Exclusionary Backlash to Job Loss: Evidence from Germany

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Abstract

This short article uses panel survey data from the decade following German reunification to study how job loss shapes individuals' attitudes toward immigration and multiculturalism. It shows that German workers who lose their jobs become more hostile toward both immigrants and Jews than they had been prior to job loss. They also become more sympathetic toward National Socialism and the radical right. This appears to be true of workers in both eastern and western Germany. The attitudinal effect of job loss is equivalent to more than half of the effect of attending university, but in the opposite direction. These findings are corroborated by more recent evidence showing that German survey respondents who are out of work are more hostile toward immigrants and Jews and are more supportive of the AfD. This paper provides the strongest evidence to date that cultural attitudes are shaped by labor market shocks.

Keywords: economic shocks, job loss, immigration, antisemitism, radical right

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[†]Supplementary material for this article is available in the online appendix. Replication files are available in the JOP Dataverse (https://dataverse.harvard.edu/dataverse/jop). The empirical analysis has been successfully replicated by the JOP replication analyst.

Over the last half-century, electoral competition in advanced democracies has become increasingly organized around a 'cultural' cleavage that pits advocates of diversity and free immigration against defenders of a more restrictive vision of political belonging (e.g., Ford and Jennings 2020). A recurring debate in contemporary scholarship is about the extent to which voters' positions on this cultural dimension of electoral competition are shaped by their economic circumstances and especially by their experiences in the labor market. According to one view, individuals' views on multiculturalism and immigration are determined primarily by their family background and educational experiences. Consistent with this view, scholars have shown that education exerts a liberalizing effect on immigration attitudes and that most voters' views on immigration are not directly related to exposure to labor market competition (Cavaillé and Marshall 2019; Hainmueller and Hopkins 2014). These findings suggest that labor market experiences in adulthood have a limited or negligible effect on attitudes toward immigration and multiculturalism.

On the other hand, there now exists a considerable body of evidence connecting labor market adversity to exclusionary nationalist attitudes and support for candidates and parties of the radical right. Recent scholarship has shown that voters in areas affected by adverse economic shocks are more likely to hold xenophobic attitudes and to vote for parties that endorse exclusionary nativism (e.g., Carreras et al. 2019; Ballard-Rosa et al. 2021). Scholars have also shown that the onset of labor market adversity may drive support for radical right parties (Kurer 2020). This evidence suggests that voters' cultural attitudes may indeed be shaped by labor market dislocation, perhaps by driving status anxieties that find expression in hostility toward minority groups (Gidron and Hall 2017).

Missing from existing scholarship, however, is direct evidence that economic dislocation at the individual level leads to the adoption of exclusionary cultural attitudes. The most credible way to study this link is through panel survey data that measures the same individuals' attitudes before and after they experience a shock. Yet scholarship using this methodology to study labor market shocks and attitudinal change has focused almost ex-

clusively on redistributive preferences (see review in Margalit 2019), with the exception of Hopkins et al. (2024), who study the effect of economic shocks on preferences toward unauthorized immigration in the United States. It remains unclear whether broader attitudes on immigration and multiculturalism change in response to shocks like job loss and whether the effects of job loss are substantively important relative to other factors like education.

In this short article, I draw on previously untapped panel survey evidence from Germany in the decade following reunification to study the effect of job loss on exclusionary cultural attitudes. The data come from the Political Attitudes, Political Participation, and Voter Behavior in Reunified Germany survey, which ran from 1994 to 2002 and was a predecessor of the German Longitudinal Election Study (GLES) (Falter et al. 2012). This survey is distinctive because of its questions about respondents' attitudes toward multiculturalism in combination with its detailed questions about respondents' labor market trajectories. In addition to assessing the effect of job loss on respondents' cultural attitudes, I examine the effect of higher education on the same attitudes, studying individuals before and after they attend university. This allows for a comparison of the relative magnitude of these effects.

The analysis shows that in Germany's post-reunification decade, job loss led to a considerable increase in exclusionary nativist sentiment, including hostility toward both immigrants and Jews. The effect of job loss was equivalent to more than half of the effect of a university education on respondents' attitudes (but in the opposite direction). Furthermore, I show that job loss led to more sympathetic attitudes toward National Socialism and a more favorable assessment of Germany's leading radical right party at the time, *Die Republikaner*. The responses of East and West Germans were statistically indistinguishable from one another on most of these outcomes. I also provide evidence that job loss induced a decline in subjective social status, lending support to the view that labor market dislocation promotes exclusionary sentiments by inducing feelings of status loss. I complement the panel data from the post-reunification decade with more recent panel and cross-sectional evidence from the GLES (Rattinger et al. 2024) and the German General Social Survey (ALLBUS;

Allerbeck et al. 2024) showing that job loss predicts anti-immigrant sentiment, hostility toward Jews, sympathy for National Socialism, and support for the far-right *Alternative für Deutschland* (AfD). This evidence suggests that the findings of the panel analysis generalize to the contemporary era.

Data and empirical strategy

To study the relationship between job loss and exclusionary cultural attitudes, this short article uses individual-level panel data collected in Germany during the decade after unification. The advantage of panel data is that respondents are asked the same questions repeatedly over time, allowing the researcher to examine whether respondents who experience shocks like job loss are more likely to change their responses from one wave to the next than are respondents whose labor market status remains unchanged. The first wave of the survey was conducted in 1994, with follow-up waves in 1998 and 2002. Interviews with participants were conducted largely face-to-face. This yielded a final sample of 2,372 working-age respondents with valid responses in at least two consecutive rounds. Participant attrition between waves was moderate and comparable to that found in more recent scholarship on responses to economic shocks, such as in Margalit (2013), as discussed in Appendix A. Appendix Tables A1 and A2 show stability across waves in the demographic composition of the sample, ameliorating concerns about differential attrition. Appendix B provides background on the post-reunification period, when Germany slid into recession and became 'the sick man of Europe.'

The main outcome of interest is respondents' answer to a survey question that asks whether they agree that "because of all the foreigners, the Federal Republic has been *überfremdet* to a dangerous degree." This word is commonly used by critics of immigration in Germany and suggests that the country is 'over-foreignized' and has become estranged or indeed 'alienated' from itself. The second survey item is one that asks respondents whether they agree or disagree that "the Jews simply have something peculiar and distinctive about them that doesn't fit so well with us." Affirmative answers indicate respondents' adherence

to an exclusionary ethno-nationalist view of belonging. I also study responses to a question that asks whether "National Socialism also had its good sides." Although this question is vague, affirmative responses may indicate sympathy for ethno-nationalism. For all of these questions, responses are measured on a five-point scale. These responses are rescaled from zero to one, with one indicating strong agreement. I also study respondents' answers to a question asking whether they have a favorable or unfavorable view of *Die Republikaner*, the country's leading radical right party in the 1990s (see background in Appendix B). Responses are measured on an eleven-point scale that I rescale from zero to one. Appendix Table C1 reports mean responses to each question by year. Appendix D discusses the question of social desirability bias. Appendix G reports the paper's findings when these variables are re-coded as binary indicators.

Existing scholarship on political responses to job loss often counts respondents as treated if they report being employed in one wave and being unemployed in the subsequent wave (e.g., Margalit 2013; Hopkins et al. 2024). This approach has two limitations. First, respondents may experience job loss between waves but find new work by the time they are surveyed again. This is especially important when panel waves are several years apart. Second, not all respondents who experience job loss enter unemployment. Some may describe themselves as retired, especially in contexts like Germany where early retirement was a widely used pathway out of the labor market for workers who lost their jobs. Others may enter a retraining program, meaning that they may not classify themselves as unemployed.

Accordingly, I code respondents as having experienced job loss if they *(i)* go from being employed in one wave to being unemployed or in retraining in the next wave, *(ii)* report having been unemployed between waves, or *(iii)* go from being employed in one wave to retired in the next wave prior to the standard retirement age. Appendix Table E1 reports the share of respondents who experience job loss and breaks down the treatment group by gender, age, and region, as well as by their status at the time of the subsequent wave (still unemployed, in new work/retraining, or in early retirement). Appendix Table E2 shows that

respondents who are coded as having lost their jobs experience large drops in household income between waves, whether they are in new work, are still unemployed, or have entered early retirement. Although it is possible that some respondents voluntarily retire early, existing scholarship has shown that early retirement in Germany is typically involuntary (e.g., Dorn and Sousa-Poza 2010). This is consistent with the finding that early retirement typically entails income losses (Appendix Table E2). To ensure that this paper's results are not driven by the inclusion of early retirees, Appendix P re-estimates all of the findings with a dataset restricted to respondents under 55 for whom early retirement was not an option.

I use three estimators to study the effects of job loss. The first is a standard two-way fixed effects estimator (TWFE), which controls for time-invariant respondent-level characteristics and respondent-invariant differences between survey waves. The second and third estimators are those developed recently by Callaway and Sant'Anna (2021) and Imai and Kim (2019). Both the CS and IK estimators correct for the problem of "forbidden comparisons" between treated units and already-treated units that can arise in standard TWFE. The CS model also allows for a weaker parallel trends assumption (common trends conditional on covariates). I condition on education and gender. The sample consists of working-age respondents. The control group consists of respondents whose labor market status does not change between waves. Time-invariant controls are made redundant through individual fixed effects. Time-variant controls are omitted because they may be downstream from job loss, introducing a risk of post-treatment bias. This paper's estimation strategy depends on the parallel trends assumption: Appendix F tests for possible violations of this assumption. All models report heteroskedasticity-robust standard errors. The TWFE and CS models cluster standard errors by respondent; this is not possible in the IK model.

Results

The results in the first three columns of **Table 1** below show that job loss is correlated with an increase in hostility to foreigners, as measured by respondents' agreement with the claim that Germany is dangerously 'over-foreignized.' The estimates from the TWFE,

CS, and IK models are similar and amount to 14-19% of a standard deviation (SD) in the outcome. The slight variation in sample size reflects the fact that the CS model requires valid responses for education and gender. The results in columns four, five, and six show that job loss is correlated with an increase in agreement with the claim that there is something about Jews that prevents them from fitting into German society. The result reaches different levels of statistical significance in the three models. The coefficients are 9-15% of an SD in the outcome. The results with a binary dependent variable are similar, as are the results with an alternative control group that includes those entering employment (Appendix G).

