Chapter 14

The Impact of Labour Market Vulnerability: Explaining Attitudes toward Immigration in Europe

Anthony Kevins, Loughborough University

Published in *Comparative Public Opinion*,
Cameron D. Anderson and Mathieu Turgeon (eds.), *Routledge.*

Abstract: This chapter investigates to what extent, and under what conditions, labour market vulnerability may be an important factor shaping attitudes toward immigration. It begins by highlighting why labour market vulnerability might affect anti-immigrant sentiment, and why vulnerable workers might be especially sensitive to the size of the immigrant population. After reviewing various approaches to conceptualizing and assessing vulnerability, the remainder of the chapter uses European Social Survey data to examine the relationship between different measures of labour market vulnerability and anti-immigrant sentiment – both directly and in interaction with education and immigration levels. Two major findings emerge from the analysis. First, the type of labour market risk that we focus on makes a difference: overall vulnerability, as well as exposure to unemployment and temporary employment, are associated with greater anti-immigrant sentiment; while exposure to part-time employment, by contrast, has no clear effect. Second, the extent to which vulnerability matters appears to vary based on education levels and the size of the immigrant population: specifically, results suggest that labour market vulnerability has a larger impact on individuals with lower levels of education who live in countries with larger foreign-born populations.

From debates about the shifting political allegiances of blue-collar "rust belt" voters in the United States to discussions of the role "left behind" voters may have played in Brexit, economic vulnerability has been attracting a lot of attention. Behind many of these arguments is the claim that labour market vulnerability – i.e., being more at risk of part-time employment, temporary employment, and/or unemployment – may push native-born workers to become more critical of immigrants and immigration. But to what extent does vulnerability actually shape anti-immigrant stances, and does its effect depend on other key factors, like education (see Chapter 7) and the size of the immigrant population (see Chapter 13)? This chapter explores these questions by building on a body of literature that suggests studying labour market vulnerability can help us to better understand politics and public opinion (see Schwander 2019).

The chapter begins by highlighting the spread of precarious employment across the Global North over the last few decades, tracing the growing divide between labour market "insiders" – who benefit from more robust employment protections and access to more generous social programmes – and "outsiders" – who do not. As I explain below, there are strong reasons to believe that this division will matter, above and beyond the standard measures of wellbeing and employment status (such as income, education levels, and employment contract type). I then go on to outline some of the psychological and sociological reasons that may lead labour market vulnerability to shape anti-immigrant sentiment; and, based on these considerations, I lay out the argument that vulnerable workers may be especially sensitive to the size of the immigrant population. The chapter then provides an overview of some of the myriad ways that researchers have conceptualized and measured labour market vulnerability, ranging from "snapshot" approaches – examining an individual's employment status at a given moment – to ones that take a much longer time horizon – incorporating past experiences on the labour market, or even the likelihood of future employment status changes.

The final sections of the chapter then build on these discussions using original empirical analysis – highlighting under what conditions, and to what extent, different types of labour market vulnerability can help us to understand how Europeans think about immigration. To do so, it uses data from approximately 12 000 responses to the 2014 wave of the European Social Survey, including respondents from eighteen countries across Europe (ESS 2014). I then analyze these data by adapting and breaking down an established measure of vulnerability (Schwander and Häusermann 2013): measuring exposure to unemployment, fixed-term employment, and part-time

employment with the help of data from the European Union Statistics on Income and Living Conditions (Eurostat 2018). The results presented then range from basic bivariate analyses to full multi-level models that take into account an array of individual- and country-level factors.

The findings from this investigation suggest two major takeaways. First, the type of labour market risk that we focus on makes a difference: overall vulnerability, as well as exposure to unemployment and temporary employment, are associated with greater anti-immigrant sentiment; while exposure to part-time employment, by contrast, has no clear effect. Second, the extent to which vulnerability matters depends on education levels and the size of the immigrant population: specifically, labour market vulnerability has a greater expected impact on individuals with lower levels of education who live in countries with larger foreign-born populations.

Labour Market Vulnerability

Why focus on labour market vulnerability? Researchers since at least the 1970s have been pointing to the spread of labour market precarity (e.g. Berger and Piore 1980; Doeringer and Piore 1971), as countries have moved away from the post-war "male-breadwinner" model and toward more "flexible" approaches with weaker protections for workers (see, for example, Weisstanner 2021). Much of this work has centred around a process labelled labour market "dualization", which is marked by a growing divide between *insiders* – who benefit from strong labour market positions and substantial employment protections – and *outsiders* – who do not (e.g. Emmenegger et al. 2012; Kevins 2015; Piore 1980). This shift from "standard" to "atypical" employment has, if anything, increased in recent years: the growth of part-time and fixed-term work has occurred alongside the rise of the so-called "gig autonomy", with more and more workers pushed outside of the standard employment relationship – and thereby deprived of a wide array of rights and protections (e.g., Crouch 2019).

Further complicating the situation, the dualization of labour markets has also coincided with a dualization of welfare states (e.g., Kevins 2017). There are (at least) two mechanisms driving this effect. First, since access to a range of social programmes depends on employment trajectories, a growing number of labour market outsiders have found themselves excluded from the more generous set of "insurance-based" welfare benefits (see Haüsermann and Schwander 2012). Second, governments have by and large failed to compensate for this trend: instead of increasing benefit coverage in order to benefit the growing class of outsiders, they have typically

opted to insulate insiders from retrenchment (e.g. Rueda 2007). The result is a compounding of economic vulnerability: vulnerable workers are not only more likely to be pushed into repeated stints of unemployment (e.g., Ojala, Nätti, and Lipiäinen 2018), they are also less likely to have access to generous benefits – if any at all – when they are unemployed (e.g., Rueda 2014). Indeed, research suggests that deregulated and highly dualized labour markets tend to have lower levels of welfare state redistribution more broadly (see, for example, Fernández-Albertos and Manzano 2016).

The core argument in this area of the literature, then, is that it is not just the classic measures of deprivation, such as income and wealth, that matter: we should be paying attention to labour market risks as well. At the same time, "labour market vulnerability" is not simply another way of referring to education or skill-levels either – a disconnect that is especially clear in Southern Europe, where older low-skilled workers are often better protected than younger high-skilled ones (see, for example, Häusermann, Kurer, and Schwander 2015). As a consequence, there are good reasons to believe that labour market vulnerability *per se* is an important subject of study.

Building from these arguments, the remainder of this section discusses why, and under what conditions, labour market vulnerability might be expected to impact anti-immigrant sentiment, before turning to consider how best to conceptualize and measure this phenomenon.

The Impact of Labour Market Vulnerability

Research on labour market vulnerability has highlighted a wide range of potential negative consequences, including greater political alienation, an increased likelihood of voting for anti-system parties, and lower levels of generalized trust (e.g. Emmenegger, Marx, and Schraff 2015; Kevins 2019). Based on the same logic, whereby labour market experiences generate knock-on attitudinal and behavioural effects, it seems probable that opinions on immigration will also be affected. In this section, I lay out common arguments as to why, and under what conditions, this is likely to be the case.

