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# Economic Shocks and the Development of Immigration Attitudes

Dillon Laaker (1)

Department of Political Science, University of Wisconsin-Madison, Madison, WI, US E-mail: laaker@wisc.edu

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#### Abstract

How do immigration attitudes form? Drawing on the political socialization literature, I argue that growing up in a recession causes a lasting increase in anti-immigration attitudes. I delineate two mechanisms that emphasize the negative consequences of recessions for young workers and the anti-immigration narrative that often emerges during economic turmoil. Young adults are particularly vulnerable to these external shocks because they have minimal political experience and are developing their core political attitudes. Support is provided for this argument with evidence from the European Social Survey. An economic shock during young adulthood causes a significant increase in anti-immigration attitudes, a relationship not found for other ages. I find tentative evidence that growing up in a recession has a larger effect on the racial and cultural dimensions of immigration and causes a broader sociotropic response. Results highlight how economic crises affect the socialization of young adults and underscore their lasting political consequences.

Keywords: immigration; political socialization; recessions; Europe; public opinion

What affects public attitudes toward immigration?<sup>1</sup> It is widely believed that economic downturns cause a spike in anti-immigration attitudes. As Dancygier and Donnelly (2014) note, UNESCO predicted that the 2008 recession would increase xenophobia and resentment toward foreigners. Previous studies argued that poor economic conditions and pessimism about the national economy correlate with anti-immigration attitudes.<sup>2</sup> Recessions pressure politicians to develop job-saving measures, which often focus on limiting employment opportunities for immigrants. This provides citizens with salient economic frames that connect immigration to its potential economic consequences. For example, after the 2008 recession, European governments began exploring policies to restrict immigration. In Spain, the socialist government even offered to pay migrants to leave the country, a 'pay-to-go' scheme similar to government strategies during economic downturns in the 1970s (Dancygier and Donnelly 2013).

While the underlying theory linking recessions to a rise in anti-immigration attitudes is compelling, it lacks strong empirical support.<sup>3</sup> For example, using panel data, Goldstein and Peters (2014) find that the 2008 recession, which represented the most significant economic downturn since the Great Depression, had little effect on immigration attitudes. Creighton, Jamal, and Malancu (2015) drew similar conclusions using several survey experiments. These

<sup>&</sup>lt;sup>1</sup>For a review, see Hainmueller and Hopkins (2014).

<sup>&</sup>lt;sup>2</sup>Wilkes, Guppy, and Farris (2008); Citrin et al. (1997); Burns and Gimpel (2000); Dancygier and Donnelly (2013).

<sup>&</sup>lt;sup>3</sup>Chandler and Tsai (2001); Hatton (2016) provide observational evidence.

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results are consistent with recent research that finds immigration attitudes are remarkably stable at the individual level (Kustov, Laaker, and Reller 2021).

This article reconciles the contradictory findings in previous studies by drawing on the political socialization literature. Research suggests that individuals form lasting economic and political attitudes during late adolescence and young adulthood, commonly referred to as the impressionable years. Contrary to theories where individuals consistently update their beliefs, scholars find that individuals often place greater weight on events that occur during this impressionable period (Alwin and Krosnick 1991).

I hypothesize that an individual's historical economic environment is a key determinant of immigration attitudes. I develop a theory of how growing up during a recession<sup>6</sup> affects the political socialization of young adults and causes a lasting increase in anti-immigration attitudes. I delineate two mechanisms to explain this effect. First, recessions increase labour market competition and are economically costly for young adults. Individuals who grow up in poor economic conditions are more likely to face unemployment, earn lower wages, and experience mental health issues (Von Wachter 2020). Second, anti-immigrant narratives typically emerge during economic turmoil and frame immigration as a broader cultural and economic threat to the country. Politicians are quick to argue that immigration hurts native workers, and negative media coverage of immigrants often increases. Young adults are particularly vulnerable to these external shocks and are susceptible to salient anti-immigrant narratives because of their limited political experience.