Table 1: The effect of job loss on exclusionary cultural attitudes in Germany, 1994-2002

	Dependent variable:					
	Germany over-foreignized			Jews don't belong		
	TWFE	CS	IK	TWFE	CS	IK
Lost job	0.049^{**}	0.052^{**}	0.063^{***}	0.041^{**}	0.041^{*}	0.026^{+}
	(0.016)	(0.020)	(0.015)	(0.015)	(0.017)	(0.014)
Observations	5440	5401	5440	5391	5352	5391
N Clusters	2372	2363	2372	2370	2361	2370
Note:			$^{+}$p<0.10; *p<0.05; **p<0.01; ***p<0.001			

To put the magnitude of these effects in context, we can compare them to the attitudinal effect of attending university. To be sure, university attendance is a very different kind of experience from job loss and cannot be characterized as an exogenous shock, given that attendance is voluntary. Studying the magnitude of attitudinal change over the course of a university education does, however, provide a useful benchmark, since many scholars see university experiences as a key source of culturally progressive attitudes. Appendix H reports the details of this panel analysis, which studies the extent to which attending university induces a change in respondents' views between the survey waves. University attendance is correlated with a roughly eight percentage point reduction in agreement with the claim that Germany is over-foreignized and a five percentage point reduction in agreement with the claim that Jews don't belong in Germany. The estimated effect of job loss is thus more than

half of the estimated effect of a university education, but in the opposite direction. This is especially notable because the estimated effect of university attendance may be biased upward for reasons discussed in Appendix H.

Table 2 presents results regarding the effect of job loss on respondents' attitudes toward National Socialism and Germany's leading radical right party at the time, *Die Republikaner*. The first three columns show that job loss is correlated with an increase in agreement with the claim that National Socialism had its good sides (11-16% of an SD). The result is significant in all three models. The significance is attenuated with a binary coding of the outcome (Appendix G). Columns four, five, and six present the results for attitudes toward *Die Republikaner*. The TWFE and IK models show a significant increase in favorability toward the party, but the results of the CS model are insignificant. Job loss also significantly increases favorability toward the radical left in the IK model but not otherwise (Appendix J). We do not see a change in respondents' vote intentions (Appendix K). Appendix L shows that respondents perceive a decline in their social status following job loss. This provides suggestive evidence regarding the mechanism that might link job loss to changes in exclusionary attitudes.

Table 2: The effect of job loss on radical right attitudes in Germany, 1994-2002

	Dependent variable:					
	National Socialism good sides			Positive attitude *Republikaner*		
	TWFE	CS	IK	TWFE	CS	IK
Lost job	0.037^{**}	0.043^{*}	0.028^{*}	0.018^{+}	0.004	0.024^{*}
	(0.014)	(0.017)	(0.013)	(0.011)	(0.010)	(0.010)
Observations	5431	5393	5431	5277	5238	5277
N Clusters	2372	2363	2372	2368	2357	2368
Note:				$^{+}$p<0.10; *p<0.05; **p<0.01; ***p<0.001		

Though the three panel waves limit what can be inferred about persistence, the effect of job loss appears to persist for a considerable share of respondents: around 67% of respondents who become more supportive of the view that Germany is over-foreignized following job loss

between 1994 and 1998 *remain* more supportive of that view in 2002 than they had been originally (Table G7). There is no evidence that finding a job leads to a significant change in attitudes (Tables G5 and G6).

It is important to consider possible differences in responses to job loss between Germans in the former East Germany and those in the older states of the Federal Republic, though it should be stressed that the division of Germany was not a natural experiment (Becker et al. 2020). Heterogeneous responses to job loss may also reflect unmeasured heterogeneity in the re-employment prospects of workers who lose their jobs in the eastern and western states, rather than deeper cultural differences. Appendix M reports the results of interaction models testing for heterogeneous effects of job loss between workers in the former GDR and those in the FRG. There is limited evidence of East-West differences: the coefficient on the interaction term is significant only for responses to the question about Jews. Appendix N conducts a similar analysis of heterogeneous effects by gender and finds no evidence of differences here. The absence of heterogeneous effects may be driven by limits in the sample size. Job loss does not exert a significant effect on even more extreme attitudes, such as sympathy for attacks on refugee homes (Appendix O). This paper's findings hold when restricting the analysis to respondents under 55, meaning that the results are not driven by coding decisions regarding early retirement (Appendix P).

Do these results generalize beyond the post-reunification period? There are several reasons to question their generalizability. The first is the unusual severity of the recession Germany experienced from 1993 onward (Appendix B), which raised the cost of job loss by reducing workers' re-employment prospects. One might expect these conditions to have triggered especially extreme reactions to job loss. Second, one might expect that individual responses to job loss were shaped by distinctive features of the political environment in the 1990s, including a radical right party (*Die Republikaner*) that advocated for exclusionary policies and engaged in Nazi apologetics. The distinctiveness of the period in this regard should not be overstated, however, since the *AfD* now occupies a similar position in Ger-

many's political space to that formerly held by *Die Republikaner* (Appendix B). Third, one might not expect German workers in the contemporary era to react to job loss in the same way that respondents reacted in the 1990s because of greater distance from the Nazi period. That said, there is at least one important reason why one might expect stronger reactions to job loss in the contemporary era. If the severity of workers' backlash to job loss is inversely related to the generosity of the support provided to them by the state, one might expect a stronger exclusionary backlash to job loss in the era following the Hartz reforms to the German unemployment insurance system, which went into force in 2005 (Appendix Q).

To assess the generalizability of the findings from the post-reunification panel study to the more recent era, I undertake two steps. First, I analyze panel data from the GLES covering the years 2009 and 2013, a period of global recession and the time of the eurozone crisis. The 2009 and 2013 waves of the GLES are the only ones that measure respondents' unemployment spells between waves, which is needed to code the job loss variable as discussed above. TWFE analysis of the GLES 2009-2013 panel (Appendix R) shows that job loss is correlated with an increase of 0.069 in support for immigration restrictions, measured from 0 to 1. This result is significant at the 5% level (p-value 0.044) and amounts to a quarter of an SD in the outcome. That said, this result should be interpreted with caution because of the small size of the panel (540 working-age respondents who participated in both waves). Accordingly, I take a second step to assess the generalizability of the findings of the post-reunification panel by using cross-sectional survey data from the ALLBUS (2008, 2018) and GLES (2009, 2013, 2017, and 2021). In the ALLBUS surveys of 2008 and 2018, respondents are asked whether Germany is over-foreignized, whether Jews belong, and whether National Socialism had its good sides. The GLES asks about support for immigration restrictions and (from 2013) the AfD. The explanatory variable takes a 1 if the respondent is out of work in the form of unemployment or early retirement at the time of the survey and a 0 otherwise. The sample is restricted to working-age respondents. **Table 3** summarizes the results; the details of these analyses can be found in Appendix S.

Table 3: Employment status and exclusionary attitudes in Germany, 2008-2021

	Dependent variable:				
	Over-foreignized	Jews don't belong	Nazism good sides	Anti-immig.	AfD
Out of work	0.074***	0.055***	0.040**	0.048***	0.022*
	(0.016)	(0.014)	(0.014)	(0.008)	(0.010)
Indiv. controls	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Observations	4629	4601	4626	12667	9377
Years (20-)	08,18	08,18	08,18	09,13,17,21	13,17,21
Note:					$^{+}$p<0.10; *p<0.05; **p<0.01; ***p<0.001

These cross-sectional findings are consistent with the results of the post-reunification panel and with the more recent panel evidence from the GLES. Germans who are out of work are more hostile toward immigrants and Jews, more sympathetic toward Nazism, and more supportive of the radical right than are other working-age respondents. It is important to note that respondents who are out of work are also more supportive of the radical left *Die Linke* (Appendix S). As in the post-reunification panel analysis, we do not observe significant heterogeneity by region or gender (Appendix S). The findings of both the panel and cross-sectional analyses suggest that there is no distinctively 'eastern' response to job loss: rather, the relatively high levels of exclusionary sentiment and radical-right support in Germany's eastern states may reflect the greater *incidence* of job loss in these states in recent decades (Appendix T). Other factors are also surely relevant for explaining regional heterogeneity in support for the radical right.

Summary

This short article makes clear that job loss can induce the adoption of exclusionary attitudes, pushing dislocated workers toward political extremism. This is the strongest evidence to date that economic shocks drive attitudinal change on the 'cultural' axis of electoral competition. These findings lend support to the view that cultural conflict in advanced democracies partially reflects asymmetric exposure to labor market dislocation.

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Appendix to "Exclusionary Backlash to Job Loss: Evidence from Germany"

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Appendix A. Re-contact rates and demographic characteristics by wave

The Political Attitudes, Political Participation, and Voter Behavior in Reunified Germany panel began with 5,465 respondents in the 1994 wave. For the 1998 wave, 3,337 new respondents were added to the panel alongside the re-contacted respondents who had participated in the 1994 wave. Overall, the survey's recontact rate was 50.5%, meaning that 50.5% of respondents were recontacted in at least one subsequent wave. This recontact rate compares favorably to other more recent panel studies that have been widely used or cited in political science research. The panel data used in Margalit's (2013) canonical study, for example, began with 3,000 respondents and achieved a recontact rate of 48.9%, meaning that 48.9% of the participants in his original 2007 wave were successfully recontacted in at least one of his subsequent waves (2009, 2010, or 2011). Given that Margalit's waves were much more closely spaced than the waves of the panel studied here (1-2 years apart instead of 4 years apart), the similarity in recontact rates is remarkable: we would expect much lower recontact rates for more widely spaced waves. Another canonical paper on the effects of unemployment on redistributive preferences is Naumann et al. (2016), which uses the Dutch Longitudinal Internet Studies for the Social Sciences (LISS) panel. The LISS panel began with 2,365 respondents and achieved a recontact rate of 50% between its 2008 and 2013 waves (Naumann et al. 2016, 85). Another widely used panel study is the Cooperative Congressional Election Study (CCES) panel, which began in 2010 and continued in 2012 and 2014. The CCES began with 55,172 respondents and achieved a very similar recontact rate of 52.9%. Schaffner and Ansolabehere (2015: 14), the authors of the CCES study, consider this level of attrition to be "relatively low." Scholars like O'Grady (2019) and Kurer (2020) use the Swiss Household Panel (SHP) to study the effect of economic shocks on preferences and voting behavior. The SHP achieves relatively good recontact rates, in part because the survey is run annually. But when examining the SHP's recontact rate over

a four-year period, its rate is only somewhat better than that of the panel study used here. Of the SHP's 7,799 participants in 1999, 5,220 were still participating in 2003 (67%). Of the 6,088 new participants added for the SHP III in 2013, 3,411 were still participating in 2017 (56%) (Voorpostel et al. 2023, 15). Overall, the Political Attitudes in Reunified Germany panel is on par with more recent studies when it comes to sample size and attrition rates. The Political Attitudes panel also compares favorably to more recent panels of the German Longitudinal Election Study (GLES): the GLES panel that began in 2009 only recontacted 23.5% of its original participants in 2013 (GLES 2016), while the GLES panel beginning in 2013 only recontacted 29.9% of its participants in 2017 (own calculations; GLES 2018).

To assess the possibility of differential panel attrition, **Table A1** reports the demographic profile of the original panel participants (those who began in 1994) in each of the three waves. There is little change in the demographic profile across the three waves, indicating that differential attrition is not a major concern. East German respondents were somewhat less likely to drop out of the panel than were their West German counterparts, as indicated by the increase in the share of respondents in the east between 1994 and 1998. The average birth cohort declines in the second and third panel wave because respondents are excluded from the sample at the time they enter retirement age (65 for men and 60 for women). So a male respondent who was 58 in 1994 and who participated in all three waves would be included in the sample for 1994 and 1998 but not for 2002. Respondents became slightly more educated as the panel progressed, though this likely reflects the aging out of older, less educated respondents as well as the acquisition of additional qualifications over the course of the eight-year panel. We observe the average income increase somewhat over time, but we would expect to observe upward movement as a consequence of the fact that income is measured nominally and Germany experienced some inflation between 1994 and 2002.