The basic starting point here is that perceptions of economic threat can shape attitudes toward immigrants and immigration (e.g., Heizmann and Huth 2021; and as discussed in Chapters 6, 7, and 13, for example). Regardless of whether immigrants actually have any meaningful impact on the lives of native-born workers, more vulnerable individuals are disproportionately likely to worry about the consequences of immigration (e.g. Dancygier and Donnelly 2012): in a pattern

reflecting discourses around immigrants not only "stealing" jobs but also "using up" welfare benefits (Taylor-Gooby et al. 2019), workers with lower skill levels tend to be more concerned about the impact immigrants will have on their economic well-being and their access to the welfare state (Gerber et al. 2017); and labour market vulnerability has been associated with more critical beliefs about the economic consequences of immigration more broadly (see Kevins and Lightman 2020). Similarly, past work suggests that individuals who feel that "people like them" are worse off than immigrants are more likely, all else being equal, to believe that immigration poses an ethnic threat as well (Meuleman et al. 2020)1.

It therefore seems likely that the economically vulnerable may express the harshest reactions to immigration. Vulnerable native-born workers are likely to at least perceive, if not actually experience, labour market competition with immigrants – partly because immigrants tend to be de-skilled upon arrival in their new country, pushing them into less attractive segments of the labour market (e.g., Lightman and Good Gingrich 2018). Increased local labour competition with immigrants has, for example, been tied to anti-immigrant sentiment as well as support for anti-immigrant radical parties (Bolet 2020; Malhotra, Margalit, and Mo 2013); but research has come to mixed findings on the relationship between vulnerability and immigration policy preferences more broadly (c.f. Pardos-Prado 2020). Further complicating matters, citizens tend to be remarkably bad at estimating the proportion of immigrants in their country, with perceived sizes far outstripping actual ones (e.g., Duffy 2014). As a consequence, it is unclear whether (objective) immigration population sizes matter for anti-immigrant sentiment – with existing studies coming to mixed conclusions (c.f. Gorodzeisky and Semyonov 2020; Young, Loebach, and Korinek 2018; and Chapter 13 in this volume).

Despite the many valuable insights generated by past research, however, it is important to note that only a fraction of this work looks specifically at labour market vulnerability: many of the findings are instead centred around proxies for risk exposure, such as low education and skill levels (Paas and Halapuu 2012) or less transferable skill sets (Pardos-Prado and Xena 2019). To address my research questions head on, the second half of this chapter will therefore directly examine the interplay between labour market vulnerability, a more traditional positional measure (namely,

1 The relative impact of economic considerations (e.g., perceived self-interest) versus symbolic ones (e.g., perceived ethnic threat) on anti-immigrant sentiment has been subject to considerable debate (see, for example, Hainmueller and Hopkins 2014). These phenomena are generally difficult to disentangle, however, and very likely to be deeply interconnected (see Baute and Meuleman 2020).

education), and the size of a country's immigrant population. Yet before we can do so, we must first consider how, exactly, to measure labour market vulnerability.

Assessing Labour Market Vulnerability

So far, we have seen that there are good reasons to believe that labour market vulnerability, above and beyond the standard markers of wellbeing and employment status, may shape anti-immigrant sentiment. But labour market vulnerability does suffer from one major shortcoming relative to measures such as income and education: it is much harder to agree on what, in practice, it actually looks like (see Busemeyer and Kemmerling 2020).

The classical approach to assessing labour market vulnerability, most commonly used in earlier political science research on the topic (e.g. Rueda 2005, 2007), was a binary one. These studies start from the position that vulnerable workers are either unemployed or on fixed-term or part-time contracts, whereas non-vulnerable workers benefit from permanent full-time contracts. From there, it is easy to construct a simple dichotomous measure of vulnerability: with basic survey data, protected "insiders" – those with standard employment contracts – can readily be distinguished from unprotected "outsiders" – those with atypical contracts, or those currently lacking employment altogether.

This approach generated interesting findings, and also had the benefit of being straightforward – but it was quickly criticized for being overly simplistic (e.g., Marx and Picot 2013). At least in certain countries, it seems clear that many workers are neither insiders nor outsiders, but somewhere in between (e.g., Jessoula, Graziano, and Madama 2010). Further complicating matters, in modern, fluid labour markets, it is not uncommon for workers to shift from one type of contract to another – with or without stints of unemployment in between (see, for example, Ojala, Nätti, and Lipiäinen 2018). This observation has important implications for research on how labour market vulnerability might shape attitudes: just noting down a person's employment status at a given moment will hide a lot of variation in life trajectories (see Schwander and Häusermann 2013). It seems probable, for example, that a newly minted "insider" who had spent decades in atypical employment will differ in crucial ways from an "insider" who had spent decades in standard employment; similarly, a long-standing "insider" who has been temporarily laid off (and is thus now labeled an "outsider") should probably be distinguished from a worker whose fixed-term contract just ended.

The best approach to addressing this issue is thus to explicitly account for workers' employment histories. This is most commonly done using panel survey data, which provides data for the same set of respondents over a long period of time – allowing researchers to directly examine the long-term consequences of periods of unemployment, fixed-term employment, and parti-time work (e.g. Emmenegger, Marx, and Schraff 2015; Schraff 2017). Unfortunately, however, this sort of data is expensive, difficult to collect, and relatively rare. Exclusively measuring labour market vulnerability in this way would restrict us to studying a small subset of countries and attitudes; decisions taken years ago by survey organizers around what questions to ask and what countries to study would dictate what researchers will be able to study for decades to come.

Various workarounds have thus been developed to try to assess the labour market vulnerability of individuals when long-term panel data is not available. Rehm (2009), for example, divides workers up into their occupational categories, calculates unemployment rates within each of those occupations, and then assigns each individual a vulnerability score that reflects the prevalence of unemployment in that person's occupation. Schwander and Häusermann (2013), in turn, devised a more refined version of this approach: workers are divided not only by occupational class (see Kitschelt and Rehm 2005), but also by key demographic characteristics that have been tied to labour market disadvantage (see Häusermann, Kurer, and Schwander 2016); and they are then assigned vulnerability scores based on the relative rate of unemployment, part-time employment, and fixed-term employment within their particular (demographic-occupational) grouping.

As should now be clear, there is no single, obviously correct way to study labour market vulnerability, and there are major trade-offs to be made between simplicity, accuracy, and data availability (for a detailed discussion, see Marx and Picot 2020). Thankfully, there is some research to suggest that, at least with regard to certain outcomes, findings are relatively similar across an array of different measures (see Rovny and Rovny 2017). In the empirical analysis presented here, I use an adapted version of the Schwander and Häusermann (2013) approach, which I then break into its component parts: this gives us an overall vulnerability score (what they call "outsiderness") as well as vulnerability scores measuring relative risk of part-time employment, fixed-term employment, and unemployment. I provide full details on what this process looks like in practice below.

Data and Analysis

The remainder of this chapter empirically explores the dynamics highlighted above, combining survey data from the 2014 round of the European Social Survey (ESS 2014) and the European Union Statistics on Income and Living Conditions (EU-SILC; Eurostat 2018). As this section outlines in detail, the ESS data allow us to explore the factors shaping anti-immigrant sentiment, while micro-level data from EU-SILC are needed to construct the measures of labour market vulnerability. Overall, the investigation includes data from 11773 respondents from across eighteen European countries (see Appendix Table 14.A1 for a detailed breakdown). Given the focus of this chapter, the study looks only at respondents born in the country they currently live in (i.e., people who are not themselves immigrants) and who are currently still on the labour market (i.e., people who are not retired, on long-term disability, etc.).