I used data (2002–2017) from the European Social Survey (ESS) to test this theory. By exploiting natural variations in macroeconomic conditions across countries and time, I gained leverage on how a recession during young adulthood affects the formation of immigration attitudes. The results are consistent with the theoretical argument: economic conditions during impressionable years significantly and meaningfully affect attitudes toward immigration. This relationship is not found for other age ranges. I also provide suggestive evidence that recessions have a greater effect on the ethnic and cultural components of immigration and cause individuals to adopt racialized immigration attitudes. Further, I show that historical economic conditions cause a more sociotropic response in populations that mobilizes a broader opposition to immigration. These findings are consistent with the idea that recessions create salient anti-immigrant narratives that connect the issue to broader cultural threats. Finally, I use advanced econometric techniques to rule out several indirect explanations along the causal pathway, such as ideology, education, and income.

This article provides several notable contributions. First, it adds to the broader literature on the determinants of immigration attitudes by providing a theory that accounts for historical economic experiences (Hainmueller and Hopkins 2014). It connects the international political economy and socio-psychology literature to develop a theory of how economic factors shape immigration attitudes. Importantly, several existing studies argue along similar lines. For example, Coenders and Scheepers (1998) show that, in the Netherlands, the unemployment rate during the formative years increases ethnic discrimination in the housing and labour market. However, previous research suffers from several theoretical and empirical limitations. Theoretically, scholars ignore the underlying mechanisms that may drive this effect. Empirically, previous studies often focus only on a single country, preventing accurate inferences since cohorts tend to share many observable and unobservable characteristics. Further, research often approaches the question from an age-period-cohort framework, forcing scholars to introduce post-treatment bias by controlling for contemporary factors. Finally, previous research fails to emphasize the

<sup>&</sup>lt;sup>4</sup>I use young adulthood, early adulthood, young individuals etc. interchangeably.

<sup>&</sup>lt;sup>5</sup>Kustov, Laaker, and Reller (2021) find evidence that immigration attitudes will likely develop when individuals are young.

<sup>&</sup>lt;sup>6</sup>I use macroeconomic shocks, economic shocks, recessions, etc., interchangeably.

<sup>&</sup>lt;sup>7</sup>See also, Gorodzeisky and Semyonov (2018); McLaren, Nuendorf, and Paterson (2019).

importance of the impressionable years. Specifically, scholars do not test whether recessions at any age have similar effects on immigration attitudes.

Second, this article contributes to the growing literature that examines the impact of exogenous economic shocks on individual preferences and voting (for example, Margalit 2013). While previous studies examine the short-term effects, this article investigates the long-term consequences of economic crises on voters' preferences. This research also provides important insights into the potential long-term effects of the 2008 recession. Young adults who experienced a negative economic environment will likely continue to hold anti-immigration attitudes throughout their lives.

Finally, this article adds to the political socialization literature (Alwin and Krosnick 1991; Jennings and Markus 1984; Sears and Valentino 1997). In particular, the research emphasizes the importance of young adulthood for developing core political and economic beliefs. Scholars often focus on ideology and party attachment but largely ignore the formation of other attitudes, such as immigration. For example, Giuliano and Spilimbergo (2013) show that growing up in a recession causes individuals to adopt a left-leaning ideology and favour redistribution. The results in this article suggest that recessions have a more subtle effect, where young adults develop attitudes toward redistribution along racial and ethnic lines.

# The Development of Immigration Attitudes

A vast literature on political socialization examines when individuals develop their core political and economic beliefs. <sup>10</sup> Scholars distinguish between two extremes. First, the 'persistence' model suggests that early (pre-adult) experiences are consequential in developing political attitudes and rarely change. At the other end of the spectrum, the 'lifelong openness' model posits that change can occur throughout individuals' lives as they update their political beliefs in response to current events. Alternative models vary the probability of attitude change over the course of one's life. For example, a consistent finding is that early adulthood is critical to forming core political and economic beliefs (Alwin and Krosnick 1991). Also known as the 'impressionable years hypothesis', this period is consequential because young adults have limited political experience and are often just beginning to engage with political institutions. This socialization process heavily influences how young adults think about political issues. <sup>11</sup> Once this impressionable period elapses, political attitudes rarely change. <sup>12</sup> Consistent with this model, recent evidence suggests that immigration attitudes are more unstable for young adults and begin to stabilize as they grow older (Kustov, Laaker, and Reller 2021). In other words, young adults are more responsive to contextual factors which crystallize as they age.

