)	(0.001)
Socio-demographic controls	Yes	Yes	Yes	Yes	Yes	Yes
Country and year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo-R^2	10.7%	10.7%	8.9%	9.0%	9.7%	9.8%
BIC	56,505	56,473	26,481	26,456	31,917	31,895
N	73,362	73,362	32,817	32,817	40,697	40,697

Notes: Coefficients shown are odds ratios. Logistic regressions with design weights. Country cluster-robust standard errors in parentheses. *Source*: European Social Survey, Multilevel Rounds 4–8 (2008–2016). Data restricted to countries where survey took place at most 1 year after the last national election. *$p < 0.05$, **$P < 0.01$, ***$P < 0.001$.
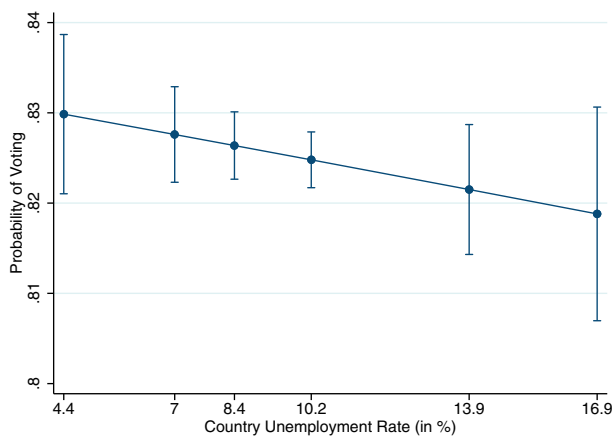
Figure 2. Probability of voting, by unemployment rate—country level

Notes: Graph depicting marginal effects at the means with 95% CIs for the impact of the unemployment rate on probability of voting. Computed with *margins* and depicted with *marginsplot* in STATA 16.1, after the logistic regression in Table 4—Column 1 with country cluster-robust standard errors and design weights.

Source: ESS, Rounds 4–8. Multilevel datasets, country unemployment rate from Eurostat.

level, the interaction is positive and statistically significant for both short- and long-scarred individuals. Figure 4 reports the associated MEMs.

The results are mixed: examining individual scarring patterns separately shows that the increase in the unemployment rate does not entail statistically significant changes, as the 95% CIs of the 5th to the 95th percentiles overlap. On the other hand, there is a slight decrease among the non-scarred individuals (2.6%) which is statistically significant (as the unemployment rate varies between the 5th and 95th percentiles).

Therefore, the difference in the probability of voting between the non-scarred and the long-scarred individuals changes in magnitude from 11.17% at the 5th percentile to 5.92% at the 95th percentile. Both are statistically significant. The contrast between the results entails that we cannot fully reject the null hypothesis for the competing *Hypotheses 4a* and *5a*: while the direction is in line with *Hypothesis 4a*, the change in the individual probabilities of voting is not statistically significant, while the reduction in the gap in the probability of voting is significant. This lack of significance is likely driven by the country FEs, which control for country-specific unobserved heterogeneity (e.g., the electoral system) that is time-variant. Therefore, the MEMs capture only the temporal variation in the unemployment rate while controlling for the between-country variation.

Finally, we move to the interactions between unemployment scarring and the unemployment rate for the NUTS1 and 2 levels. In both, the interactions are positive and statistically significant at the $P < 0.01$ level, or slightly above it ($P = 0.015$ and $P = 0.013$ for the interactions with Long Scar in NUTS1 and NUTS2, respectively). We depict the MEMs for the probability of voting in Figure 5.

The *y*-axis is identical to that of Figure 2, while the *x*-axes report the 5th, 25th, 50th, 75th, 90th, and 95th percentiles for the unemployment rate. Both NUTS1 and 2 present the same pattern: the gap in the probability of voting is largest at the 5th percentile of the unemployment rate, amounting to 13.47% (12.62% of a SD) and 12.62% (11.39% of a SD), respectively. As the unemployment rate varies from the 5th to the 95th percentiles, the gap decreases, amounting to 4.69% (4.4% of a SD) for NUTS1 and 5.13% (4.67% of a SD) for NUTS2 at the 95th percentiles.