Dependent Variable

The analysis centres around anti-immigrant sentiment as measured by a six-item index. The first three questions included in the index broadly reflect items in the Comparative Study of Electoral Systems that were considered in Section 2 chapters of this volume. Respondents were asked to give their opinion as to the impact migrants have on:

> The economy: "Would you say it is generally bad or good for [country]'s economy that people come to live here from other countries?"
>
> Culture: "Would you say that [country]'s cultural life is generally undermined or enriched by people coming to live here from other countries?"
>
> Crime: "Are [country]'s crime problems made worse or better by people coming to live here from other countries?"

The three other items record additional related attitudes, asking about how migrants affect:

> Employment opportunities: "Would you say that people who come to live here generally take jobs away from workers in [country], or generally help to create new jobs?"

Social services: "Most people who come to live here work and pay taxes. They also use health and welfare services. On balance, do you think people who come here take out more than they put in or put in more than they take out?"

Quality of life: "Is [country] made a worse or a better place to live by people coming to live here from other countries?"

Potential responses to each question ranged from zero to ten, and I reverse the scale ordering so that higher values always equate to greater anti-immigrant sentiment. On average, respondents were most worried about how immigrants might affect crime rates (mean response: 6.35) and least worried about their impact on cultural life (mean response: 4.20).2

I then combine these six questions (using principal-component factor analysis) to create an index measuring "anti-immigrant sentiment".3 Appendix Table 14.A2 provides additional descriptive information on the index and its component parts, as well as on all other variables included in the analysis (including means, standard deviations, ranges, and percentage breakdowns).

Independent Variables

To examine how economic vulnerability might shape anti-immigrant sentiment, I home in on three key variables: two at the individual level, focussed on labour market risk and education levels; and one at the country level, accounting for the (proportional) size of the immigrant population. I start by outlining the measurement of these three explanatory variables before then listing the various controls that are also included in the models.

As we saw above, assessing an individual's exposure to labour market risk can be complex, and there is no single clear way to best measure labour market vulnerability. Here I use an adapted version of Schwander and Häusermann's (2013) "outsiderness" scores. In brief, this approach centres on the *relative* labour market risk that individuals face based on their specific labour market

2 Note that, here and below, all analysis is conducted using survey weights.
3 The Eigenvalue is 3.57, and the proportion of variance explained is 0.59. Factor loadings range from 0.63 (for the *Crime* item) to 0.85 (for *Quality of Life*).

profile. In the original form developed by Schwander and Häusermann, these profiles account for differences based on an intersection of gender, age (over/under 40), and occupational category (divided into the five post-industrial class groups developed by Kitschelt and Rehm (2005)). The measure of labour market vulnerability used in this chapter adapts this calculation process in two ways: first, in light of the focus of this study, I add an additional profile marker based on immigration status (designating whether or not an individual or their family has immigrated to the country); and second, in order to incorporate as wide a range of countries into the investigation as possible, I use a simpler measure of occupational category, adapted to the broader groupings in the International Standard Classification of Occupations (International Labour Office 2012).4

The next step in the process is to apply these divisions to the detailed EU-SILC micro-level data (Eurostat 2018), so as to measure the prevalence of part-time employment, temporary employment, and unemployment for any given profile across each of the countries in the dataset. Subtracting these rates from the corresponding country mean then allows us to calculate the *relative* vulnerability of individuals in each profile group. These scores are then standardized, and their average provides an overall "outsiderness" measure. This leaves us with four different labour market vulnerability scores – reflecting the predominance of part-time work, temporary work, unemployment, and their average (i.e., outsiderness) – for every profile (e.g., young, female, native-born managers/professionals) within every country in the analysis. By applying these scores to ESS respondents based on each individual respondent's profile and country of residence, we can then investigate the impact labour market vulnerability has on anti-immigrant sentiment.

Figure 14.1 provides a first indication of how attitudes toward immigrants might be related to the four labour market vulnerability scores under investigation. The figure lays out average anti-immigrant sentiment across each country in the sample, presenting: (1) mean attitudes among those who had a positive risk score (i.e., the comparatively more vulnerable), illustrated with a hollow circle; (2) mean attitudes among those who had a negative risk score (i.e., the comparatively less vulnerable), illustrated with a solid circle; and (3) mean attitudes within the general population, illustrated with a cross. The longer the line between the two dots, the greater the divide between the anti-immigrant attitudes of low- and high-risk individuals. This exercise is repeated four times

4 These occupational categories are: managers and professionals; technicians and associate professionals; clerical support workers, service and sales workers; skilled agricultural, forestry/fishery workers, and elementary occupations; and craft and related trades workers, plant and machine operators, and assemblers.

Figure 14.1: Mean anti-immigrant sentiment among high-risk individuals, low-risk individuals, and overall, by country and type of labour market vulnerability

Note: All calculations account for survey design (using post-stratification survey weights) so as to reflect the broader population distribution in each country.

per country, to illustrate the potential importance of overall labour market vulnerability as well as its three component parts (i.e., exposure to part-time employment, temporary employment, and unemployment).

Breaking the data down in this way reveals several insights. On the one hand, we see sizeable cross-country differences in anti-immigrant sentiment, with Czechs expressing the highest level and Swedes the lowest. On the other, we see a broad pattern suggesting that more vulnerable individuals were more likely than less vulnerable ones to take a critical view of immigrants. Yet we nevertheless also see important variation based on the type of labour market vulnerability under study: exposure to part-time employment has an especially mixed relationship with anti-immigrant sentiment; whereas exposure to unemployment is the measure that most consistently correlates with higher levels of anti-immigrant sentiment.

The other two key explanatory variables are comparatively easy to investigate. To measure education levels, respondents were asked to provide "the highest level of education [they had] successfully completed" in line with the International Standard Classification of Education (UNESCO Institute for Statistics 2012). I then divide respondents into three groups to reflect low-, medium-, and high-levels of education: those with less than an upper-secondary degree (15.8% of the sample); those with an upper-secondary and/or a post-secondary non-tertiary degree (46.7% of the sample); and those with a tertiary (i.e., university) degree (37.5% of the sample). The size of the immigrant population, in turn, is measured using data from the United Nations (United Nations Population Division 2015) and captures the proportion of a country's population that was born abroad.

To properly assess the impact of these variables on anti-immigrant sentiment, I also include a series of individual- and country-level controls that past research suggests should be taken into account (see, for example, Hainmueller, Hiscox, and Margalit 2015; Kevins and Lightman 2020). At the individual-level, survey questions in the ESS allow us to control for: household income, measured in decile groupings; household size, to complement the household-based income measure; gender, measured as a binary variable; age and its square, to account for any potential (non-linear) effects of aging; marital status, with respondents in civil unions or marriages grouped together; trade union membership; and employment status, with binary variables capturing unemployment, temporary employment, and part-time employment. Note that these final variables on union membership and employment status are especially important for our purposes, as they

allow us to disentangle the effect of a person's exposure to labour market vulnerability (e.g., the risk of becoming unemployed, as calculated using the EU-SILC micro-level data) from the effect of a person's status on the labour market at the moment they answered the survey questions (e.g., being unemployed, as recorded in the ESS).