If immigration attitudes develop during this impressionable period, it suggests that young adults are particularly susceptible to external shocks. What types of events are likely to matter? Sears and Valentino (1997) suggest that major political and economic events will have an enduring effect. As Osborne, Sears, and Valentino (2011) argue, these events need to be highly visible to cause a lasting impact. Further, when events are of national concern and receive informal or formal reinforcement, they are more likely to be remembered (Sears and Valentino 1997). Political socialization is likely to occur when young adults are exposed to the strongest flow of information regarding a specific attitude. Exogenous shocks can trigger this communication and are likely critical to socialization.

<sup>&</sup>lt;sup>8</sup>See also Ahlquist, Copelovitch, and Walter (2018); Bechtel, Hainmueller, and Margalit (2014); Fernández-Albertos and Kuo (2016).

<sup>&</sup>lt;sup>9</sup>Several studies examine how exposure to racial diversity during young adulthood affects long-term partisanship (Brown et al. 2020; Goldman and Hopkins 2020).

<sup>&</sup>lt;sup>10</sup>There is also a large literature on the stability of political attitudes (see Alwin and Krosnick 1991; Jennings and Markus 1984; Kustov, Laaker, and Reller 2021; Sears and Valentino 1997).

<sup>&</sup>lt;sup>11</sup>Given differences in physical and mental development, variation certainly exists across individuals. In a literature review, Delli Carpini (1989) find that scholars have defined the impressionable years as 14–25, 18–25, 17–25, 18–26, and 20–30.

<sup>&</sup>lt;sup>12</sup>The 'increasing persistence' and Bayesian learning models provide similar predictions.

Suppose immigration attitudes develop during young adulthood and rarely change after this period elapses. In that case, scholars need to characterize the development of immigration attitudes during this impressionable period. The following section outlines the logic for one potential condition: the economic environment during young adulthood.

# **Growing Up in a Recession**

In this section, I develop a theory to explain why historical economic conditions matter in forming immigration attitudes. Specifically, I delineate two mechanisms. First, economic turmoil increases labour market competition and is economically costly for young adults. Second, a recession typically causes a rise in anti-immigrant rhetoric that frames immigration as a broader cultural and economic threat to the country. Since young adults have limited political experiences, economic downturns define events in developing their core beliefs. In short, growing up during a recession affects how young adults think about immigration for the rest of their lives.

#### The Negative Consequences of Recessions for Youth Workers

Extensive literature in economics finds that recessions negatively affect wage and employment prospects for young adults.<sup>13</sup> For instance, unemployment among young workers in the European Union during the Euro crisis reached over 20 per cent on average, compared to just over 10 per cent for general unemployment (Eurostat, 2018). Moreover, young adults are particularly vulnerable to external shocks and labour market conditions because they have just gained independence and have few economic assets. Further, these individuals likely do not have full access to social insurance programmes such as unemployment benefits or job-search assistance because they don't have enough years in the workforce to qualify.

Recent studies find that young adults entering the labour market during a typical recession experience, on average, experience a 10 per cent decrease in annual earnings (approx.) (Von Wachter 2020). The effect varies extensively by education level. College graduates entering a depressed labour market typically face a 5 per cent reduction, while high school dropouts experience a decrease closer to 15 per cent. Research suggests that recessions affect initial wage earnings by increasing labour market constraints and competition, which causes unemployed young adults to search for less-skilled and lower-paying occupations (Huckfeldt 2022). Notably, the effects of recessions on wages only persist for five to ten years, which suggests that the long-term impact on income should not be driving the effects of a recession on contemporary immigration attitudes (Von Wachter 2020).

Recessions have negative consequences beyond objective economic indicators. Numerous scholars show that individuals perceive unemployment as one of the most traumatic events in their lives (Winkelmann and Winkelmann 1998). Helliwell (2003) finds that the mass public views unemployment as more traumatic than divorce in thirty countries. Moreover, these consequences tend to spill over into other aspects of individuals' lives, such as physical and mental health, and persist for some time (Von Wachter 2020).

A core explanation for immigration attitudes in the political economy literature is the economic threat immigration poses to natives. Previous studies contextualize this argument by skill level: low-skilled (high-skilled) workers oppose low-skilled (high-skilled) immigration because it increases labour market competition (Scheve and Slaughter 2001). A similar logic applies to young workers and economic downturns. Recessions create labour market constraints that increase competition for young workers, which causes them to search for less-skilled occupations with lower annual earnings. Furthermore, evidence suggests that immigration causes a

<sup>&</sup>lt;sup>13</sup>See Von Wachter (2020) for a review of this literature.