These changes in the probability of voting are driven by the short- and long-scarred individuals, who are markedly and statistically significantly more likely to vote as the unemployment rate increases.

On the other hand, there is no statistically significant change for the non-scarred group.

These results show that unemployment scarring is most harmful to electoral participation when the unemployment rate is low. In contrast, when the unemployment rate is highest, scarring drives limited and significant gaps in the probability of voting. These results illuminate the differences between the short- and long-scarred groups: when the unemployment rate is close to the 5th percentile at the NUTS1 level, the difference in the probability of voting between short- and long-scarred individuals is 6.42%, while the difference between non-scarred and short-scarred individuals is 7.05%. Thus, when the unemployment rate is low, a long scar decreases turnout twice as much as a short scar. A similar pattern is present at the NUTS2 level. Therefore, these results support *Hypotheses 4b* and *4c* over *Hypotheses 5b* and *5c*: the unemployment rate at the macro-level mitigates scarring effects at the micro-level.

Discussion and Conclusion

In this article, we addressed three questions: do past experiences of unemployment scar electoral participation? Does the unemployment rate at different macro-levels increase or decrease voter turnout? Finally, does the macro-level unemployment rate moderate the micro-level effect?

Our answers are as follows: past unemployment experiences decrease electoral participation by
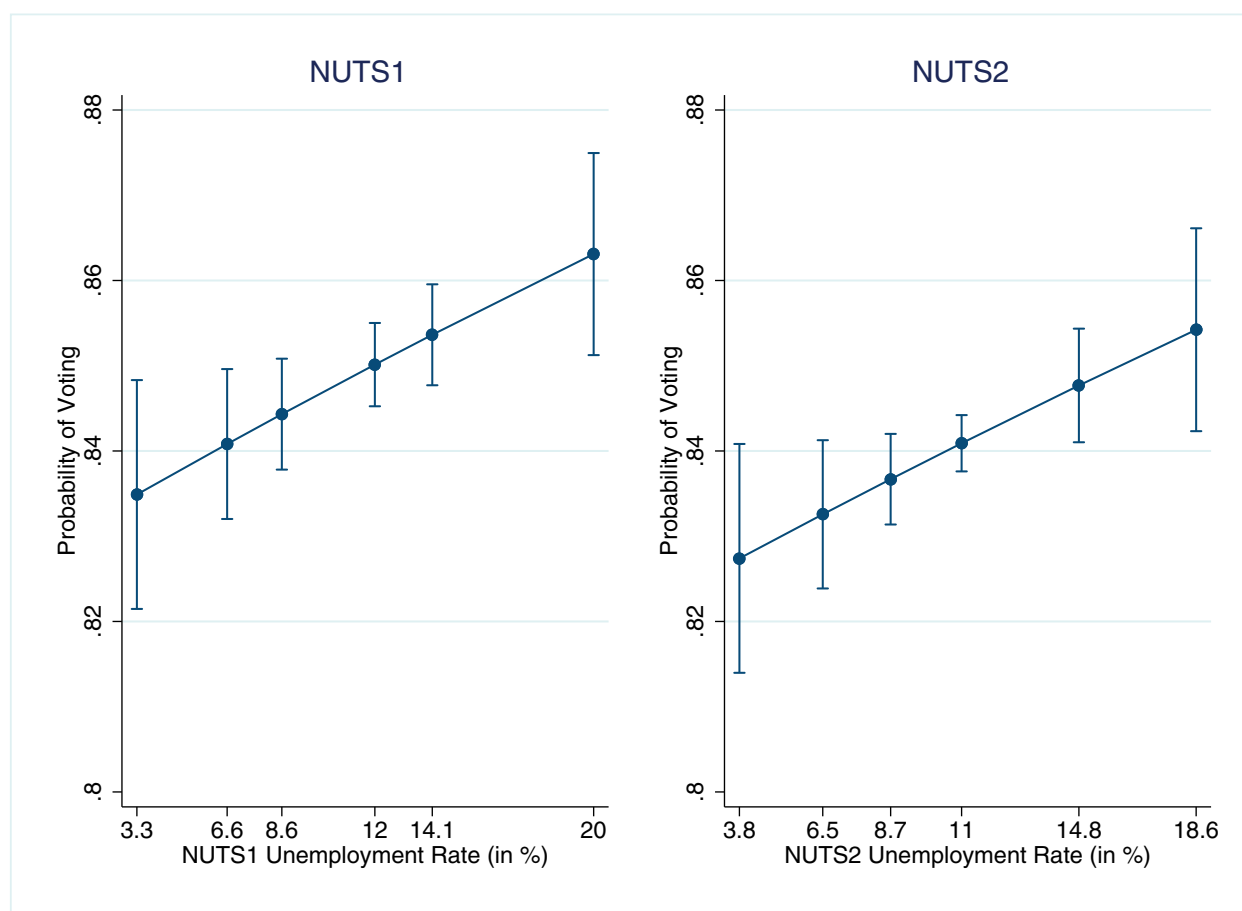
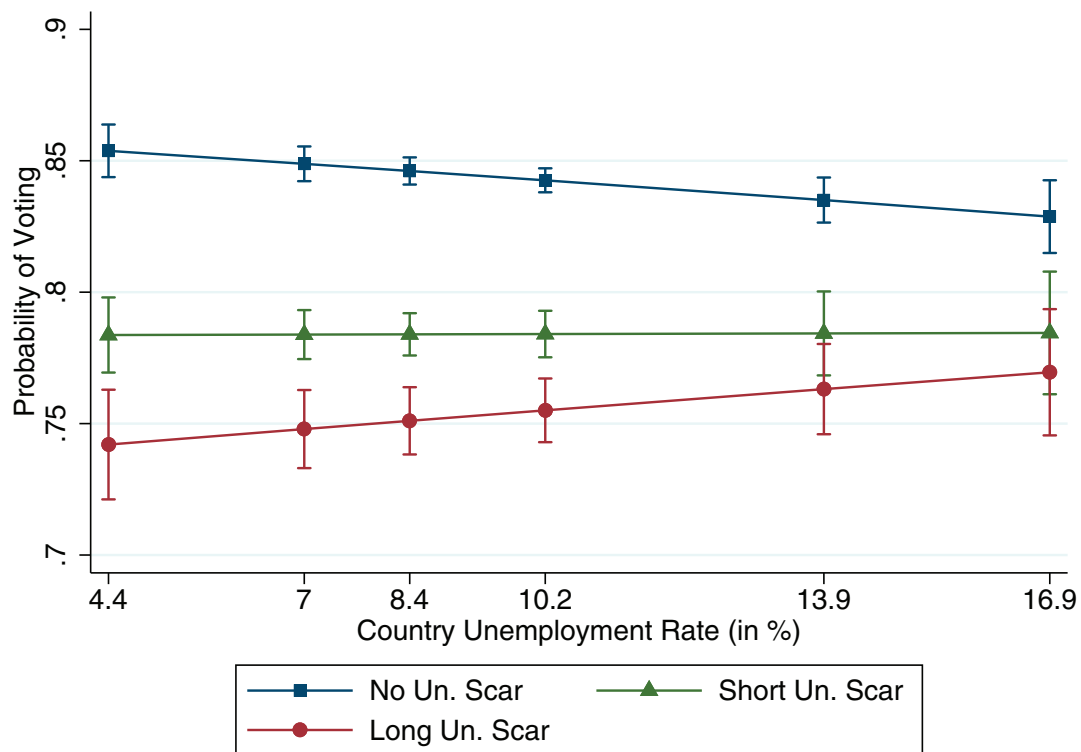**Figure 3.** Probability of voting, by unemployment rate—NUTS1 and 2 levels

Notes: Graph depicting marginal effects at the means with 95% CIs for the impact of the unemployment rate on probability of voting. Computed with *margins* and depicted with *marginsplot* in STATA 16.1, after the logistic regression in Table 4—Columns 3 and 5 with cluster-robust standard errors and design weights.