At the country-level, in turn, the full models include controls for: gross domestic product (GDP) per capita at current prices in US dollars, to account for general economic scarcity/wealth; the percentage of the working-age migrant population (between the ages of 25 and 69) with a university degree, to account for cross-national variation in immigrant skill levels; and the national unemployment rate, to account for broad labour market conditions. The GDP data are taken from the OECD (2020), while the data on immigrant skill levels and national unemployment rates come from Eurostat (2020).

Analysis and Results

I conduct the analysis in two stages: the first explores how individual-level characteristics may shape anti-immigrant sentiment on their own, investigating the interaction between labour market vulnerability and education levels; while the second adds national-level variables into the mix, to examine how the impact of vulnerability and education may be shaped by the proportion of migrants in a given country. In both cases, I investigate these relationships using maximum likelihood regressions, with respondents nested in their respective countries; and I include models looking at all four of our labour market vulnerability measures. I discuss the results of this analysis using figures to illustrate key findings, with full regression tables printed in the Appendix.5

Turning first to the findings from the individual-level regressions, Figure 14.2 presents the factors that appear to shape anti-immigrant sentiment across the eighteen European countries in the sample (see Appendix Table 14.A3 for the underlying regression results). The variables included in the analysis are listed on the left-hand side of the figure, while the panels show the findings for each of the four measures of labour market vulnerability under investigation. Interaction terms are marked with an asterisk (e.g., "Labour Market Vulnerability * Secondary Education") and allow us to examine whether the impact of one variable (e.g., labour market

5 The figures in this chapter were drawn using several R packages (Kassambara 2020; Leeper 2018; Lüdecke 2018; Wickham 2016; Wickham et al. 2019). The tables, in turn, were produced using Stargazer (Hlavac 2018) and Table1 (Rich 2020).

Figure 14.2: Factors explaining anti-immigrant sentiment, by type of labour market vulnerability

Note: Plots are based on the corresponding models found in Appendix Table 14.A3. Figure includes confidence intervals (at the 95 percent confidence level) as well as a dashed vertical line to note the zero marker on the scale.

vulnerability) may change at different values of another variable (e.g., education levels). The circle markers, finally, illustrate the effect a variable has on anti-immigrant sentiment: a hollow circle indicates an effect that we cannot statistically distinguish from zero (i.e., a coefficient that is not statistically significant); while a filled circle indicates an effect that we can conclude with reasonable certainty is above or below zero (i.e., a coefficient that is statistically significant at the $p < 0.05$ level, two-tailed).

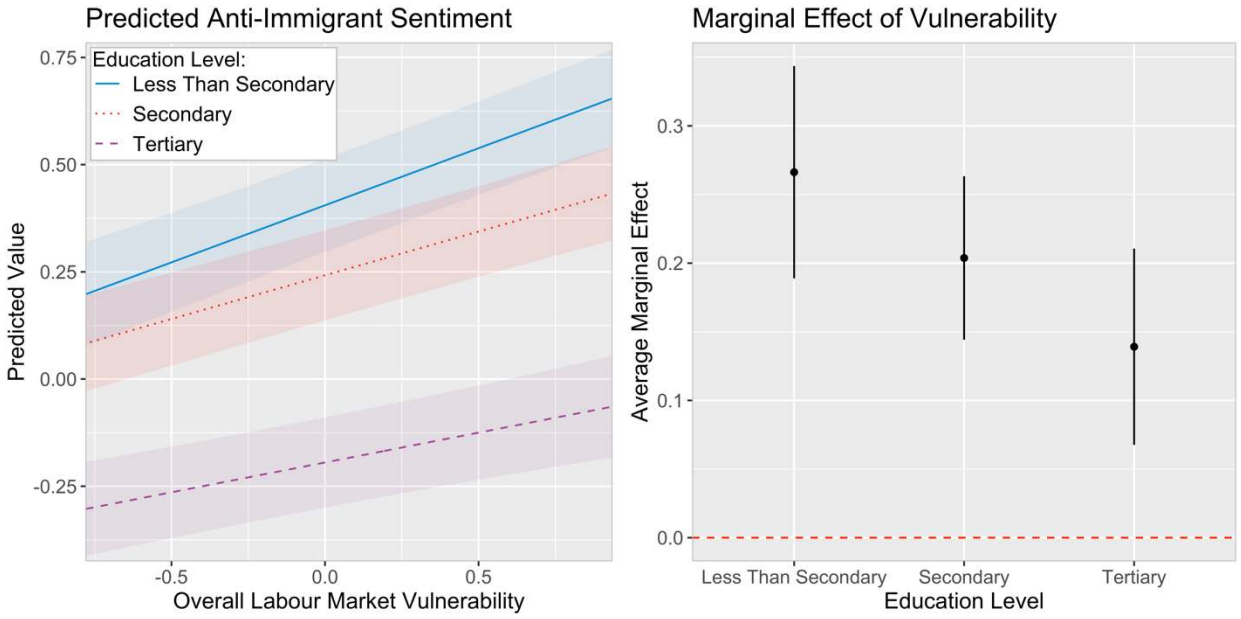
Results indicate that among our key control variables, part-time employment is associated with lower anti-immigrant sentiment, whereas unemployment is associated with greater anti-immigrant sentiment (all else being equal). At the same time, and even controlling for other relevant factors, the findings suggest that labour market vulnerability and education levels interact to shape anti-immigrant sentiment: three of our four measures of labour market vulnerability – everything but exposure to part-time work – are associated with stronger anti-immigrant attitudes;

while higher education levels are associated with more liberal stances toward immigrants. For both the overall labour market vulnerability and exposure to temporary employment, we also see an additional interactive effect: labour market vulnerability's predicted impact on anti-immigrant sentiment is notably smaller among respondents who have completed university education.

Figure 14.3 digs deeper into this interactive relationship using the results from the regression looking at overall labour market vulnerability (findings vis-à-vis exposure to temporary employment look nearly identical). The figure's left-hand panel shows the predicted level of anti-immigrant sentiment across a range of labour market vulnerability scores (on the x-axis), broken down by education level (illustrated using a solid line for low levels, a dashed line for medium levels, and a dotted line for high levels). The right-hand panel, in turn, illustrates labour market vulnerability's marginal effect on anti-immigrant sentiment, broken down by education level (on the x-axis). This allows us to see the effect that a one-point change in labour market vulnerability would have on anti-immigrant sentiment (i.e., the marginal effect) for three profiles: an "average" respondent with (a) less than secondary education, (b) secondary education, or (c) tertiary education.