<sup>&</sup>lt;sup>14</sup>A typical recession is a 4 to 5 per cent increase in the unemployment rate.

larger wage decrease for young workers (Dustmann, Schönberg, and Stuhler 2017; Glitz 2012). The increased labour market competition and lower incomes cause young adults to adopt restrictive immigration attitudes out of self-interest. Notably, while the adverse effects that a recession has on wages and unemployment dissipate after about ten years, I argue that recessions have a lasting impact on immigration attitudes because young adults are developing their core political and economic beliefs during this period (Kustov, Laaker, and Reller 2021). Simply stated, young adults who grow up in a recession are more likely to develop anti-immigration attitudes initially out of economic interest; however, they do not update these attitudes when their labour market position improves.

#### The Political Narrative of Recessions

Direct economic self-interest is not the only reason why an economic shock during young adult-hood may cause an increase in anti-immigration attitudes. A consistent finding in the literature is that sociotropic factors drive attitudes toward immigration (Hainmueller and Hopkins 2014). Individuals evaluate immigration policies based on their perceived economic and cultural consequences for the country rather than their economic self-interest. I argue that recessions can still socialize young adults to oppose immigration by creating salient anti-immigrant narratives that connect the issue to economic competition and national identity concerns. This framing causes young adults, even those who do not experience wage decreases or unemployment, to perceive immigrants as out-group members harmful to the national economy and culture.

During recessions, politicians often scapegoat immigrants as the source of economic and social problems in the country and develop measures that limit their employment opportunities (Leitner 1995). For example, during the 2008 financial crisis, Italy's official statistics agency pointedly blamed immigrants for high unemployment. In Britain, two MPs suggested that Parliament restrict immigration due to rising unemployment, and several high-ranking government officials in Switzerland wanted businesses to give preferential treatment to native workers (Dancygier and Donnelly 2014).<sup>16</sup>

The media may also help to reinforce this anti-immigrant narrative during recessions. For instance, in Europe, media coverage of immigrants and immigration is often negative and selective (Eberl et al. 2018). In the United States, during the Great Depression, the recessions in the 1970s, and California's economic recession in the early 1990s, media coverage often exacerbated the scapegoating of Mexican immigrants (Williams 2008). While this anti-immigrant rhetoric may initially only focus on the economic issues surrounding immigration, it quickly transcends the economic realm. Previous research finds that financial crises give rise to xenophobic and ethnocentric parties across Europe (Funke, Schularick, and Trebesch 2016). Studies also show that economic downturns increase violence toward immigrants by weakening the social norms that usually constrain them (Falk, Kuhn, and Zweimüller 2011).

The political narrative during recessions plays a central role in attributing blame for economic and cultural problems and inciting public resentment toward minority groups. Research finds that elite cues and public discourse are critical in forming immigration attitudes (McLaren

<sup>&</sup>lt;sup>15</sup>Importantly, my argument does not presuppose changes to the supply of labour caused by immigration. Instead, the logic focuses on changes in the demand for labour caused by economic downturns and potential competition with migrants. As Pardos-Prado and Xena (2019) note, this approach is similar to political economy studies that treat social policy preferences as a function of expected risk and demands for protection in case of job loss or downward mobility.

<sup>&</sup>lt;sup>16</sup>Various other examples exist. To name a few – the US during the 1870s (Heald 1953), the early 1910s (Higham 1955), the early 1970s (Calavita 1984), and the 1990s (Calavita 1996); the UK during the late 1950s and late 1970s Thränhardt (1995); France during the mid-1970s (Dancygier 2010).

<sup>&</sup>lt;sup>17</sup>Previous evidence also suggests that the media has a vital role in the socialization of young adults (Atkin and Gantz 1978; Ayoub and Garretson 2017).

<sup>&</sup>lt;sup>18</sup>See also Dancygier (2010).