Table A2 reports the demographic characteristics for all panel participants, including the new participants added in the 1998 top-up. This shows that the new participants added in 1998 were somewhat more likely to be female and considerably more likely to be in the

Table A1: Demographic characteristics (only original participants)

Variable	1994 wave	1998 wave	2002 wave
share female	43.8	43.8	42.6
share in east	51.7	55.8	56.6
mean birth cohort (1-5)	3.04	2.91	2.75
mean education (1-4)	2.12	2.07	2.38
mean income (DM)	3,517	3,856	4,355

west than the original pool of participants. Given that all of the analyses in the paper are within-person panel comparisons, this change in the composition of the panel due to the addition of new respondents is not a threat to inference.

Table A2: Demographic characteristics (including 1998 top-up)

Variable	1994 wave	1998 wave	2002 wave
share female	43.8	47.3	46.9
share in east	51.7	40.7	43.8
mean birth cohort (1-5)	3.04	2.72	2.63
mean education (1-4)	2.12	2.05	2.27
mean income (DM)	3,517	3,855	4,255

The birth cohort categories are as follows: born between 1969 and 1977 (1), born between 1959 and 1968 (2), born between 1949 and 1958 (3), born between 1939 and 1948 (4), and born between 1930 and 1938 (5). Older respondents are excluded from the analysis because they are no longer of working age by 1994. The education categories are as follows: Volks-, Hauptschule mit/ohne Lehre bzw. 8-klassige Schule (1); Mittlere Reife bzw. weiterführende Schule ohne Abitur, bzw. 10-klassige polytechnische Oberschule (2), Abitur, Fachhochschulreife bzw. 12-klassige erweiterte Oberschule (3), and abgeschlossenes Studium am Hoch-, Fachhochschule, Universität, Akademie, Polytechnikum (4). 'East' is measured as place of residence at the time of a respondent's first wave.

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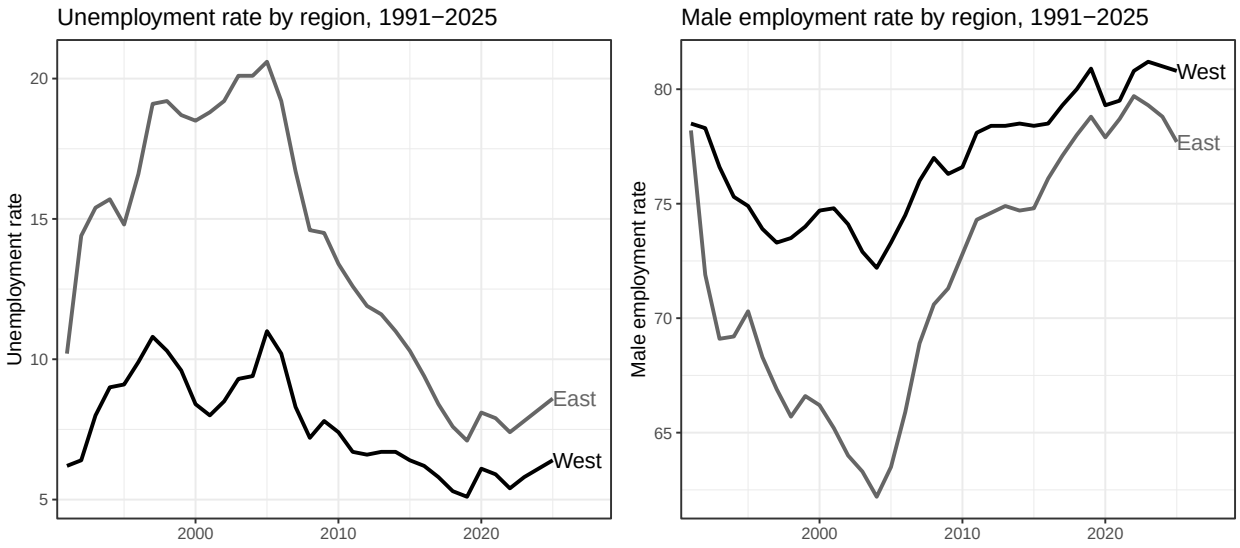
Appendix B. Background on the post-reunification period

B.1 Economic conditions

The period covered by the panel study (1994-2002) was one of severe recession in Germany. The recession is generally understood to have been a consequence of policy responses to the rapid inflation brought about by German reunification. Reunification was followed by a strong positive demand shock for several reasons: first, because of the Kohl government's decision to implement a 1:1 exchange rate between the West German D-Mark and the East German Mark, which was highly favorable to East German consumers; second, because West German wage rates were extended to the former GDR through collective agreements, raising incomes of East German consumers; and third, because West German social benefits were extended to East German citizens, leading to a substantial increase in pensions and other benefits. The first and second of these factors also undermined the competitiveness of East German industry, since firms were saddled with an uncompetitive exchange rate and higher labor costs (Akerlof et al. 1991). The inflationary post-reunification boom was thus combined with a sharp contraction in manufacturing employment in East Germany that placed new fiscal pressures on the German government (Manow and Seils 2001: 287-288). The German central bank, the Bundesbank, responded to rising inflation with monetary tightening that pushed the whole of the German economy into recession by 1993 (Carlin and Soskice 1997: 70). The contraction was deepened by the German government's pro-cyclical fiscal policy, which was in part necessitated by the limits on deficit spending imposed by the 1992 Maastricht Treaty. In the east, the employment losses brought about by the cyclical down-

Figure B1: Unemployment and male employment trends in eastern and western Germany



Source: Statistisches Bundesamt (2025a, 2025b).

turn were compounded by the uncompetitiveness of its firms and the German government's privatization drive. While employment losses were especially severe in the east, there was also a "dramatic decline in employment in the west" (Manow and Seils 2001: 292). Germany was famously proclaimed "the sick man of Europe" by *The Economist* in light of its persistently sluggish economy over the second half of the 1990s (quoted in Dustmann et al. 2014: 167).

The employment effects of the post-reunification recession are captured in **Figure B1** above. The left-hand side reports the unemployment rate in Germany's eastern and western states from 1991 onward. We see a sharp increase in unemployment in both eastern and western Germany from 1992 onward, peaking in the second half of the decade and then declining slightly before rising again in the first half of the 2000s. The increase is clearly more severe in the eastern states, though unemployment in the west was also very high by international standards. As discussed in the main text, unemployment rates are an imperfect guide to labor market dislocation in countries like Germany because of the availability of other pathways out of the labor market, such as early retirement. The right-hand figure

therefore reports the male employment rate in the eastern and western states from 1991 onward. The figure focuses on the male employment rate because east-west differences in female labor force participation are affected by differing cultural norms, especially in the 1990s; differences in the male employment rate better capture differences in labor market conditions. We see the male employment rate decline sharply from the early 1990s and fall more or less continuously until the mid-2000s. The decline in male employment is more severe in the eastern states than in the western states.

B.2 Political environment

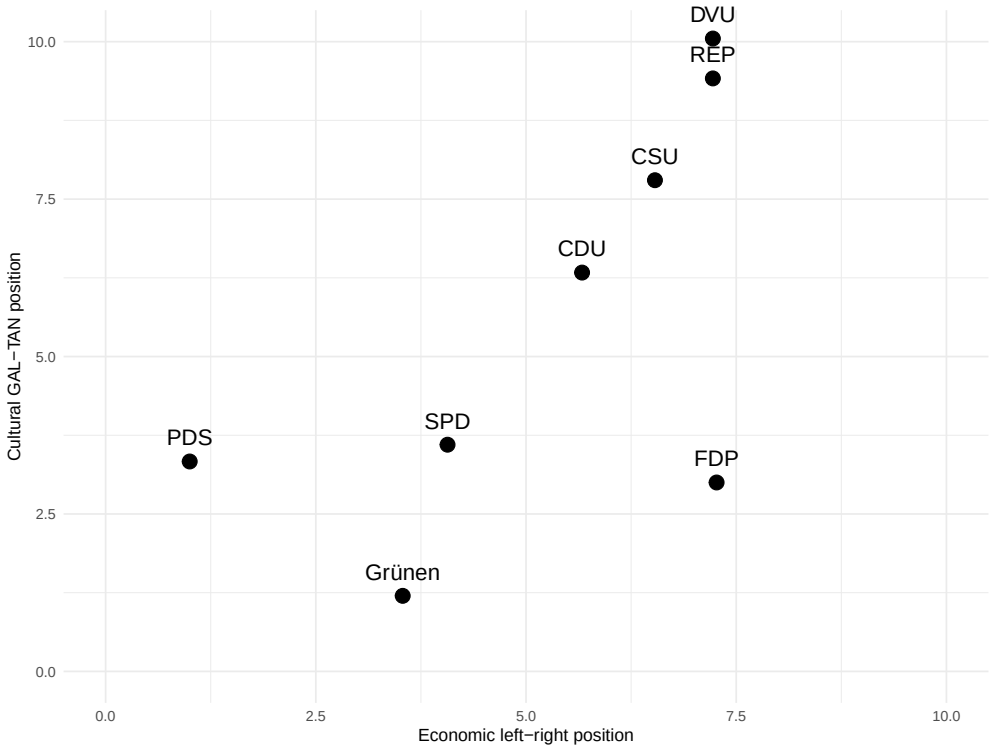
Immigration and multiculturalism were prominent political issues in the 1990s, in part because of the surge in immigration and asylum claims in Germany in 1990 and in the following years (Green 2013; Hess and Green 2016). Throughout the period, the conservative Christian Democratic Union (CDU) adopted a critical stance toward immigration, while the Social Democratic Party (SPD) adopted a more pro-immigration position, as shown by Dancygier and Margalit's (2020) manifesto analysis. Most of Germany's smaller parties – the Free Democratic Party (FDP), the Greens, and the Party of Democratic Socialism (PDS, the successor to the ruling socialist party of the German Democratic Republic) – are typically seen as having been at least as supportive of immigration as the SPD during the 1990s (e.g., Wüst 2016), with the Greens in particular standing on "the liberal vanguard of the immigration debate" (Green 2013: 342). Meanwhile, the CDU's Bavarian sister party, the Christian Social Union (CSU), held an especially hard-line anti-immigration position (Falkenhagen 2013). Concerns about immigration during this period fueled the rise of anti-immigrant radical right parties including the German People's Union (DVU) and especially *Die Republikaner*, which was formed by disgruntled members of the CSU and scored an initial breakthrough in the Berlin state election and European Parliament election of 1989 and achieved some success in state elections in the following years (Saalfeld 1993). *Die Republikaner*'s early leader, Franz Schönhuber, was a former member of the SS and a Nazi apologist (Saalfeld 1993; Karapin 1998). In response to this challenge from the radical right,

the governing CDU/CSU/FDP coalition pushed through a constitutional reform to restrict asylum rights in 1993, a change that was hesitantly supported by the SPD (Schmidtke 2016). In the federal elections of the following years, radical right parties received a collective 2% (1994) and 2.9% (1998) of the national vote, with *Die Republikaner* constituting the largest share of radical-right votes (Lubbers et al. 2002). This was a modest performance for the radical right in comparative perspective, a result that has been attributed variously to the aforementioned restrictive shift in immigration policy by the mainstream parties and to the successful isolation and stigmatization of the radical right (Karapin 1998; Art 2007). Though they refused to cooperate with *Die Republikaner*, the CDU and CSU agitated against immigration and multiculturalism through the 1990s and mobilized against the liberalizing citizenship law of 1999 passed by the SPD/Green coalition (Schmidtke 2016), which had replaced the CDU/CSU/FDP coalition in government following the 1998 election.