Several takeaways emerge from this analysis. First, greater overall labour market vulnerability is associated with stronger anti-immigrant sentiment, regardless of a respondent's education level: the slopes are consistently positive in the predicted values plot, suggesting that as labour market vulnerability increases, so too does anti-immigrant sentiment; and the effect of overall labour market vulnerability is, correspondingly, consistently positive and statistically significant in the marginal effects plot. Second, the predicted values plot highlights that while individuals who completed tertiary education tended to express lower levels of anti-immigrant sentiment, the attitudes of individuals with low- and medium-levels of education were broadly similar. Indeed, only at high levels of overall labour market vulnerability do the opinions of respondents with low- and medium-levels of education become statistically distinguishable from one another. Finally, the marginal effects plot indicates that the *size* of labour market vulnerability's effect on anti-immigrant sentiment decreases as education levels increase. Concretely, based on these results we would expect labour market vulnerability's impact on anti-immigrant sentiment to be about twice as large among low-educated individuals as it would be among highly educated ones (with a statistically significant difference between the two effect sizes).

Figure 14.3: Relationship between overall labour market vulnerability and anti-immigrant sentiment, by education level



Note: Plots are based on the "Overall" model found in Appendix Table 14.A3. In the predicted values plot, the x-axis range excludes extreme values of overall labour market vulnerability (below the 5th percentile and above the 95th percentile) to foreground representative effects. The included confidence intervals are: 83.5 percent in the predicted value plot, to highlight where values are statistically distinguishable at the $p < 0.05$ confidence level (overlapping intervals indicate insignificant differences (see Bolsen and Thornton 2014)); and 95 percent in the marginal effect plot, to similarly illustrate statistical significance at the $p < 0.05$ confidence level.

So far, however, I have not yet accounted for potentially relevant differences at the country level. To what extent do these dynamics change if I account for national-level factors, especially when it comes to cross-country differences in immigrant population sizes?

Figure 14.4 lays out how labour market vulnerability, education, and the size of the foreign-born population interact in the models to shape attitudes toward immigration (see Appendix Table 14.A4 for the underlying regression results). The figure illustrates the predicted size of labour market vulnerability's impact on anti-immigrant sentiment across a range of common "migrant stock" levels, with the panels breaking these effects down by education level (i.e., low, medium, and high) and labour market vulnerability type (i.e., overall, and exposure to part-time employment, temporary employment, and unemployment).

Figure 14.4: Impact of labour market vulnerability on anti-immigrant sentiment, by education and immigrant population size (as a percentage of the total population)

Note: Plots are based on the corresponding models found in Appendix Table 14.A4. The x-axis range excludes extreme values of percentage of migrant stock (below the 5th percentile and above the 95th percentile) to foreground representative effects. The figures also include 95 percent confidence intervals, to illustrate statistical significance at the $p < 0.05$ confidence level.

Accounting for national-level variation reveals an important interplay between labour market vulnerability, education levels, and immigrant population sizes. First, the figure points to an even more systematic impact of labour market vulnerability on anti-immigrant sentiment: only with exposure to part-time employment do we see no evidence of an effect. Second, a larger immigrant population magnifies the predicted impact that the other three measures of labour market vulnerability have on anti-immigrant sentiment. Notably, however, this effect is only visible for individuals with low and, in the case of exposure to unemployment, medium levels of education. Lastly, in countries with particularly small immigrant populations (below 5 to 7 percent of the total population), the predicted impact of labour market vulnerability on anti-immigrant sentiment effectively disappears, becoming statistically indistinguishable from zero.

Results thus suggest that vulnerability does indeed matter, and that it does so even after controlling for an array of other labour market- and wellbeing-related considerations. Overall labour market vulnerability, as well as exposure to unemployment and temporary employment (but not part-time employment), are all associated with higher levels of anti-immigrant sentiment. The scope of this effect, however, depends both on an individual's educational background and on the size of a country's existing foreign-born population: results suggest that labour market vulnerability has a larger expected impact on individuals with lower levels of education living in countries with larger immigrant populations.

Two final considerations are worth underscoring at this point. First, findings throughout the investigation have indicated that exposure to part-time employment was the only vulnerability measure that lacked a clear statistical effect on attitudes toward immigration. What might explain this? The simplest answer would be that working hours are simply less important for anti-immigrant sentiment. Yet it is difficult to draw any strong conclusions on this point, as it may be that some types of part-time employment matter more than others: in particular, the data do not allow us to distinguish individuals who unwillingly work fewer hours than they would like (i.e., involuntary part-time employment) from those who actively choose to work less (i.e., voluntary part-time employment).

Second, it is worth highlighting that the dynamics uncovered above play out similarly even if I separately examine the attitudes that make up the anti-immigrant sentiment index: i.e., regarding the impact immigration has on the economy, culture, crime, employment opportunities, social services, and quality of life. The only notable exception is responses to the *crime* survey item: for this question, labour market vulnerability is only associated with a more anti-immigrant perspective among individuals who have not completed tertiary education; and the size of the immigrant population does not appear to shape the impact of vulnerability among those with less education either. Attitudes on immigrant criminality, then, may be driven by slightly different factors – though even here results suggest that labour market vulnerability and education levels matter.

Conclusion

This chapter set out to investigate to what extent, and under what conditions, labour market vulnerability might be an important factor shaping attitudes toward immigrants and immigration.

It began by highlighting that labour markets have been marked by increasing precarity in recent decades, reflecting a process typically labeled "dualization" (e.g. Piore 1980). The interplay between employment status and welfare state access has, in turn, contributed to a growing gap between (relatively) protected insiders and less protected outsiders – generating a variety of attitudinal and behavioural knock-on effects (see Schwander 2019). It then highlighted why labour market vulnerability might affect anti-immigrant sentiment in particular, and why vulnerable workers might be especially sensitive to the size of the immigrant population. After reviewing various approaches to conceptualizing and assessing vulnerability, the remainder of the chapter empirically examined the relationship between different measures of labour market vulnerability and anti-immigrant sentiment – both directly and in interaction with education and immigration levels.

Extending past work looking at the perceived economic effects of immigration (see Kevins and Lightman 2020), the empirical analysis highlighted that different types of labour market vulnerability do indeed appear to increase anti-immigrant sentiment. At the same time, the findings also suggested that vulnerability may have an especially strong impact on individuals with lower levels of formal education – a result that chimes with the broad link between education and labour market positions, since risk exposure is likely to be particularly worrisome for low-educated workers. That these same workers were the ones affected by the size of the immigrant population therefore also makes sense. What is more, given how bad citizens tend to be at assessing the size of the immigrant population in their country (e.g. Duffy 2014), it is noteworthy that the findings indicate that actual (rather than simply perceived) levels of migrant stock may also be shaping the relationship between labour market vulnerability and anti-immigrant sentiment.

Suggested Further Reading:

Kevins, Anthony, and Naomi Lightman. 2020. "Immigrant Sentiment and Labour Market Vulnerability: Economic Perceptions of Immigration in Dualized Labour Markets." *Comparative European Politics* 18(3): 460–484.

Meuleman, Bart et al. 2020. "Economic Conditions, Group Relative Deprivation and Ethnic Threat Perceptions: A Cross-National Perspective." *Journal of Ethnic and Migration Studies* 46(3):

593–611.

Pardos-Prado, Sergi. 2020. “Labour Market Dualism and Immigration Policy Preferences.” *Journal of European Public Policy* 27(2): 188–207.

Schwander, Hanna. 2019. “Labor Market Dualization and Insider–Outsider Divides: Why This New Conflict Matters.” *Political Studies Review* 17(1): 14–29.