Source: ESS, Rounds 4–8. Multilevel datasets. Contextual variables from Eurostat.

approximately 9%, controlling for well-established predictors of turnout and using country and year FEs. The unemployment rate increases electoral participation, but this is not significant at the country level, whereas it is modest and borderline significant at the NUTS1 and 2 levels. Our key finding comes from interacting the two levels: scarring at the micro-level is mitigated by higher unemployment rates at the macro-level. Thus, our answer to the mobilization vs. withdrawal question is *both*: withdrawal at the micro-level and mobilization at the macro-level, providing a synthesis of the longstanding debate in political sociology that has existed since Lipset (1960) and Rosenstone (1982). These findings support *Hypothesis 1* at the micro-level and *Hypotheses 2 and 4* across the NUTS1 (macro-regional) and 2 (regional) levels. We summarize our findings in Table 5.[4]

While the effect size at the micro-level is limited, we find the effect while controlling for traditional predictors

of voter turnout such as social class, current labour market position, education, and age, in addition to country and year FEs. The key contribution of the individual-level findings is that past unemployment experiences not only shape lasting difficulties in the labour market and in the family, health, and political trust domains but also depress electoral participation. Considering these adversities together, the scar effects of unemployment may trigger a circle of cumulative disadvantage over the life course (DiPrete and Eirich, 2006), with socio-economic vulnerabilities shaping political marginality. This is another facet of the '*unresolved dilemma of democracy*' described by Lijphart (1997), in which political marginality may drive unequal representation and responsiveness of elected officials towards the most struggling strata of society, exacerbating their conditions. The second contribution relates to the impact of the unemployment rate at the macro-level: we find weak evidence for mobilization across the sub-national

Figure 4. Probability of voting, by unemployment scarring and rate—country level

Notes: Graph depicting marginal effects at the means with 95% CIs for the impact of unemployment scars (none: <3 months; short: ≥3 months; long: ≥12 months) and the unemployment rate on probability of voting. Computed with *margins* and depicted with *marginsplot* in STATA 16.1, after the logistic regression in Table 4—Column 2 with cluster-robust standard errors and design weights.

Source: ESS, Rounds 4–8. Multilevel datasets, NUTS1 and 2 unemployment rates from Eurostat.

levels, in line with previous research (Burden and Wichowsky, 2014; Aytaç, Rau and Stokes, 2020). However, the effects are negligible.

Our key contribution comes from the macro-micro effect: unemployment scarring is stronger when the unemployment rate is lower, and this is consistent across geographic contexts. These findings highlight that the underlying mechanism is linked to different societal norms, in line with research on habituation (Clark, 2003; Heggebø and Elstad, 2018). Notably, the differences between the scarring effects of short and long unemployment experiences are stronger when the unemployment rate is low (the impact of a long scar on turnout is almost double that of a short scar) and milder to non-significant when the unemployment rate is higher. This pattern reinforces the importance of the sub-national context as the key reference group for habituation (Clark, 2003).

We provide a *caveat* for the macro-micro effects at the country level: while the gap between non-scarred and long-scarred individuals is consistently significant and shrinks from −11.17% to −5.92% as the unemployment rate rises, the change in the probability

of voting among short- and long-scarred individuals is not statistically significant. Therefore, we report the macro-micro effect at the country-level as statistically significant, while the macro-level effect is not.

This result is corroborated by several robustness checks, including selection into unemployment. The latter check (Supplementary Material Section 8) shows how higher unemployment rates increase the probability of scarring, particularly among low social class members. While our sociodemographic controls capture selection effects, this pattern reinforces our habituation mechanism: higher rates make unemployment spells in the past more common, likely decreasing internal and external stigma.