Figures B2 and **B3** draw on data from the Chapel Hill Expert Survey (CHES; Rovny et al. 2025) to more systematically map German parties in a two-dimensional electoral space. **Figure B2** reports the positions of all parties receiving at least 1% of the national vote in the 1998 federal elections, based on the first round of the CHES in 1999. The parties are the Christian Democratic Union (CDU), its Bavarian affiliate the Christian Social Union (CSU), the Social Democratic Party of Germany (SPD), the Party of Democratic Socialism (PDS), the Greens (Grünen), *Die Republikaner* (REP), and the German People's Union (DVU), a smaller radical right party (the analysis in the main text focuses on *Die Republikaner* because the panel survey only asks about attitudes toward *Die Republikaner*, not the smaller DVU; the DVU is included in the analysis of radical right voting in Appendix K). As the figure shows, *Die Republikaner* were considerably more extreme on cultural issues than was the CDU and slightly to the right of the CDU on economic issues.

Figure B3 shows the positions of the same parties over the period 1999-2024, drawing on the same CHES data. *Die Republikaner* and the DVU drop out of the CHES after 1999, while Die Linke (the successor to the PDS) and the *Alternative für Deutschland* (AfD)

Figure B2: Positions of German parties, 1999



enter in the 2010 and 2014 CHES rounds, respectively. The key point for our purposes is the similarity of the positions occupied by *Die Republikaner* and the AfD relative to the mainstream parties. The similarity is particularly pronounced after the AfD's pivot toward an (even) more culturally conservative position after 2014.

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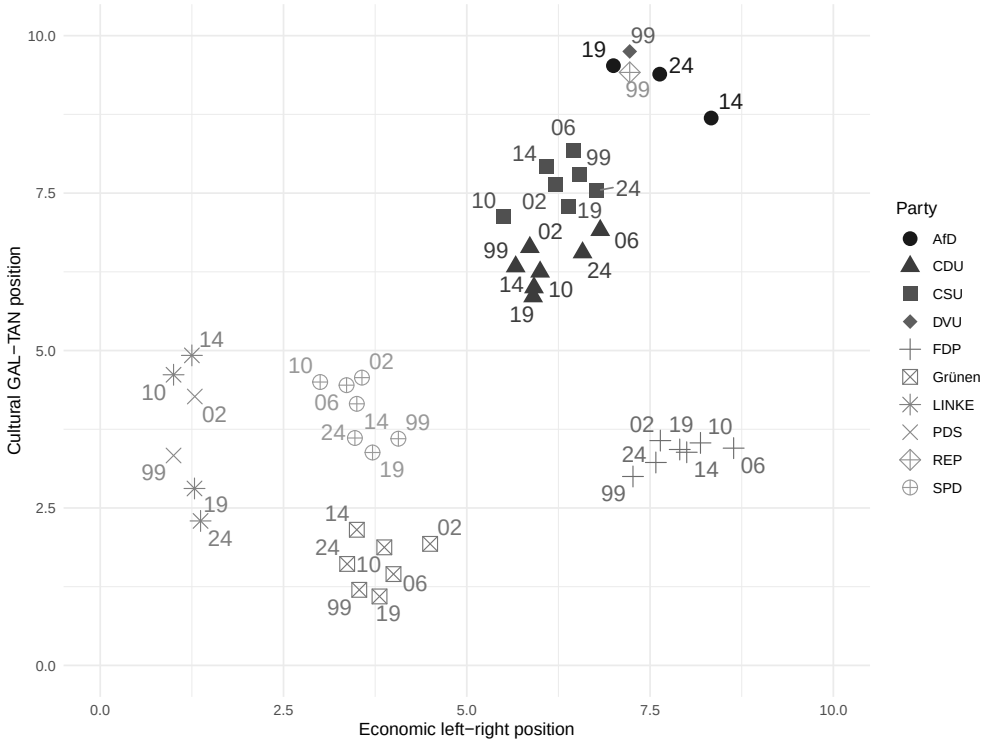
Figure B3: Positions of German parties, 1999-2024



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Appendix C. Descriptive statistics for outcome variables

Table C1: Mean values of outcome variables by wave and region

Variable	1994	1998	2002
Germany over-foreignized (West)	0.420	0.493	0.424
Germany over-foreignized (East)	0.479	0.559	0.511
Jews don't belong (West)	0.234	0.226	0.187
Jews don't belong (East)	0.248	0.266	0.248
National Socialism good sides (West)	0.212	0.207	0.165
National Socialism good sides (East)	0.203	0.202	0.204
Attitude *Republikaner* (West)	0.108	0.111	0.083
Attitude *Republikaner* (East)	0.063	0.112	0.084
Social status (West)	0.663	0.630	0.661
Social status (East)	0.434	0.439	0.454

Table C2: Summary statistics of outcome variables

Statistic	N	Mean	St. Dev.	Min	Max
Germany over-foreignized	5,440	0.489	0.338	0	1
Jews don't belong	5,391	0.230	0.275	0	1
National Socialism good sides	5,431	0.192	0.265	0	1
Attitude *Republikaner*	5,277	0.092	0.191	0	1
Social status	5,236	0.555	0.323	0	1
Would vote radical right	4,835	0.019	0.136	0	1
Attacks understandable	5,428	0.104	0.219	0	1

Appendix D: On social desirability bias in survey responses

The survey questions studied in this short article deal with sensitive topics relating to prejudice and political extremism. It is therefore likely that some respondents were hesitant to report their true attitudes when asked about them on the survey. This is especially relevant because the survey was conducted largely face-to-face, as noted in the main text. Does the possibility of social desirability bias in survey responses pose a significant threat to this article's inferences? Social desirability bias would be a major concern if the goal of this article were to estimate the true *level* of hostility toward foreigners or Jews in the German population. It is likely that the true level of hostility would be under-estimated because of social desirability concerns on the survey. The point of this article, however, is to study a possible determinant of *change* in respondents' survey answers between waves. Given this

objective, social desirability bias is not a major threat. The most intuitive way to conceive of social desirability concerns is as a time-invariant individual-level characteristic. Some respondents are shy about reporting their prejudices to survey researchers, while others are not. This is addressed through the differences-in-differences design, which focuses on whether *within-person* change in survey responses between waves is greater among respondents who lose their jobs than among those whose labor market status remains unchanged. The fact that respondents are heterogeneous in their baseline levels of agreement with the survey questions – partially because of differences in sensitivity to social desirability concerns – is unproblematic, given this design. When it comes to the cross-sectional analysis in the final part of the paper, social desirability issues would only bias the results if respondents who are out of work are systematically less influenced by social desirability concerns in their private survey responses than are other working-age respondents. The fact that survey responses are generally influenced by social desirability concerns is not a source of bias in estimating attitudinal differences between the subgroup of interest and the rest of the sample unless there is reason to believe that the subgroup of interest is more or less influenced by these concerns than the rest of the sample.

Appendix E. Characteristics of respondents experiencing job loss by wave

Table E1: Share of respondents who lost job between waves:

	1994-1998	1998-2002
(1) **lost job**	**13.4%**	**20.9%**
share of (1) who are		
unemp. at survey	23.0%	27.2%
retired early	18.1%	22.5%
in new work/retraining	58.9%	50.3%
share of (1) who are		
in eastern states	72.2%	60.3%
female	43.0%	39.2%
share of (1) who are in		
1969-1977 cohort	8.8%	10.1%
1959-1968 cohort	26.1%	26.5%
1949-1958 cohort	25.1%	28.6%
1939-1948 cohort	28.3%	31.7%
1930-1938 cohort	11.7%	3.2%

Table E2 below estimates the effect of job loss and the various sub-categories thereof on respondents' net (after-tax) household income. In each regression, the control group is respondents whose labor market status does not change between waves. The dependent variable is monthly net household income in DM. Since the survey asks respondents to place themselves in one of twelve income groups, I impute the respondent's income in DM as the midpoint of the income range for the group in which the respondent placed herself. In the sample, the median monthly net household income is DM 3750 and the mean is DM 4017. The results show that job loss is associated with income losses equivalent to more than 10% of median household income. The losses are greater for respondents who are unemployed at the time of the survey and who retire early and are less severe for respondents who have found new work or entered retraining by the time of the subsequent survey wave.

Table E2: The effect of various forms of job loss on respondents' monthly household income

	Dependent variable:			
	Monthly net income (DM)			
	(1)	(2)	(3)	(4)
Lost job	-405.352^{***}			
	(116.354)			
Of which: remained unemployed		-675.732^{**}		
		(223.374)		
Of which: retired early			$-1{,}011.950^{***}$	
			(211.873)	
Of which: entered new work/retraining				-242.279^{+}
				(132.197)
Unit and time FE	Yes	Yes	Yes	Yes
N Clusters	2301	2268	2267	2291
Observations	4,528	4,120	4,074	4,397
R^2	0.005	0.006	0.010	0.002
Note:		$^{+}$p<0.10; *p<0.05; **p<0.01; ***p<0.001		

Appendix F: test for violations of parallel trends

This paper's empirical strategy depends on the assumption that the attitudes of respondents who lost their jobs between t and $t+1$ were not already diverging from the attitudes of other respondents *before* they lost their jobs (i.e., in the period between $t-1$ and t). In other words, it requires an assumption of parallel trends. Although parallel trends can never be conclusively demonstrated, it is possible to test for clear violations of the parallel trends assumption. To do so, I examine whether respondents who lost their jobs between 1998 and 2002 were more likely to change their attitudes between 1994 and 1998 than were respondents whose employment status did not change: were the attitudes of individuals who would eventually lose their jobs already diverging from other individuals in the earlier period? As shown in Table F1 below, we do not observe evidence that this is the case. We cannot reject the null hypothesis that, in the period preceding job loss, the attitudes of respondents who would eventually lose their jobs were moving in parallel to those who would not. The sample is necessarily restricted to respondents who participated in all three panel waves.