References

Berger, Suzanne, and Michael J Piore. 1980. *Dualism and Discontinuity in Industrial Societies*. New York, NY: Cambridge University Press.

Bolet, Diane. 2020. "Local Labour Market Competition and Radical Right Voting: Evidence from France." *European Journal of Political Research* 59(4): 817-841.

Bolsen, Toby, and Judd R Thornton. 2014. "Overlapping Confidence Intervals and Null Hypothesis Testing." *The Experimental Political Scientist* 4(1): 12–16.

Busemeyer, Marius, and Achim Kemmerling. 2020. "Dualization, Stratification, Liberalization, or What? An Attempt to Clarify the Conceptual Underpinnings of the Dualization Debate." *Political Science Research and Methods* 8(2): 375–79.

Crouch, Colin. 2019. *Will the Gig Economy Prevail?* Cambridge, UK: John Wiley & Sons.

Dancygier, Rafaela M, and Michael J Donnelly. 2012. "Sectoral Economies, Economic Contexts, and Attitudes toward Immigration." *The Journal of Politics* 75(1): 17–35.

Doeringer, Peter, and Michael J Piore. 1971. New York: DC Heath and Company *Internal Labor Markets and Manpower Adjustment*.

Duffy, Bobby. 2014. "Perceptions and Reality: Ten Things We Should Know about Attitudes to Immigration in the UK." *The Political Quaterly* 85(3): 285–88.

Emmenegger, Patrick, Silja Haüsermann, Bruno Palier, and Martin Seeleib-Kaiser. 2012. *The Age of Dualization*. Oxford, UK: Oxford University Press.

Emmenegger, Patrick, Paul Marx, and Dominik Schraff. 2015. "Labour Market Disadvantage, Political Orientations and Voting: How Adverse Labour Market Experiences Translate into Electoral Behaviour." *Socio-Economic Review* 13(2): 189–213.

ESS. 2014. "European Social Survey Round 7 Data."

Eurostat. 2018. "Income and Living Conditions Dataset" ed. Eurostat.

———. 2020. "European Labour Force Survey."

Fernández-Albertos, José, and Dulce Manzano. 2016. "Dualism and Support for the Welfare State." *Comparative European Politics* 14(3): 349–75.

Gerber, Alan S., Gregory A. Huber, Daniel R. Biggers, and David J. Hendry. 2017. "Self-Interest, Beliefs, and Policy Opinions: Understanding How Economic Beliefs Affect Immigration Policy Preferences." *Political Research Quarterly* 70(1): 155–71.

Gorodzeisky, Anastasia, and Moshe Semyonov. 2020. "Perceptions and Misperceptions: Actual Size, Perceived Size and Opposition to Immigration in European Societies." *Journal of Ethnic and Migration Studies* 46(3): 612–30.

Hainmueller, Jens, Michael J Hiscox, and Yotam Margalit. 2015. "Do Concerns about Labor Market Competition Shape Attitudes toward Immigration? New Evidence." *Journal of International Economics* 97(1): 193–207.

Häusermann, Silja, Thomas Kurer, and Hanna Schwander. 2015. "High-Skilled Outsiders? Labor Market Vulnerability, Education and Welfare State Preferences." *Socio-Economic Review* 13(2): 235–58.

———. 2016. "Sharing the Risk? Households, Labor Market Vulnerability, and Social Policy Preferences in Western Europe." *The Journal of Politics* 78(4): 1045–60.

Haüsermann, Silja, and Hanna Schwander. 2012. "Varieties of Dualization? Labor Market Segmentation and Insider-Outsider Divides Across Regimes." In *The Age of Dualization: The Changing Face of Inequality in Deindustrializing Societies*, eds. Patrick Emmenegger, Silja Haüsermann, Bruno Palier, and Martin Seeleib-Kaiser. Oxford, UK: Oxford University Press, 27–51.

Heizmann, Boris, and Nora Huth. 2021. "Economic Conditions and Perceptions of Immigrants as an Economic Threat in Europe: Temporal Dynamics and Mediating Processes." *International Journal of Comparative Sociology* 62(1): 56-82.

Hlavac, Marek. 2018. "Stargazer: Well-Formatted Regression and Summary Statistics Tables. Bratislava, Slovakia: Central European Labour Studies Institute (CELSI)."

International Labour Office. 2012. *International Standard Classification of Occupations 2008 (ISCO-08)*. International Labour Office.

Jessoula, Matteo, Paolo Graziano, and Ilaria Madama. 2010. "'Selective Flexicurity' in Segmented Labor Markets: The Case of Italian 'Mid-Siders.'" *Journal of Social Policy* 39(4): 561–83.

Kassambara, Alboukadel. 2020. "'Ggpubr': 'ggplot2' Based Publication Ready Plots." *R package version 0.2.5*.

Kevins, Anthony. 2015. "Political Actors, Public Opinion, and the Extension of Welfare Coverage." *Journal of European Social Policy* 25(3): 303–15.

———. 2017. *Expanding Welfare in an Age of Austerity: Increasing Protection in an Unprotected World*. Amsterdam, NL: Amsterdam University Press.

———. 2019. "Dualized Trust: Risk, Social Trust and the Welfare State." *Socio-Economic Review* 17(4): 875–897.

Kevins, Anthony, and Naomi Lightman. 2020. "Immigrant Sentiment and Labour Market Vulnerability: Economic Perceptions of Immigration in Dualized Labour Markets." *Comparative European Politics* 18(3): 460–484.

Kitschelt, Herbert, and Philipp Rehm. 2005. "Work, Family and Politics: Foundations of Electoral Partisan Alignments in Postindustrial Democracies." *Annual Meeting of the American Political Science Association*.

Leeper, Thomas J. 2018. "Margins: Marginal Effects for Model Objects." *R package version 0.3.23*.

Lightman, Naomi, and Luann Good Gingrich. 2018. "Measuring Economic Exclusion for Racialized Minorities, Immigrants and Women in Canada: Results from 2000 and 2010." *Journal of Poverty* 22(5): 398–420.

Lüdecke, Daniel. 2018. "Ggeffects: Tidy Data Frames of Marginal Effects from Regression Models." *Journal of Open Source Software* 3(26): 772.

Malhotra, Neil, Yotam Margalit, and Cecilia Hyunjung Mo. 2013. "Economic Explanations for Opposition to Immigration: Distinguishing between Prevalence and Conditional Impact." *American Journal of Political Science* 57(2): 391–410.

Marx, Paul, and Georg Picot. 2013. "The Party Preferences of Atypical Workers in Germany." *Journal of European Social Policy* 23(2): 164–178.

———. 2020. "Three Approaches to Labor-Market Vulnerability and Political Preferences." *Political Science Research and Methods* 8(2): 356–61.

Meuleman, Bart et al. 2020. “Economic Conditions, Group Relative Deprivation and Ethnic Threat Perceptions: A Cross-National Perspective.” *Journal of Ethnic and Migration Studies* 46(3): 593–611.

OECD. 2020. “National Accounts Statistics.”

Ojala, Satu, Jouko Nätti, and Liudmila Lipiäinen. 2018. “Types of Temporary Employment: An 8-Year Follow-Up of Labour Market Attachment.” *Social Indicators Research* 138(1): 141–63.