2001). Further, studies across multiple disciplines demonstrate that political actors regularly manipulate economic hardships to encourage intergroup conflict.<sup>19</sup> The underlying logic throughout this literature is that increased competition over scarce resources (jobs, identity) causes greater animosity toward out-groups, even for those individuals who are not economically affected.<sup>20</sup> Importantly, even when political rhetoric targets other minority groups during a recession, it will likely affect broader immigration attitudes. As Sniderman et al. (2000) note, prejudice is blind and reflects animosity toward all out-groups, not just one particular minority group (Kinder and Kam 2010).<sup>21</sup>

My argument is that recessions drastically increase the flow of negative information about migration, immigrants, and other minorities (Sears and Valentino 1997). These anti-immigrant narratives socialize young adults to oppose immigration by connecting the issue to broader economic and cultural threats. Under this view, economic downturns can cause a sociotropic response to immigration rather than one motivated by individual economic self-interest. This logic is consistent with evidence that shows perceived national economic and cultural threats can mobilize a broader coalition against immigration (Sniderman, Hagendoorn, and Prior 2004). I argue that this anti-immigrant framing during recessions is particularly consequential for young adults because they are developing their core economic and political beliefs. In other words, this political rhetoric affects how young adults conceptualize and think about immigration issues. This suggests that growing up in a recession should cause a lasting increase in anti-immigration attitudes.

As a final note on this matter, while the above discussion focuses on the separate causal channels of each mechanism, it is important to emphasize that an interaction effect may drive the impact of an economic shock on immigration attitudes. That is, young adults negatively affected by the economic downturn may be more receptive to anti-immigrant rhetoric than others. Alternatively, young adults harmed by a recession may not be able to easily connect immigration and the tightening labour market without political actors directly blaming immigrants or other minorities (Green, Glaser, and Rich 1998).

### **Empirical Implications and Hypotheses**

Immigration attitudes that develop during the impressionable years rarely change afterwards (Kustov, Laaker, and Reller 2021) – the economic shocks experienced during this period cause a lasting increase in anti-immigration attitudes. I delineated two mechanisms to explain this effect. First, recessions and immigration are economically costly for young workers and increase labour market competition. Second, anti-immigration narratives typically emerge during economic turmoil that scapegoats immigrant populations and connects the issue to broader economic and cultural threats. Recessions provide young adults with salient economic and political frames that emphasize the issue's central and peripheral features and cause an increase in anti-immigration attitudes. Even when young adults recover, and conditions improve, the effect persists.

If recessions during young adulthood are consequential for the development of immigration attitudes, then cohort effects should emerge. The socialization of cohorts that grow up during poor economic conditions should differ from other cohorts (Sears and Valentino 1997). Further, one should expect that the severity and the frequency of recessions matter. Individuals who experience poor economic conditions more frequently during this

<sup>&</sup>lt;sup>19</sup>See Calavita (1996); Dancygier (2010); Horowitz (1985); Olzak (1992); Saxton (1971); Wade (1987).

<sup>&</sup>lt;sup>20</sup>See Hewstone et al. (2002) for review of intergroup bias and in-group favouritism.

<sup>&</sup>lt;sup>21</sup>Similarly, while the sources and types of immigrants have substantially changed over time, the recessions likely condition how individuals think about broader immigration issues. This is consistent with evidence that suggests attitudes toward different immigrant groups/issues are highly correlated (Kustov, Laaker, and Reller 2021).

impressionable period are more likely to be exposed to anti-immigrant rhetoric and suffer a worse personal economic outcome. This discussion leads to the following hypotheses:

Hypothesis 1: Individuals who experience an economic shock during their impressionable years are more likely to hold anti-immigration attitudes.

Hypothesis 2: Individuals who experience poor economic conditions more frequently during their impressionable years are more likely to hold anti-immigration attitudes.

Finally, this argument is consistent with research findings which show that economic shocks outside the impressionable years affect political attitudes (Margalit 2013). However, these shocks do not have an enduring effect (Margalit 2019). In other words, a shock at any point may increase anti-immigration attitudes, but the effect does not persist and individuals quickly revert to their long-term equilibrium.

# Research Design

To test whether macroeconomic conditions during the impressionable years affect the formation of immigration attitudes, I use cross-sectional time-series data from the 2002–2017 European Social Survey (ESS).<sup>22</sup> The ESS allows for sufficient macroeconomic variation to gain leverage on the question of interest and reduces regional variation differences by focusing only on European countries. The entire sample includes twenty-three countries: Austria, Belgium, Bulgaria, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Netherlands, Norway, Portugal, Russia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.<sup>23</sup>

While many studies of immigration attitudes use single-year or single-country surveys, this approach is not practical when studying how beliefs form. This is because of the potential for omitted variable bias. When using only cross-sectional or cross-time data, it is challenging to identify the effect of macroeconomic shocks because cohorts tend to share many similar observable and unobservable characteristics. As Giuliano and Spilimbergo (2013) explain, exploiting regional and time variation is essential to eliminate confounding explanations. Further, this approach can identify the effect of a particular type of shock across time and cohorts, which is rare in previous political socialization research.