Table F1: Job loss between 1998 and 2002 and attitudinal change between 1994 and 1998

	Dependent variable:			
	Germany over-foreignized (change 94-98)	Jews don't belong (change 94-98)	National Socialism good sides (change 94-98)	Attitude *Republikaner* (change 94-98)
	(1)	(2)	(3)	(4)
Lost job between 1998 and 2002	0.048	0.050	−0.0003	0.013
	(0.043)	(0.040)	(0.035)	(0.027)
Observations	605	600	604	586
R^2	0.002	0.003	0.000	0.000
Note:				*p<0.05; **p<0.01; ***p<0.001

Appendix G: Effects of job loss with outcomes coded as binary variables, effects of job loss with a different definition of the control group and with a control for re-employment, and persistence calculations

The analyses reported in **Tables G1-G2** below are the same as those in the main text but with the outcome coded so that the variable takes a 1 if the respondent agrees or strongly agrees with the survey question and a 0 otherwise. For the question about *Die Republikaner,* the binary variable takes a 1 if the respondent reports a favorable attitude and a 0 otherwise.

Table G1: The effect of job loss on exclusionary cultural attitudes in Germany, 1994-2002 (binary outcomes)

	Dependent variable:					
	Germany over-foreignized			Jews don't belong		
	TWFE	CS	IK	TWFE	CS	IK
Lost job	0.067**	0.086**	0.077***	0.027	0.040*	0.016
	(0.025)	(0.031)	(0.023)	(0.017)	(0.019)	(0.016)
Observations	5440	5401	5440	5391	5352	5391
N Clusters	2372	2363	2372	2370	2361	2370
Note:				$^{+}$p<0.10; *p<0.05; **p<0.01; ***p<0.001		

Tables G3-G4 report the results of analyses like those in the main text but with a sample that includes within the control group respondents who enter employment from one wave to the next. In the baseline estimates, the control group is comprised only of respondents whose labor market status does not change, meaning that observations in which the respondent enters employment are excluded. The results in these tables show that the inclusion of these respondents as members of the control group does not affect the results.

Table G2: The effect of job loss on radical right attitudes in Germany, 1994-2002 (binary outcomes)

	Dependent variable:					
	National Socialism good sides			Positive attitude *Republikaner*		
	TWFE	CS	IK	TWFE	CS	IK
Lost job	0.033^{+}	0.047^{**}	0.009	0.008	0.002	0.006
	(0.017)	(0.018)	(0.015)	(0.012)	(0.011)	(0.011)
Observations	5431	5393	5431	5277	5238	5277
N Clusters	2372	2363	2372	2368	2357	2368
Note:				$^{+}$p<0.10; *p<0.05; **p<0.01; ***p<0.001		

Extending this approach, **Tables G5-G6** report the results of analysis in which a variable for "found job" is included alongside the "lost job" variable: in other words, both sorts of labor market transitions are being compared against a control group comprised of respondents whose labor market status does not change between waves. This type of analysis is only possible using the TWFE and IK estimators. The estimates for job loss reported here do not substantially diverge from the baseline estimates. The results in these tables also show that entering employment does not have a significant effect on respondents' attitudes.

Table G3: The effect of job loss on exclusionary cultural attitudes in Germany, 1994-2002 (including job-finders in control group)

	Dependent variable:					
	Germany over-foreignized			Jews don't belong		
	TWFE	CS	IK	TWFE	CS	IK
Lost job	0.041^{**}	0.048^{**}	0.055^{***}	0.038^{**}	0.043^{**}	0.025^{+}
	(0.015)	(0.018)	(0.014)	(0.014)	(0.017)	(0.013)
Observations	5703	5661	5703	5653	5611	5653
N Clusters	2474	2464	2474	2472	2462	2472
Note:				$^{+}$p<0.10; *p<0.05; **p<0.01; ***p<0.001		

Table G7 examines the persistence of attitudinal change following job loss. To compute the shares reported in the table, the denominator consists of respondents who experienced job loss between 1994 and 1998 and who reported a more exclusionary attitude on the item of interest on the 1998 survey than they had in the 1994 survey. The numerator consists of members of this sub-group who *retained* a more exclusionary attitude in 2002

Table G4: The effect of job loss on radical right attitudes in Germany, 1994-2002 (including job-finders in control group)

	Dependent variable:					
	National Socialism good sides			Positive attitude *Republikaner*		
	TWFE	CS	IK	TWFE	CS	IK
Lost job	0.041**	0.047***	0.031*	0.016	0.003	0.022*
	(0.013)	(0.014)	(0.012)	(0.010)	(0.011)	(0.010)
Observations	5696	5655	5696	5536	5495	5536
N Clusters	2474	2464	2474	2470	2458	2470
Note:						$^{+}$p<0.10; *p<0.05; **p<0.01; ***p<0.001

Table G5: The effect of job loss on exclusionary cultural attitudes in Germany, 1994-2002 (including job-finders, controlling for re-employment)

	Dependent variable:			
	Germany over-foreignized		Jews don't belong	
	TWFE	IK	TWFE	IK
Lost job	0.043**	0.057***	0.037**	0.026*
	(0.015)	(0.015)	(0.014)	(0.013)
Found job	−0.033	−0.026	0.017	−0.015
	(0.031)	(0.041)	(0.025)	(0.031)
Observations	5703	5703	5653	5653
N Clusters	2474	2474	2472	2472
Note:				$^{+}$p<0.10; *p<0.05; **p<0.01; ***p<0.001

Table G6: The effect of job loss on radical right attitudes in Germany, 1994-2002 (including job-finders, controlling for re-employment)

	Dependent variable:			
	National Socialism good sides		Positive attitude *Republikaner*	
	TWFE	IK	TWFE	IK
Lost job	0.041**	0.031*	0.015	0.021*
	(0.013)	(0.013)	(0.010)	(0.010)
Found job	0.001	0.008	0.010	0.014
	(0.026)	(0.031)	(0.021)	(0.026)
Observations	5696	5696	5536	5536
N Clusters	2474	2474	2470	2470
Note:				$^{+}$p<0.10; *p<0.05; **p<0.01; ***p<0.001

than they had held in 1994. As the table makes clear, a considerable share of respondents who became more exclusionary following job loss between 1994 and 1998 still espoused these more exclusionary attitudes in 2002. We observe less persistence in supportive attitudes toward the *Republikaner*, possibly reflecting this party's declining support in the electorate after the late 1990s.

Table G7: Persistence of attitudinal shifts following job loss, 1994–2002

	Share still elevated in 2002
Germany over-foreignized	66.7%
Jews don't belong	52.6%
National Socialism good sides	47.1%
Attitude *Republikaner*	31.6%

Among respondents who lost a job and became more supportive on the item, 1994–1998.

Appendix H: The effect of a university degree

I estimate the effect of university attendance on respondents' attitudes by coding a variable that takes a 1 in wave t if the respondent reported that she did not possess a university degree in wave *t-1* but reports that she *does* have a university degree at time *t*. 3.7% of respondents reported that they received a university degree between the 1994 and 1998 waves and 4.4% of respondents reported that they received a degree between the 1998 and 2002 waves. We can estimate the attitudinal effect of a university education under the assumption that the attitudes of university graduates were not already diverging from the attitudes of non-graduates before they attended university (i.e., the parallel trends assumption). Inasmuch as this assumption is violated, we are likely to overestimate the true effect of a university education on respondents' attitudes.

Given that the control group in this analysis is comprised of all working-age respondents who do not receive a university degree between waves, it is likely that the parallel trends assumption is, indeed, violated. Respondents who receive a university degree between waves are likely to be under 30. Compared to other working-age respondents, members of this age group may be trending in a more progressive direction over the course of the panel study

irrespective of university attendance. If true, this would upwardly bias the estimated effect of a university education on respondents' attitudes. This would be an important problem if this paper were primarily interested in estimating the true effect of university attendance. As it stands, the point of the analysis in this appendix is to provide an empirical benchmark to assess the magnitude of the attitudinal effects of job loss. The fact that the results reported below are upwardly biased estimates of the effect of a university education is therefore not a major concern: it simply means that the paper provides a conservative assessment of the magnitude of the effect of job loss relative to the effect of a university education. Reassuringly, the estimates reached here are only mildly larger than Scott's (2022) estimate of the effect of a university education on racial prejudice in Britain. The estimated effect of a university education on agreement with the claim that Germany is over-foreignized is around 23% (TWFE), 23% (CS), or 16% (IK) of a standard deviation in the outcome, while Scott (2022) documents an effect of around 15% of a standard deviation in racial prejudice.

Table H1: The effect of a university degree on exclusionary cultural attitudes, 1994-2002

	Dependent variable:					
	Germany over-foreignized			Jews don't belong		
	TWFE	CS	IK	TWFE	CS	IK
Received degree	-0.077^{***}	-0.079^{**}	-0.053^{*}	-0.046^{*}	-0.051^{*}	-0.049^{**}
	(0.022)	(0.027)	(0.022)	(0.018)	(0.023)	(0.018)
Observations	6305	6305	6305	6253	6253	6253
N Clusters	2719	2719	2719	2717	2717	2717
Note:				$^{+}$p<0.10; *p<0.05; **p<0.01; ***p<0.001		

Table H2: The effect of a university degree on radical right attitudes, 1994-2002

	Dependent variable:					
	National Socialism good sides			Positive attitude *Republikaner*		
	TWFE	CS	IK	TWFE	CS	IK
Received degree	-0.041^{*}	-0.050^{*}	-0.042^{*}	-0.008	-0.017	0.001
	(0.018)	(0.020)	(0.017)	(0.011)	(0.014)	(0.011)
Observations	6300	6300	6300	6118	6118	6118
N Clusters	2719	2719	2719	2714	2714	2714
Note:				$^{+}$p<0.10; *p<0.05; **p<0.01; ***p<0.001		

References in Appendix H:

Scott, Ralph. 2022. "Does university make you more liberal? Estimating the within-individual effects of higher education on political values." *Electoral Studies* (77): 102471.

Appendix J: Effect of job loss on attitudes toward left parties

The following models estimate the effect of job loss on attitudes toward the mainstream left Social Democratic Party of Germany (SPD) and the radical left Party of Democratic Socialism (PDS). Favorability is measured on an 11-point scale rescaled from 0 to 1.

Table J1: The effect of job loss on attitudes toward left parties in Germany, 1994-2002

	Dependent variable:					
	Positive attitude SPD			Positive attitude PDS		
	TWFE	CS	IK	TWFE	CS	IK
Lost job	0.0002	−0.009	−0.015	0.014	0.030^{+}	0.036^{**}
	(0.013)	(0.015)	(0.012)	(0.014)	(0.016)	(0.014)
Observations	5354	5315	5354	5224	5185	5224
N Clusters	2370	2361	2370	2362	2353	2362
Note:			$^{+}$p<0.10; *p<0.05; **p<0.01; ***p<0.001			

Appendix K: vote intentions

The following models estimate the effect of job loss on respondents' reported support for a radical right party in a hypothetical upcoming election. I code the following parties as radical right parties: *Die Republikaner*, the *Deutsche Volksunion*, the *Nationaldemokratische Partei Deutschlands*, and the *Schill-Partei*. The results of all three models show that job loss exerts a negligible and insignificant effect on respondents' propensity to vote for the radical right. Thus, though we saw in the main text that job loss leads to more favorable attitudes toward the radical-right *Republikaner*, this does not manifest in reported vote choice. This could be because the center-right Christian Democrats were seen at the time as sufficiently anti-immigrant that it was not necessary for voters to switch to the radical right to find a party that represented exclusionary cultural attitudes. We see in table K2 below that there is also no significant effect on respondents' propensity to vote for the radical left (the Party of Democratic Socialism).