Paas, Tiiu, and Vivika Halapuu. 2012. “Attitudes towards Immigrants and the Integration of Ethnically Diverse Societies.” *Eastern Journal of European Studies* 3(2): 161–76.

Pardos-Prado, Sergi. 2020. “Labour Market Dualism and Immigration Policy Preferences.” *Journal of European Public Policy* 27(2): 188–207.

Piore, Michael J. 1980. “Economic Fluctuation, Job Security, and Labor-Market Duality in Italy, France, and the United States.” *Politics & Society* 9(4): 379–407.

Rehm, Philipp. 2009. “Risks and Redistribution: An Individual-Level Analysis.” *Comparative Political Studies* 42(7): 855–81.

Rich, B. 2020. “Table1: Tables of Descriptive Statistics in HTML.” *R package version* 1.

Rovny, Allison E, and Jan Rovny. 2017. “Outsiders at the Ballot Box: Operationalizations and Political Consequences of the Insider–Outsider Dualism.” *Socio-Economic Review* 15(1): 161–185.

Rueda, David. 2005. “Insider-Outsider Politics in Industrialized Democracies: The Challenge to Social Democratic Parties.” *American Political Science Review* 99(1): 61–74.

———. 2007. *Social Democracy Inside Out: Partisanship and Labor Market Policy in Industrialised Democracies*. New York, NY: Oxford University Press.

———. 2014. “Dualization, Crisis and the Welfare State.” *Socio-Economic Review* 12(2): 381–407.

Schraff, Dominik. 2017. “Labor Market Disadvantage and Political Alienation: A Longitudinal Perspective on the Heterogeneous Risk in Temporary Employment.” *Acta Politica* 53(1): 48–67.

Schwander, Hanna. 2019. “Labor Market Dualization and Insider–Outsider Divides: Why This New Conflict Matters.” *Political Studies Review* 17(1): 14–29.

Schwander, Hanna, and Silja Häusermann. 2013. “Who Is in and Who Is out? A Risk-Based Conceptualization of Insiders and Outsiders.” *Journal of European Social Policy* 23(3): 248–69.

Taylor-Gooby, Peter et al. 2019. “Moral Economies of the Welfare State: A Qualitative Comparative Study.” *Acta Sociologica* 62(2): 119–34.

UNESCO Institute for Statistics. 2012. *International Standard Classification of Education: ISCED 2011*. UNESCO Institute for Statistics Montreal.

United Nations Population Division. 2015. “Trends in International Migrant Stock: The 2015 Revision.”

Weisstanner, David. 2021. “Insiders under Pressure: Flexibilization at the Margins and Wage Inequality.” *Journal of Social Policy* 50(4): 725-44.

Wickham, Hadley. 2016. *Ggplot2: Elegant Graphics for Data Analysis*. Springer.

———. 2019. “Welcome to the Tidyverse.” *Journal of Open Source Software* 4(43): 1686–92.

Young, Yvette, Peter Loebach, and Kim Korinek. 2018. “Building Walls or Opening Borders? Global Immigration Policy Attitudes across Economic, Cultural and Human Security Contexts.” *Social Science Research* 75(April): 83–95.

Appendix Table 14.A1: Number of respondents, per country

Country	Observations
Austria	572
Belgium	653
Czech Republic	717
Finland	960
France	748
Germany	1207
Hungary	511
Ireland	633
Lithuania	656
Netherlands	726
Norway	743
Poland	449
Portugal	413
Slovenia	300
Spain	621

Country	Observations
Sweden	738
Switzerland	447
United Kingdom	679
Total	**11 773**

Appendix Table 14.A2: Descriptive statistics for all variables included in the analysis

	Total (N=11773)
Anti-Immigrant Sentiment	
Mean (SD)	-0.000000000773 (1.00)
Median [Min, Max]	-0.108 [-2.83, 2.79]
Immigrants Harm the Economy	
Mean (SD)	4.98 (2.38)
Median [Min, Max]	5.00 [0, 10.0]
Immigrants Harm Culture	
Mean (SD)	4.20 (2.48)
Median [Min, Max]	4.00 [0, 10.0]
Immigrants Increase Crime	
Mean (SD)	6.35 (1.90)
Median [Min, Max]	6.00 [0, 10.0]
Immigrants Reduce Job Opportunities	

	Total (N=11773)
Mean (SD)	5.19 (2.23)
Median [Min, Max]	5.00 [0, 10.0]
Immigrants Harm Social Services	
Mean (SD)	5.59 (2.15)
Median [Min, Max]	5.00 [0, 10.0]
Immigrants Bad for the Country	
Mean (SD)	4.87 (2.20)
Median [Min, Max]	5.00 [0, 10.0]
Labour Market Vulnerability, Overall	
Mean (SD)	-0.0110 (0.497)
Median [Min, Max]	-0.0959 [-1.30, 1.58]
Labour Market Vulnerability, Part-Time Employment	
Mean (SD)	0.00411 (0.504)
Median [Min, Max]	-0.193 [-0.717, 1.68]
Labour Market Vulnerability, Temporary Employment	

	Total (N=11773)
Mean (SD)	-0.0146 (0.496)
Median [Min, Max]	-0.136 [-1.35, 1.96]
Labour Market Vulnerability, Unemployment	
Mean (SD)	-0.0161 (0.491)
Median [Min, Max]	-0.103 [-1.14, 2.38]
Education Level	
Low Education	1857 (15.8%)
Medium Education	5496 (46.7%)
High Education	4420 (37.5%)
Income Decile	
Mean (SD)	6.11 (2.68)
Median [Min, Max]	6.00 [1.00, 10.0]
Household Size	
Mean (SD)	2.74 (1.30)
Median [Min, Max]	3.00 [1.00, 11.0]

	Total (N=11773)
Male	
Female	5839 (49.6%)
Male	5934 (50.4%)
Age	
Mean (SD)	42.1 (12.8)
Median [Min, Max]	43.0 [14.0, 87.0]
Union Member	
Not in a Trade Union	8393 (71.3%)
Union Member	3380 (28.7%)
Unemployed	
Not Unemployed	10822 (91.9%)
Unemployed	951 (8.1%)
Temporary Employed	
Not in Temporary Employment	9081 (77.1%)
Temporary Employed	2692 (22.9%)

	Total (N=11773)
Part-Time Employed	
Not in Part-Time Employment	9498 (80.7%)
Part-Time Employed	2275 (19.3%)
Married	
Unmarried	6003 (51.0%)
Married	5770 (49.0%)
% of Migrant Stock	
Mean (SD)	11.5 (5.68)
Median [Min, Max]	12.0 [1.62, 28.8]
GDP Per Capita	
Mean (SD)	45100 (21600)
Median [Min, Max]	47800 [14200, 97100]
% of Skilled Migrants	
Mean (SD)	33.1 (8.78)
Median [Min, Max]	31.3 [13.7, 50.6]

	Total (N=11773)
Unemployment Rate	
Mean (SD)	8.64 (4.48)
Median [Min, Max]	8.00 [3.50, 24.4]