#### Dependent Variable

I derive the dependent variable from the six survey items in Table 1. I follow Cavaillé and Marshall (2018) to create the dependent variable for the main analysis. Questions 1 to 3 elicit beliefs about the effect of immigrants on the country's economy, culture, and quality of life, while questions 4 to 6 elicit preferences about the level and type of immigration. As Cavaillé and Marshall (2018) note, simply using the raw responses is problematic for two reasons. First, response categories have different interpretations across time and countries, which introduces measurement errors. Second, preferences for different types of immigrants cannot be examined separately because individuals express opposition differently, depending on whether they demand limitations based on income, ethnicity, or both. Since the salience of each type may differ across countries and time, it is essential to distinguish between support for unconditional restrictions for any type of immigrant and wanting to restrict entry for at least one type.

 $<sup>^{22}\</sup>mbox{\ensuremath{\text{I}}}$  only use respondents who are born in the country and are citizens.

<sup>&</sup>lt;sup>23</sup>For the primary analysis, I use all countries included in the ESS and have GDP data available, with a few exceptions. Due to limitations in GDP data, I exclude Ireland, Slovakia, Ukraine, Lithuania, Poland, and Turkey.

Table 1. Immigration survey-items

Item	Question wording	Response categories
1	Is it generally bad or good for [country]s economy that people come to live here from other countries?	Bad (0) - Good (10)
2	Is [country]s cultural life generally undermined or enriched by people coming to live here from other countries?	Undermined (0) – Enriched (10)
3	Is [country] made a worse or a better place to live by people coming to live here from other countries?	Worse (0) – Better (10)
4	To what extent do you think [country] should allow people of the same race or ethnic group as most [country] people to come and live here?	Allow Many/Some/Few/ None
5	How about people of a different race or ethnic group from most [country] people?	Allow Many/Some/Few/ None
6	How about people from the poorer countries outside Europe?	Allow Many/Some/Few/ None

To address these issues, I recode the six survey items as five binary variables and then aggregate across the variables to create an additive scale that ranges from 0 [min. anti-immigration] to 5 [max. anti-immigration]. The dependent variable captures an individual's latent anti-immigration attitude. Cronbach's  $\alpha$  equals 0.78, which indicates that the measures are tapping into the same underlying latent attitude. For an in-depth discussion on the coding of the dependent variable, see the Appendix. Finally, as a robustness check, I test alternative definitions of anti-immigration attitudes. Again, the results are substantively similar.

#### Independent Variable

The independent variable of interest is 'economic shock', which measures whether respondents experienced an economic crisis during their impressionable years. To identify economic shocks, I primarily rely on data from Barro and Ursúa (2008), who documented historical Gross Domestic Product per Capita (GDPPC) growth rates for several countries from the 1800s. Unfortunately, the dataset does not include several Eastern European countries. Therefore, I use data from Bolt et al. (2018) for these. Unfortunately, the data is still limited in its historical nature. Thus, given these constraints, I present the results using all countries and the restricted sample with complete GDPPC data. For the main analysis, I define an economic shock as when the contraction in GDPPC for a single year exceeds 4 per cent. While it is difficult to predict precisely when an economic downturn should have an effect, this definition provides a good variation across countries and cohorts. <sup>26</sup>

An important question is how to define the impressionable years. As noted above, no universal agreement exists on the ages included in this period, and the previous literature often suggests conflicting estimates. Further, the specific definition of impressionable years is often empirically derived. To some, and rightfully so, this process can seem tautological since the age range is not theoretically motivated. The impressionable years become a moving target. For the main analysis, I define impressionable years as being between the ages of 18 and 25. I select this age range because the theory suggests that the economic threat from immigrants may be an underlying mechanism, which indicates that individuals at least need to be able to participate in the labour market. Therefore, 18 is an appropriate age for the start of this impressionable period. Even if individuals do not enter the labour market at this time, it is still likely that the economic threat

<sup>&</sup>lt;sup>24</sup>Questions 1 to 3 are recoded as separate indicator variables equal to one if the response is between 0 and 4. I recode questions 4 to 6 as two indicator variables that capture whether individuals oppose at least one type of immigrant.