Table K1: Effect of job loss on vote intention for the radical right

	Dependent variable:		
	would vote for radical right		
	TWFE	CS	IK
Lost job	−0.004	−0.001	0.002
	(0.008)	(0.008)	(0.008)
Observations	4835	4798	4835
N Clusters	2303	2293	2303
Note:	*p<0.05; **p<0.01; ***p<0.001		

Table K2: Effect of job loss on vote intention for the radical left

	Dependent variable:		
	would vote for radical left		
	TWFE	CS	IK
Lost job	−0.014	0.009	−0.015
	(0.017)	(0.019)	(0.016)
Observations	4835	4798	4835
N Clusters	2303	2293	2303
Note:	*p<0.05; **p<0.01; ***p<0.001		

Appendix L: Job loss and social status

The table below reports the effect of job loss on respondents' subjective social status. I construct a measure of status using respondents' answers to two questions that ask them to place themselves on a social scale. The first question asks whether they think of themselves as working class, middle class, or upper class. The second asks whether they see themselves as being in the upper part, the middle, or the lower part of their class. Since very few respondents classify themselves as upper class, I group these responses with those who categorize themselves as upper middle class. This yields a six-level scale that I rescale from 0 to 1, so a movement of approximately .17 indicates one step on the 6-point social scale. The results in Table L1 show that job loss induces a considerable and highly significant decline in subjective social status. The estimates are similar across the three models.

Table L1: Effect of job loss on respondents' subjective social status, 1994-2002

	Dependent variable:		
	subjective social status		
	TWFE	CS	IK
Lost job	-0.062^{***}	-0.085^{***}	-0.066^{***}
	(0.015)	(0.016)	(0.014)
Observations	5236	5198	5236
N clusters	2362	2351	2362
Note:		*p<0.05; **p<0.01; ***p<0.001	

Appendix M: differential effects of job loss by region

The table below reports the results of interaction models that test whether the effect of job loss on respondents' attitudes differs by their place of residence (East or West). TWFE models are used because these allow for the incorporation of an interaction term. Respondents' place of residence is determined by their answer in the first wave of the panel in which they participate. Ideally, one would be able to sort respondents on the basis of their background (whether they grew up in GDR or in the FRG). Unfortunately, this is impossible on the basis of the information included on the survey, so current residence is used instead. The results show that we cannot reject the null hypothesis of an identical response among residents of eastern and western Germany on most of the survey items studied here. The exception is the question about Jews belonging in Germany: here, we see a significant coefficient on the interaction term and a small and insignificant coefficient on the uninteracted job loss term, indicating that antisemitic backlash to job loss is concentrated among residents of the eastern states.

Appendix N: Differential effects of job loss by gender

The table below reports the results of TWFE models that test whether attitudinal responses to job loss differ significantly by respondents' gender. The coefficients on the interaction terms are insignificant in all four models, showing that we cannot reject the null hypothesis that men and women respond to job loss in an identical way.

Table M1: Heterogeneous effects of job loss by region

	Dependent variable:			
	Germany over-foreignized	Jews don't belong	Nazism good sides	Attitude *REP*
	(1)	(2)	(3)	(4)
Lost job	0.048*	−0.004	0.013	0.009
	(0.025)	(0.022)	(0.023)	(0.019)
Lost job*East	0.001	0.069*	0.036	0.013
	(0.030)	(0.028)	(0.028)	(0.022)
Unit and time FE	Yes	Yes	Yes	Yes
Observations	5440	5391	5431	5277
N clusters	2372	2370	2372	2368
R^2	0.003	0.005	0.003	0.001
Note:				*p<0.05; **p<0.01; ***p<0.001

Table N1: Heterogeneous effects of job loss by gender

	Dependent variable:			
	Germany over-foreignized	Jews don't belong	Nazism good sides	Attitude *REP*
	(1)	(2)	(3)	(4)
Lost job	0.053**	0.054**	0.028	0.019
	(0.019)	(0.018)	(0.017)	(0.014)
Lost job*female	−0.008	−0.033	0.023	−0.003
	(0.030)	(0.028)	(0.028)	(0.020)
Unit and time FE	Yes	Yes	Yes	Yes
Observations	5440	5391	5431	5277
N clusters	2372	2370	2372	2368
R^2	0.003	0.003	0.003	0.001
Note:				*p<0.05; **p<0.01; ***p<0.001

Appendix O: Effect of job loss on sympathy for violence against refugees

The table below reports the result of an analysis similar to those reported in the main text, but with an outcome variable that measures respondents' agreement with the statement, "I can well understand the attacks on the housing complexes for asylum seekers." As with the other questions, responses are scaled from 0 to 1. The results are positive (in the TWFE and CS models) but generally insignificant.

Table O1: Effect of job loss on sympathy for violence against refugees

	Dependent variable:		
	Attacks on refugees understandable		
	TWFE	CS	IK
Lost job	0.018	0.026^{+}	−0.0002
	(0.012)	(0.014)	(0.011)
Observations	5428	5389	5428
N Clusters	2372	2363	2372
Note:	$^{+}$p<0.10; *p<0.05; **p<0.01; ***p<0.001		

Appendix P: Effects of job loss on respondents under 55

The analyses below replicate the analyses in the main text with a restricted sample of respondents that only includes those under 55, who were ineligible for early retirement.

Table P1: The effect of job loss on exclusionary cultural attitudes in Germany, 1994-2002, only respondents under 55

	Dependent variable:					
	Germany over-foreignized			Jews don't belong		
	TWFE	CS	IK	TWFE	CS	IK
Lost job	0.052^{**}	0.050^{*}	0.058^{**}	0.036^{*}	0.037^{*}	0.016
	(0.019)	(0.020)	(0.018)	(0.018)	(0.019)	(0.016)
Observations	4364	4335	4364	4324	4295	4324
N Clusters	2058	2053	2058	2053	2048	2053
	$^{+}$p<0.10; *p<0.05; **p<0.01; ***p<0.001					

Table P2: The effect of job loss on radical right attitudes in Germany, 1994-2002, only respondents under 55

	Dependent variable:					
	National Socialism good sides			Positive attitude *Republikaner*		
	TWFE	CS	IK	TWFE	CS	IK
Lost job	0.052**	0.049*	0.040*	0.021	0.014	0.026+
	(0.017)	(0.020)	(0.016)	(0.014)	(0.014)	(0.013)
Observations	4355	4327	4355	4239	4209	4239
N Clusters	2059	2054	2059	2048	2040	2048

+p<0.10; *p<0.05; **p<0.01; ***p<0.001

Appendix Q: The Hartz Reforms in Germany

The Hartz reforms were a series of labor market reforms undertaken by the German government under SPD Chancellor Gerhard Schröder in the early 2000s. The name refers to Peter Hartz, the human resources executive at Volkswagen who chaired the committee recommending the reforms. The reform of the unemployment insurance system (Hartz IV) came into effect in 2005 and considerably reduced the generosity of the support provided to long-term unemployed workers in Germany. Prior to Hartz IV, support for the unemployed was structured in three tiers (Krause and Uhlig 2012; Hochmuth et al. 2021): unemployed workers were eligible to receive unemployment insurance (Arbeitslosengeld) for a period usually limited to one year. This benefit amounted to 60-67% of a worker's prior wage, depending on their family status. After exhausting their eligibility for Arbeitslosengeld, unemployed workers would then begin to receive unemployment assistance (Arbeitslosenhilfe), which amounted to 53-57% of their prior wage and could be received indefinitely depending on a worker's social security contribution history. Workers who were not eligible for Arbeitslosenhilfe because of their inadequate contribution history would receive means-tested social assistance (Sozialhilfe), which was a flat-rate benefit. Hartz IV bundled together the second and third tiers of this model, leaving a two-tier model of normal unemployment insurance (Arbeitslosengeld I) with a similar replacement rate as the old Arbeitslosengeld and a means-tested, flat-rate form of unemployment assistance (Arbeitslosengeld II) with new job search incentives and sanctions attached (Seeleib-Kaiser 2016: 224). This reform en-

tailed a large reduction in the generosity of the support provided to long-term unemployed workers who exhausted their normal unemployment insurance benefits, since the generosity of the post-Hartz Arbeitslosengeld II was much lower than what had been available to long-term unemployed through the Arbeitslosenhilfe system. The exact effect of the reform on the replacement rate of unemployment support depended on a worker's prior income, but Seeleib-Kaiser (2016: 224) reports that for a long-term unemployed worker who had exhausted the normal unemployment benefit and had previously earned the average wage, the replacement rate declined from 53% to 17%. Hartz IV also curtailed a special provision that had existed for older workers that allowed them to receive normal unemployment insurance for longer than their younger counterparts (Hochmuth et al. 2021: 4, 22). Another important change that was not part of the Hartz reforms but which unfolded during the same period was the closing of the pathway to early retirement for unemployed older workers. Previously, this had been available at age 60. A series of reforms gradually raised the age at which this early retirement pathway could be accessed starting in 2007 and eliminated the pathway in 2015 (Riphahn and Schrader 2023: 308).

These reforms are relevant because generous compensation for job loss is often believed to assuage the discontent associated with unemployment and dampen right-wing backlash (e.g., Swank and Betz 2003). Inasmuch as this is the case, we would expect to observe less of an exclusionary backlash to job loss during the period covered by the post-reunification panel (1994-2002) than in the more recent, post-Hartz era. As noted in the main text, however, there are also considerations pointing in the opposite direction (most notably the unusual severity of the recession in the 1990s, which raised the effective cost of job loss). The relative importance of these considerations is ambiguous, so it is not clear whether we should expect exclusionary backlash to job loss to be weaker or stronger in the more recent period than for the post-reunification period.

References in Appendix Q:

Hochmuth, Brigitte, Britta Kohlbrecher, Christian Merkl, and Hermann Gartner. 2021. "Hartz IV and the decline of German unemployment: A macroeconomic evaluation." *Journal of Economic Dynamics and Control* 127: 104114.

Krause, Michael, and Harald Uhlig. 2012. "Transitions in the German labor market: Structure and crisis." *Journal of Monetary Economics* 59(1): 64-79.

Riphahn, Regina, and Rebecca Schrader. 2023. "Reforms of an early retirement pathway in Germany and their labor market effects." *Journal of Pension Economics & Finance* 22(3): 304-330.