While the lack of reinforcement between structural and individual adversity is reassuring, long-scarred citizens in low-unemployment contexts are over 10% less likely to vote than non-scarred citizens. This effect becomes stronger at the sub-national level, with scarred citizens being up to 13.47% less likely to vote than non-scarred citizens when the unemployment rate is below the 5th percentile. For exemplificatory purposes, similar unemployment rates can be found in countries like Denmark, the Netherlands, and
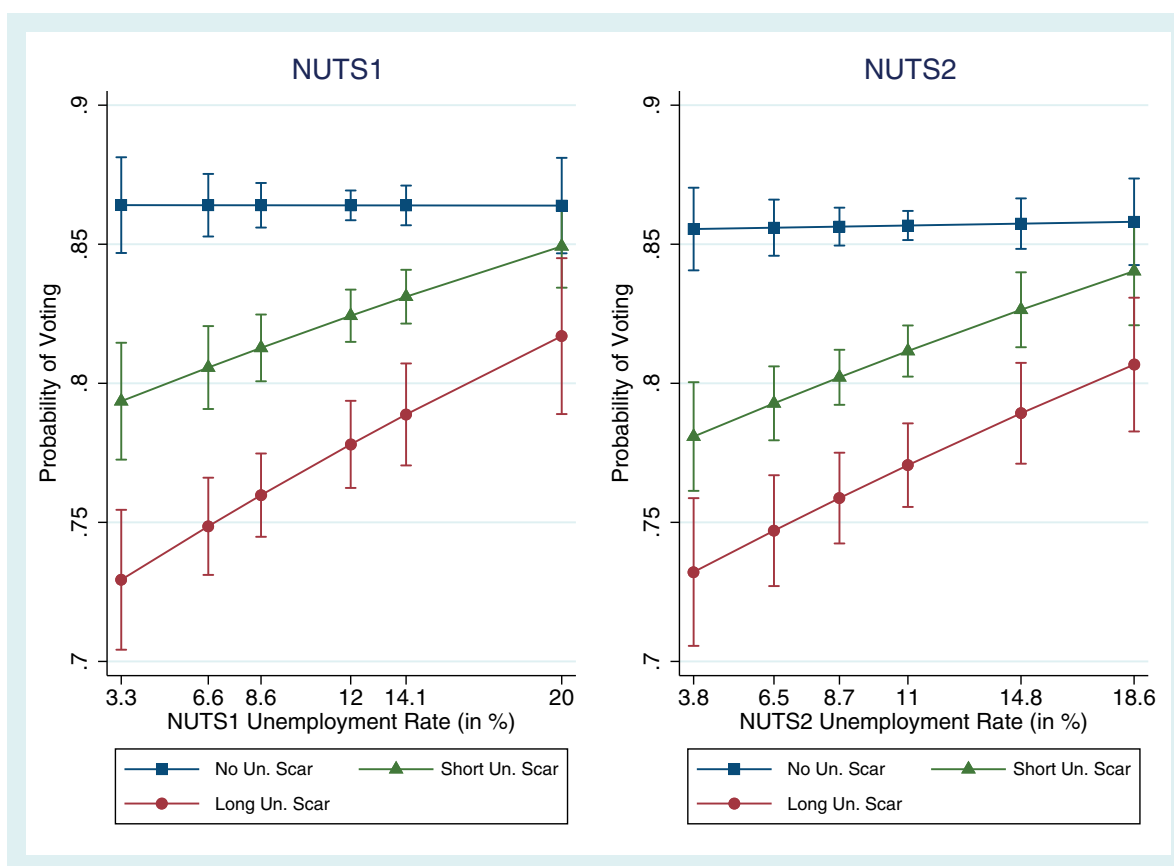
Figure 5. Probability of voting, by unemployment scarring and rate—NUTS1 and 2 levels

Notes: Graph depicting marginal effects at the means with 95% CIs for the impact of unemployment scars (none: <3 months; short: ≥3 months; long: ≥12 months) and the unemployment rate on probability of voting. Computed with *margins* and depicted with *marginsplot* in STATA 16.1, after the logistic regression in Table 4—Columns 4 and 6 with cluster-robust standard errors and design weights.

Source: ESS, Rounds 4-8. Multilevel datasets, NUTS1 and 2 unemployment rates from Eurostat.