Appendix Table 14.A3: Regression analyses, without country-level variables

	Dependant Variable: Anti-Immigrant Sentiment			
	Type of Labour Market Vulnerability			
	Overall	Part-Time Employment	Temporary Employment	Unemployment
	(1)	(2)	(3)	(4)
Labour Market Vulnerability	0.266*** (0.039)	-0.011 (0.049)	0.226*** (0.032)	0.223*** (0.042)
Secondary Education	-0.163*** (0.026)	-0.208*** (0.025)	-0.166*** (0.026)	-0.176*** (0.027)
Tertiary Education	-0.600*** (0.030)	-0.683*** (0.027)	-0.616*** (0.029)	-0.612*** (0.031)
Labour Market Vulnerability * Secondary Education	-0.062 (0.045)	-0.043 (0.047)	-0.034 (0.038)	0.048 (0.052)
Labour Market Vulnerability * Tertiary Education	-0.127* (0.050)	-0.012 (0.053)	-0.115** (0.044)	-0.095 (0.059)
Income Decile	-0.036*** (0.004)	-0.042*** (0.004)	-0.036*** (0.004)	-0.035*** (0.004)
Household Size	0.041*** (0.008)	0.043*** (0.008)	0.040*** (0.008)	0.038*** (0.008)
Male	-0.063** (0.021)	-0.178*** (0.028)	-0.120*** (0.019)	-0.165*** (0.018)

Age	0.016*** (0.005)	0.011* (0.005)	0.018*** (0.005)	0.014** (0.005)
Age * Age	-0.0002** (0.0001)	-0.0001* (0.0001)	-0.0002** (0.0001)	-0.0001** (0.0001)
Married	-0.007 (0.021)	-0.003 (0.022)	-0.006 (0.021)	-0.006 (0.021)
Union Member	-0.016 (0.024)	-0.021 (0.024)	-0.018 (0.024)	-0.023 (0.024)
Unemployed	0.152*** (0.033)	0.170*** (0.033)	0.156*** (0.033)	0.148*** (0.033)
In Temporary Employment	-0.050* (0.023)	-0.037 (0.023)	-0.054* (0.023)	-0.048* (0.023)
Part-Time Employed	-0.101*** (0.023)	-0.077** (0.024)	-0.077*** (0.023)	-0.081*** (0.023)
Constant	0.111 (0.127)	0.386** (0.122)	0.072 (0.126)	0.245* (0.123)
Observations	11 773	11 773	11 773	11 773
Log Likelihood	-19 342.770	-19 380.820	-19 338.920	-19 331.220
Akaike Inf. Crit.	38 721.540	38 797.650	38 713.840	38 698.440
Bayesian Inf. Crit.	38 854.260	38 930.370	38 846.570	38 831.170

Note: Cells contain maximum likelihood regression coefficients, with standard errors in parentheses. All models incorporate population and post-stratification survey design weights. $^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix Table 14.A4: Regression analyses, with country-level variables included

	Dependant Variable: Anti-Immigrant Sentiment			
	Type of Labour Market Vulnerability			
	Overall	Part-Time Employment	Temporary Employment	Unemployment
	(1)	(2)	(3)	(4)
Labour Market Vulnerability	0.283*** (0.039)	0.005 (0.053)	0.290*** (0.033)	0.240*** (0.042)
Secondary Education	-0.167*** (0.026)	-0.212*** (0.026)	-0.169*** (0.026)	-0.184*** (0.027)
Tertiary Education	-0.578*** (0.030)	-0.670*** (0.028)	-0.598*** (0.029)	-0.604*** (0.031)
% of Migrant Stock (Centred)	0.023 (0.020)	0.025 (0.019)	0.013 (0.020)	0.023 (0.020)
Labour Market Vulnerability * Secondary Education	-0.062 (0.045)	-0.006 (0.053)	-0.078* (0.038)	0.049 (0.052)
Labour Market Vulnerability * Tertiary Education	-0.106* (0.050)	0.045 (0.059)	-0.154*** (0.044)	-0.105+ (0.060)
Labour Market Vulnerability * % of Migrant Stock (Centred)	0.024** (0.008)	-0.011 (0.012)	0.030*** (0.006)	0.026* (0.011)

Secondary Education * % of Migrant Stock (Centred)	-0.006 (0.006)	-0.010^{+} (0.006)	0.001 (0.006)	-0.005 (0.005)
Tertiary Education * % of Migrant Stock (Centred)	-0.035*** (0.006)	-0.035*** (0.006)	-0.027*** (0.006)	-0.032*** (0.007)
Labour Market Vulnerability * Secondary Education * % of Migrant Stock (Centred)	-0.030** (0.010)	-0.005 (0.014)	-0.028*** (0.007)	-0.006 (0.013)
Labour Market Vulnerability * Tertiary Education * % of Migrant Stock (Centred)	-0.028** (0.011)	-0.0004 (0.016)	-0.034*** (0.008)	-0.027^{+} (0.015)
Income Decile	-0.037*** (0.004)	-0.042*** (0.004)	-0.037*** (0.004)	-0.036*** (0.004)
Household Size	0.043*** (0.008)	0.045*** (0.008)	0.042*** (0.008)	0.041*** (0.008)
Male	-0.047* (0.021)	-0.155*** (0.029)	-0.108*** (0.019)	-0.163*** (0.018)
Age	0.018*** (0.005)	0.012** (0.005)	0.022*** (0.005)	0.016*** (0.005)
Age * Age	-0.0002** (0.0001)	-0.0001* (0.0001)	-0.0002*** (0.0001)	-0.0002** (0.0001)
Married	-0.006 (0.021)	-0.001 (0.021)	-0.007 (0.021)	-0.006 (0.021)

Union Member	-0.013 (0.024)	-0.021 (0.024)	-0.014 (0.024)	-0.021 (0.024)
Unemployed	0.154*** (0.033)	0.170*** (0.033)	0.157*** (0.033)	0.148*** (0.033)
In Temporary Employment	-0.046+ (0.023)	-0.032 (0.023)	-0.048* (0.023)	-0.039+ (0.023)
Part-Time Employed	-0.105*** (0.023)	-0.081*** (0.024)	-0.079*** (0.023)	-0.087*** (0.023)
GDP Per Capita (Centred)	-0.00001 (0.00001)	-0.00001 (0.00001)	-0.00001 (0.00001)	-0.00001 (0.00001)
% of Skilled Migrants (Centred)	-0.001 (0.009)	-0.002 (0.008)	-0.002 (0.009)	-0.0003 (0.009)
Unemployment Rate (Centred)	-0.019 (0.018)	-0.021 (0.017)	-0.018 (0.018)	-0.021 (0.018)
Constant	0.034 (0.128)	0.332** (0.123)	-0.034 (0.129)	0.198 (0.125)
Observations	11 773	11 773	11 773	11 773
Log Likelihood	-19 348.350	-19 393.860	-19 333.760	-19 336.680
Akaike Inf. Crit.	38 750.700	38 841.720	38 721.530	38 727.360
Bayesian Inf. Crit.	38 949.780	39 040.800	38 920.610	38 926.450

Note: Cells contain maximum likelihood regression coefficients, with standard errors in parentheses. All models incorporate population and post-stratification survey design weights. $^{+}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$