Seeleib-Kaiser, Martin. 2016. "The end of the conservative German welfare state model." *Social Policy & Administration* 50(2): 219-240.

Swank, Duane, and Hans-Georg Betz. 2003. "Globalization, the welfare state and right-wing populism in Western Europe." *Socio-Economic Review* 1(2): 215-245.

Appendix R: GLES panel analysis, 2009-2013

In this Appendix, I analyze more recent panel data from the German Longitudinal Election Study (GLES). A key limitation of the GLES panels is that they do not inquire about respondents' unemployment experiences *between* panel waves. One of the main advantages of the post-reunification panel analyzed in the main text is that in the follow-up wave in 1998, all respondents were asked "have you been unemployed since 1994?" In the follow-up wave of 2002, all respondents were asked "have you been unemployed since 1998?" This allows for the coding of the treatment as discussed in the main text, according to which respondents are coded as having experienced job loss between one wave and the next not only if they go from being employed in one wave to unemployed, in early retirement, or in retraining in the next wave, but also if they experience unemployment *between waves* (even if they are employed in both waves). As shown in Appendix E, more than half of all 'treated' respondents are those who experience a spell of unemployment between survey waves but are not unemployed at the time of the second wave. Given that the survey waves are four

years apart, this is unsurprising: most respondents who experience unemployment over a four-year period will not be unemployed at the particular moment in which the follow-up survey is conducted in the fourth year.

None of the GLES panel waves from 2005 onward include this question, preventing the treatment from being coded in the same way. This problem is, however, partially surmountable through the use of another question that is included in some of the GLES survey waves that asks how many months within the past ten years a respondent has been unemployed. Between-wave unemployment spells can be computed by subtracting the number of months reported in the survey wave at time t from the number of months reported in the survey wave at time *t-1*. Unfortunately, the GLES does not consistently use this question on its panel surveys. The GLES panel that starts in 2002 includes the old question (unemployment since 1998) in the 2002 wave but does not ask this question or the question about unemployment in the last ten years in the 2005 wave (Rattinger et al. 2012). The panel that starts in 2005 includes the question about unemployment in the last ten years in its 2009 and 2013 follow-up waves, but not in the original 2005 survey wave, meaning that it is possible to compute whether a respondent experienced a spell of unemployment between 2009 and 2013 but not between 2005 and 2009. This can be seen by comparing the codebooks for the individual waves or by downloading the 'Variablensystematik' excel sheet available on the GESIS web page for the panel starting in 2009 under the 'other documents' tab (Rattinger et al. 2016; link in reference below). In the excel sheet, *arlos* is the old question included in the 1994, 1998, and 2002 waves; *arlo_d* and *arlo99* are the newer question about unemployment in the last 10 years. The GLES panel that starts in 2009 includes this question in its 2009 and 2013 waves, though not in the intervening waves (during which no labor market information is collected) (Rattinger et al. 2016).[1] The respondents from the 2009 and 2013 waves who were recontacted in 2017 were rolled into the GLES panel that started in 2013, which included

[1]The *arlo99* question was posed to respondents who were unemployed at the time of the survey in 2009, whereas the *arlo_d* question was posed to other respondents, but the

the relevant question in 2013 but not in 2017. This can be seen on page 43 of the study description for the 2013-2017 panel (Roßteutscher et al. 2018; link in reference).

Accordingly, a panel analysis of the kind conducted with the post-reunification panel is only possible in the GLES for the period 2009-2013. There were 540 working-age respondents who participated in both waves. This includes 181 respondents who started in 2005 and remained in the panel through 2009 and 2013 and 359 respondents who started in 2009 and remained through 2013. Of participants in the balanced panel between 2009 and 2013, 21.1% are coded as experiencing job loss. The GLES panel does not include the same outcome questions as those in the post-reunification panel. The only relevant question is one that asks whether "immigration conditions for foreigners should be [eased/restricted]." This is measured on an 11-point scale, which I rescale from 0 to 1 with 1 indicating the most restrictive attitude. The mean response is 0.57 with a standard deviation of 0.28.

Given the fact that the usable panel consists of only two waves, I use a standard TWFE estimator. The Callaway and Sant'Anna and Imai and Kim estimators used in addition to the TWFE in the main text are relevant for panel data with more than two periods, when 'forbidden comparison' problems can arise within the TWFE framework. I use a TWFE model to estimate whether job loss correlates with increased support for immigration restrictions between 2009 and 2013. As in the main text, standard errors are clustered by respondent. The result, reported in **Table R1** below, shows that job loss is correlated with a considerable increase in support for immigration restrictions. The estimated effect amounts to a quarter of a standard deviation, which is somewhat larger than the estimated effects of job loss in the post-reunification panel. Given the small sample size, this result should be interpreted with some caution. But the finding is consistent with the evidence from the post-reunification panel and the cross-sectional analyses.

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question is the same, as is clear from the code book. In the 2013 wave this is combined into the variable *jarlo99*.

References in Appendix R:

Rattinger, Hans, Sigrid Roßteutscher, Rüdiger Schmitt-Beck, Bernhard Weßels, Jürgen Falter, and Oscar Gabriel. "Long-term Panel 2002-2005-2009 (GLES 2009)." GESIS Data archive study ZA5320. https://doi.org/10.4232/1.11350

Rattinger, Hans, Sigrid Roßteutscher, Rüdiger Schmitt-Beck, Bernhard Weßels, Steffen Kühnel, Oskar Niedermayer, and Bettina Westle. 2016. Long-term Panel 2005-2009-2013 (GLES). GESIS Data Archive study ZA5321. https://doi.org/10.4232/1.12626

Rattinger, Hans, Sigrid Roßteutscher, Rüdiger Schmitt-Beck, Bernhard Weßels, and Christof Wolf. 2016. Long-term panel 2009-2013-2017 (GLES 2013). GESIS Data Archive study ZA5322. https://doi.org/10.4232/1.12627

Roßteutscher, Sigrid, Rüdiger Schmitt-Beck, Harald Schoen, Bernhard Weßels, and Christof Wolf. Long-term Panel 2013-2017 (GLES). GESIS Data Archive study ZA5770. https://doi.org/10.4232/1.13018

Table R1: Job loss and support for immigration restrictions in Germany, 2009-2013

	Dependent variable:
	Restrict immigration
Lost job	0.069*
	(0.034)
Unit and time FE	Yes
Observations	1080
N Clusters	540
Note:	*p<0.05; **p<0.01; ***p<0.001

Appendix S: Analyses of ALLBUS and GLES data

The analyses below use cross-sectional survey data from the ALLBUS and GLES to study the relationship between employment status and political attitudes. The sample includes working-age respondents who are German citizens by birth. The explanatory variable of interest is an indicator that takes a 1 if the respondent is either unemployed or in early

retirement and a 0 otherwise (see discussion of early retirement in the main text). In the GLES analysis, workers in retraining are included in this group as well in order to maintain consistency with the panel analysis. The ALLBUS does not separately identify respondents in retraining. In both analyses I exclude the small number of workers on short-time work subsidized through the unemployment insurance system (*Kurzarbeit*), since workers in this position are in an ambiguous temporary middle ground between employment and unemployment. I use a set of control variables that can be standardized across the ALLBUS and GLES: gender (female = 1), region (east = 1), age category (1-5), education (university degree = 1), and marital status (married = 1). The 2008 and 2018 rounds of the ALLBUS ask the same questions as those that appear in the panel study discussed in the main text (whether respondents agree that Germany is over-foreignized, that Jews don't belong in Germany, and that National Socialism also had its good sides). Responses are scaled from 0 to 1 with 1 indicating strong agreement. On the GLES, I first analyze respondents' answers to a question about whether opportunities for immigration should be made easier or limited. Responses are measured on an 11-point scale that I rescale from 0 to 1 with 1 indicating strong support for immigration restrictions. I then study respondents' attitudes toward the *Alternative für Deutschland* (AfD) and the far left party *Die Linke*, using an 11-point scale of approval like the one used to measure attitudes toward *Die Republikaner* in the panel study analyzed in the main text. **Tables S1** and **S2** present summary statistics for the ALLBUS and GLES data.

Table S3 below reports the full regression results for the ALLBUS analysis summarized in columns 1-3 of Table 3 of the main text. **Table S4** reports the results of an analysis in which employment status is interacted with region. The interaction terms are all insignificant. **Table S5** reports the results of an analysis in which employment status is interacted with gender. The interactions are insignificant with the exception of the question about Germany being over-foreignized, where we see a positive interaction term, indicating that

Table S1: ALLBUS summary statistics, 2008 and 2018

Statistic	N	Mean	St. Dev.	Min	Max
Female	4,758	0.496	0.500	0	1
East	4,758	0.313	0.464	0	1
Age category (1-5)	4,742	3.379	1.311	1	5
University	4,690	0.165	0.371	0	1
Married	4,745	0.557	0.497	0	1
Out of work	4,756	0.116	0.321	0	1
Over-foreignized	4,719	0.471	0.351	0	1
Jews don't belong	4,689	0.184	0.260	0	1
Nazism good sides	4,716	0.179	0.270	0	1

Table S2: GLES summary statistics, 2009–2021

Statistic	N	Mean	St. Dev.	Min	Max
Female	14,040	0.496	0.500	0	1
East	14,100	0.340	0.474	0	1
Age category (1-5)	13,153	3.412	1.339	1	5
University	13,996	0.182	0.386	0	1
Married	13,970	0.525	0.499	0	1
Out of work	13,966	0.149	0.356	0	1
Restrict immig.	13,798	0.570	0.281	0	1
Favorable AfD	10,243	0.187	0.281	0	1
Favorable Die Linke	13,701	0.405	0.293	0	1

the relationship between being out of work and believing that Germany is over-foreignized is stronger among women.