Table 5. Summary of findings, with statistical significances and effect sizes

Variable(s)	Level	Marginal effect	Statistical significance	Effect size	Supp. hypothesis
Unemployment scarring	Micro	−9.02%	Yes	7.87% SD	*Withdrawal (H1)*
Unemployment rate	Country	−1.1%	No	0.07% SD	*Null (H0)*
	NUTS1	+2.82%	Mix	2.14% SD	*Mobilization (H2)*
	NUTS2	+2.68%	Mix	2.24% SD	
Scarring and **Low** Unemp. rate	Country	−11.17%	Mix	9.71% SD	*Mitigate Withdrawal*
Scarring and **High** Unemp. rate		−5.92%	Mix	5.51% SD	*(H4)*
Scarring and **Low** Unemp. rate	NUTS1	−13.47%	Yes	12.62% SD	*Mitigate Withdrawal*
Scarring and **High** Unemp. rate		−4.69%	Yes	4.40% SD	*(H4)*
Scarring and **Low** Unemp. rate	NUTS2	−12.33%	Yes	11.39% SD	*Mitigate Withdrawal*
Scarring and **High** Unemp. rate		−5.13%	Yes	4.67% SD	*(H4)*

　　Notes: Marginal effects at the means computed after logistic regressions with Country and Year FE, design weights, and cluster-robust standard errors. Low and high unemployment refer to the 5th and 95th percentiles of the unemployment rate distribution, at the Country, NUTS1, and NUTS2 levels. The marginal effects refer to the difference in probability of voting between the non-scarred and the long-scarred at the micro and macro–micro levels, or between the 5th and 95th percentiles of the unemployment rate at the macro-level.

　　Source: European Social Survey, Rounds 4–8 (2008–2016). Data restricted to countries where survey took place at most 1 year after the last national election.

Switzerland, in NUTS1 macro-regions such as Baden-Württemberg (DE1) and Bavaria (DE2), as well as in NUTS2 regions including capitals as Amsterdam in North Holland (NL32) and Prague (CZ01).

Therefore, we find that the scar effects of unemployment on electoral participation can be powerful across a range of geographical contexts in Europe. This finding is particularly salient in the context of close elections, when crucial electoral outcomes can be tilted by a few percentage points (Uggen and Manza, 2002). These close outcomes include the US Presidential Elections of 2000, 2016, and 2020, the British General Elections of 2017, and the Italian National Elections of 2006 and 2013.

The key limitation of this article is the cross-sectional nature of the data: although we leverage retrospective questions, we do not know exactly when the unemployment spell took place. After having examined the scar effects of unemployment on turnout across 26 countries and 139 regions, future research may inquire into this relationship by relying on panel data, possibly approaching causality through individual FEs. However, this is restricted to countries with panels including both socio-economic and electoral data (e.g., BHPS/Understanding Society in Great Britain, GSOEP in Germany, LISS in the Netherlands). Therefore, this paper establishes new correlations across different contexts to be further explored in a causal framework with nation-specific datasets. Future research may also expand this macro-micro framework to further socio-political outcomes, such as attitudes on redistribution and migration, party choice, and civil society engagement.

In conclusion, unemployment scars electoral participation, as well as several socio-economic outcomes. The effect is particularly harmful where the unemployment rate is low and next to null where joblessness is high. Therefore, extending the framework of the scar effects of unemployment to electoral outcomes can further illuminate the relationship between social stratification and political behaviour, which is crucial in contemporary Europe, where lower turnout rates and rising ethnonationalist forces are prominent.

Notes

1 For robustness purposes, we have run our analyses using the class schemas by Erikson, Goldthorpe, and Portocarero (1979) and Oesch (2006). The findings for the unemployment variables are equivalent to using ESEC.
2 For robustness purposes, we have conducted a mediation analysis relying on the Karlson–Holm–Breen de-composition method (KHB, Karlson, Holm, Breen, 2012). This analysis shows that income decile mediates 12.62% and 26.45% of the impact of short and long scarring on turnout, respectively. As income itself is an established predictor of voter turnout and is not included in our posited mechanisms, we control for it systematically in all analyses.
3 Due to the restrictions on the survey taking place at most 1 year after the last national elections, the following countries have been excluded: Albania, Iceland, Italy, Latvia, Romania, Ukraine, and Kosovo. We exclude Belgium due to compulsory voting, and Russia due to electoral fairness concerns (Clean Elections Index, V-Dem, 2020).
4 We also report changes in terms of SD in the dependent variable to ensure consistency in terms of effect size, as a 1% increase in the unemployment rate may entail different changes at the Country (SD: 3.87), NUTS1 (4.93), and 2 (4.81) levels.

Supplementary Data

Supplementary data are available at *ESR* online.

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