Table S3: ALLBUS baseline results with full controls

	Germany over-foreignized	Jews don't belong	Nazism good sides
Out of work	0.074***	0.055***	0.040**
	(0.016)	(0.014)	(0.014)
Female	0.001	-0.026***	-0.010
	(0.010)	(0.007)	(0.008)
Age cat.	0.012**	0.013***	-0.016***
	(0.004)	(0.003)	(0.003)
University	-0.250***	-0.130***	-0.128***
	(0.012)	(0.008)	(0.008)
Married	-0.006	0.019*	0.011
	(0.011)	(0.008)	(0.009)
East	0.085***	0.033***	0.047***
	(0.011)	(0.008)	(0.009)
Constant	0.445***	0.167***	0.237***
	(0.016)	(0.012)	(0.013)
Year fixed effects	Yes	Yes	Yes
Observations	4,629	4,601	4,626
R^2	0.099	0.066	0.048
Note:			*p<0.05; **p<0.01; ***p<0.001

Table S4: ALLBUS analysis with region interaction

	Germany over-foreignized	Jews don't belong	Nazism good sides
Out of work	0.078***	0.050**	0.036*
	(0.022)	(0.019)	(0.018)
East	0.086***	0.031***	0.046***
	(0.012)	(0.009)	(0.009)
Female	0.001	-0.026***	-0.010
	(0.010)	(0.007)	(0.008)
Age cat.	0.012**	0.013***	-0.016***
	(0.004)	(0.003)	(0.003)
University	-0.250***	-0.130***	-0.128***
	(0.012)	(0.008)	(0.008)
Married	-0.006	0.019*	0.010
	(0.011)	(0.008)	(0.009)
Out of work*East	-0.008	0.011	0.007
	(0.032)	(0.027)	(0.027)
Constant	0.445***	0.168***	0.238***
	(0.016)	(0.012)	(0.013)
Year fixed effects	Yes	Yes	Yes
Observations	4,629	4,601	4,626
R^2	0.099	0.066	0.048
Note:			*p<0.05; **p<0.01; ***p<0.001

Moving to the GLES, **Table S6** below reports the full regression table for the results summarized in columns 4 and 5 of Table 3 in the main text. **Table S7** reports the results of an analysis in which employment status is interacted with region. The interaction terms are all insignificant. **Table S8** reports the results of analysis in which employment status is

Table S5: ALLBUS analysis with gender interaction

	Germany over-foreignized	Jews don't belong	Nazism good sides
Out of work	0.038	0.036*	0.031
	(0.023)	(0.018)	(0.019)
Female	-0.008	-0.030***	-0.012
	(0.010)	(0.008)	(0.008)
Age cat.	0.012**	0.013***	-0.016***
	(0.004)	(0.003)	(0.003)
University	-0.249***	-0.130***	-0.127***
	(0.012)	(0.008)	(0.008)
Married	-0.006	0.019*	0.011
	(0.011)	(0.008)	(0.009)
East	0.084***	0.033***	0.047***
	(0.011)	(0.008)	(0.009)
Out of work*Female	0.074*	0.039	0.017
	(0.031)	(0.027)	(0.027)
Constant	0.450***	0.170***	0.238***
	(0.016)	(0.012)	(0.013)
Year fixed effects	Yes	Yes	Yes
Observations	4,629	4,601	4,626
R^2	0.100	0.067	0.048
Note:			*p<0.05; **p<0.01; ***p<0.001

interacted with gender: the interaction terms are generally insignificant, with the exception of the significant negative interaction term on support for *Die Linke*, which suggests that the relationship between being out of work and supporting *Die Linke* is stronger among men.

Table S6: GLES baseline results with full controls

	Anti-immigration	Positive attitude AfD	Positive Attitude *Die Linke*
Out of work	0.048***	0.022*	0.040***
	(0.008)	(0.010)	(0.008)
Female	-0.010*	-0.047***	0.027***
	(0.005)	(0.006)	(0.005)
Age cat.	0.025***	-0.004	-0.017***
	(0.002)	(0.002)	(0.002)
University	-0.142***	-0.088***	0.023***
	(0.006)	(0.006)	(0.006)
Married	0.011*	-0.011	-0.038***
	(0.005)	(0.006)	(0.006)
East	0.062***	0.086***	0.105***
	(0.005)	(0.006)	(0.005)
Constant	0.554***	0.335***	0.402***
	(0.008)	(0.011)	(0.009)
Year fixed effects	Yes	Yes	Yes
Observations	12,667	9,377	12,609
R^2	0.117	0.093	0.066
Note:			*p<0.05; **p<0.01; ***p<0.001

Table S7: GLES analysis with region interaction

	Anti-immigration	Positive attitude AfD	Positive Attitude *Die Linke*
Out of work	0.039***	0.016	0.032**
	(0.010)	(0.012)	(0.010)
East	0.058***	0.085***	0.103***
	(0.005)	(0.007)	(0.006)
Female	-0.011*	-0.047***	0.027***
	(0.005)	(0.006)	(0.005)
Age cat.	0.025***	-0.004	-0.017***
	(0.002)	(0.002)	(0.002)
University	-0.142***	-0.088***	0.023***
	(0.006)	(0.006)	(0.006)
Married	0.011*	-0.011	-0.038***
	(0.005)	(0.006)	(0.006)
Out of work*East	0.021	0.015	0.018
	(0.014)	(0.021)	(0.016)
Constant	0.555***	0.335***	0.403***
	(0.008)	(0.011)	(0.009)
Year fixed effects	Yes	Yes	Yes
Observations	12,667	9,377	12,609
R^2	0.117	0.093	0.066
Note:			*p<0.05; **p<0.01; ***p<0.001

Table S8: GLES analysis with gender interaction

	Anti-immigration	Positive attitude AfD	Positive Attitude *Die Linke*
Out of work	0.041***	0.017	0.058***
	(0.010)	(0.014)	(0.011)
Female	-0.012*	-0.048***	0.032***
	(0.005)	(0.006)	(0.005)
Age cat.	0.025***	-0.004	-0.017***
	(0.002)	(0.002)	(0.002)
University	-0.142***	-0.088***	0.023***
	(0.006)	(0.006)	(0.006)
Married	0.011*	-0.011	-0.038***
	(0.005)	(0.006)	(0.006)
East	0.061***	0.086***	0.106***
	(0.005)	(0.006)	(0.005)
Out of work*Female	0.015	0.011	-0.037*
	(0.014)	(0.019)	(0.015)
Constant	0.555***	0.336***	0.399***
	(0.008)	(0.011)	(0.009)
Year fixed effects	Yes	Yes	Yes
Observations	12,667	9,377	12,609
R^2	0.117	0.093	0.066
Note:			*p<0.05; **p<0.01; ***p<0.001

Appendix T: Explaining contemporary East-West differences

As discussed above and in the main text, this paper finds that there is little difference in individual-level responses to job loss between Germans in the country's eastern and western states. Why, then, are there higher levels of exclusionary sentiment and support for the AfD in eastern Germany today? As is clear from the ALLBUS and GLES data reported in **Tables T1** and **T2** below, respondents in eastern Germany are more likely to hold exclusionary attitudes and to support the AfD than are their counterparts in western Germany.

Table T1: Mean values of ALLBUS outcomes by year and region

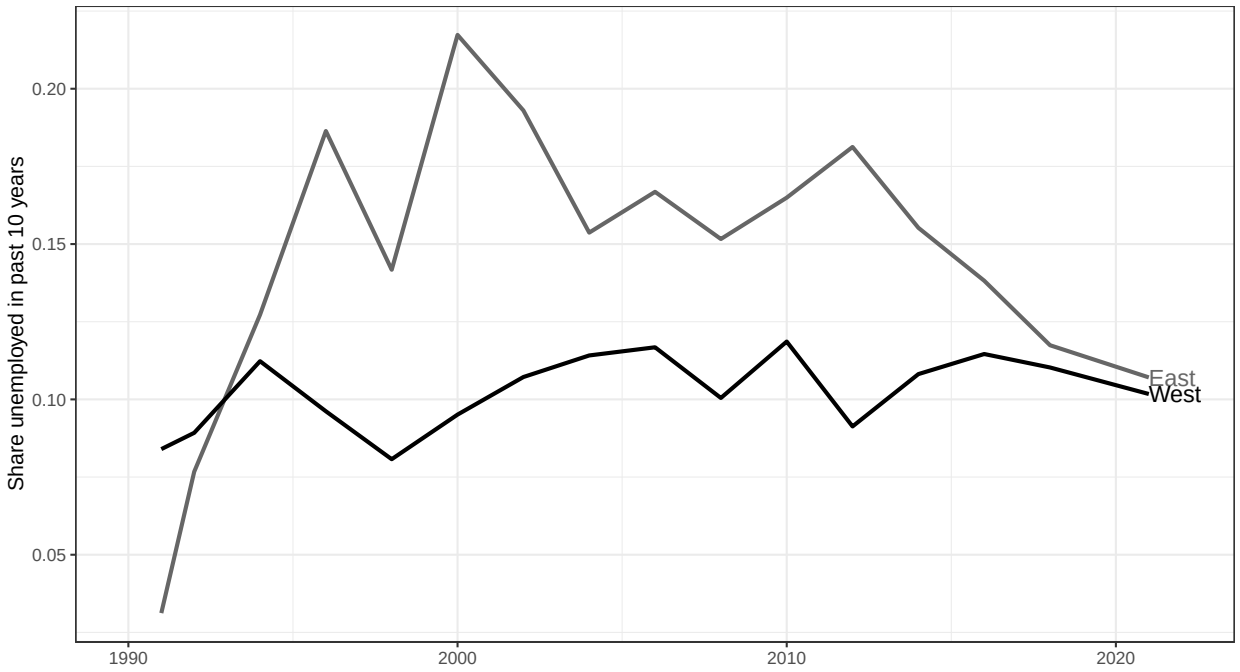
Variable	**2008**	**2018**
Germany over-foreignized (West)	0.453	0.425
Germany over-foreignized (East)	0.557	0.527
Jews don't belong (West)	0.197	0.143
Jews don't belong (East)	0.235	0.192
National Socialism good sides (West)	0.172	0.152
National Socialism good sides (East)	0.226	0.205

Table T2: Mean values of GLES outcomes by year and region

Variable	**2009**	**2013**	**2017**	**2021**
Restrict immigration (West)	0.632	0.576	0.519	0.501
Restrict immigration (East)	0.704	0.650	0.623	0.559
Attitude AfD (West)	-	0.297	0.156	0.114
Attitude AfD (East)	-	0.361	0.247	0.215

Given this paper's findings, a plausible explanation for this pattern is that there has been a higher *incidence* of job loss in Germany's eastern states in recent decades. This would lead to higher levels of exclusionary sentiment and support for the AfD in the eastern states even if eastern and western Germans responded similarly to the experience of job loss at the individual level.

Figure T1: Share of ALLBUS respondents who report having been unemployed in past 10 years by region, 1991-2021



The claim that there has been a higher incidence of job loss in Germany's eastern states is consistent with the data presented in **Figure B1** in Appendix B above, which showed that eastern Germany has had a higher unemployment rate and a lower male employment rate than western Germany since reunification. This indicates considerably higher rates of labor market dislocation in the eastern states than in the western states. Given what this paper has found about attitudinal responses to job loss, we should expect higher support for exclusionary attitudes and far-right parties in the eastern states than in the western states even if individual-level responses to job loss were similar. Further evidence on regional differences in exposure to labor market dislocation can be gleaned from the ALLBUS, which since 1991 has asked respondents whether they have been unemployed within the last ten years. **Figure T1** reports the share of respondents who report having been unemployed within the last ten years by region for each survey round since 1991. In each biennial sample,

we see that a much higher share of respondents in Germany's eastern states report having been unemployed within the last ten years. The regional gap shrinks in the 2010s, which is consistent with the figures on unemployment and employment reported in Appendix B above. Overall, these findings are consistent with the conjecture that higher levels of exclusionary sentiment and far-right support in eastern Germany may be driven in part by higher average exposure to labor market shocks in this region in recent decades (rather than reflecting a distinctively 'eastern' reaction to labor market shocks). As noted in the main text, other factors are surely also relevant for explaining the east-west gap in exclusionary sentiment and far-right support.