<sup>&</sup>lt;sup>25</sup>Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, and Slovenia.

<sup>&</sup>lt;sup>26</sup>This threshold is also the average decline in GDP per capita for a single year. Further, while any threshold is arbitrary, I test several alternative definitions to ensure the robustness of the results.

will be salient, given that they will join the labour force in the near future. Therefore, I select 25 as the cutoff, given that the literature usually does not predict attitude change beyond this age (Alwin and Krosnick 1991). Of course, given mental and physical development differences, this impressionable period is not definitive across individuals. Thus, as an additional robustness check, I test alternative definitions for impressionable years.

I construct two independent variables. The first equals one if the respondent experienced an economic shock between the ages of 18 and 25, and zero otherwise. About 13 per cent of the respondents experienced a recession between the ages of 18 and 25. The second variable equals the  $\log(x+1)$  transformation of the number of years between the ages of 18 and 25 when the respondent experiences an economic shock. Having a variable that measures the number of years individuals experience a recession provides leverage for examining whether the duration of the economic turmoil matters.

Finally, for the main analysis, I only included respondents who were at least 26 years old at the time of the survey. This is for two reasons. First, since the impressionable period is defined between the ages of 18 and 25, a survey conducted during a recession will capture the effect of the current economic conditions rather than the lasting effect of an economic shock. Thus, excluding individuals still in impressionable years is necessary to ensure that current economic conditions do not cause the estimated effect. Second, individuals in their impressionable years will have substantial variations in their political attitudes because they consistently update their beliefs in response to contextual factors (Kustov, Laaker, and Reller 2021). This random variation increases the uncertainty in the estimated effects. Importantly, the results hold even when including all respondents (see the Appendix).

#### **Control Variables**

To identify the causal effect of an economic shock during the impressionable years on immigration attitudes, the analysis should only include variables that are not a consequence of the shock itself. Controlling for variables that influence the impact of an economic shock provide good controls, but variables caused by the shock are bad controls because they induce post-treatment bias (Angrist and Pischke 2008).<sup>27</sup> Therefore, the main analysis estimates the average treatment effect (ATE). Since historical economic conditions may also influence one's education, income, or ideology, and these variables may also affect immigration attitudes, the effect may include both direct and indirect effects. To shed light on the treatment's average controlled direct effect (ACDE), which is the direct effect of a shock when education, income, or ideology are the same fixed value for all units, I use sequential g-estimation to block suspected indirect causal pathways. I discuss the underlying motivation and assumptions of this method below.

The baseline specification in the main analysis includes several control variables to account for potential confounding explanations. First, I control the respondent's gender, race, and age. I also include a binary variable that measures whether the respondent completed at least twelve years of education. Second, in addition to the education and citizenship of the respondents' parents, I controlled for the parents' occupation when the respondent was 14 years old. Specifically, I measure whether each parent held a high-skilled, moderately skilled, or low-skilled occupation. These controls are particularly useful because they help account for the specific economic context of respondents preceding their impressionable years. Third, I include cohort, country, and survey wave fixed effects to account for unobserved differences across cohorts, countries, and survey waves.

Finally, since the identification strategy depends on the fact that cohorts in different countries experienced different economic conditions over the years, a potential concern is the existence of

 $<sup>^{27}</sup>$ Controlling for post-treatment variables can either reduce or inflate the estimated effect.

<sup>&</sup>lt;sup>28</sup>See the Appendix for details of these variables.

time-varying regional confounders; that is, regional time-varying characteristics that affect economic downturns and the development of attitudes toward immigration. To alleviate this concern, the baseline specification includes measures for the population's average education level and educational equality. These controls are important since the previous literature demonstrates that the effect of a recession on young adults varies by education (Von Wachter 2020). As a robustness check, I also estimate models that include additional regional time-varying controls in the Appendix.

# The Effect of Growing up in a Recession

As a preliminary test, Fig. 1 shows the mean of the dependent variable by treatment for the full and restricted sample. Again, the pattern is consistent with the theory: those who experienced an economic shock during young adulthood are, on average, more likely to hold anti-immigration attitudes. For the full sample, the mean of the dependent variable for respondents who experienced an economic shock between the ages of 18 and 25 is 1.99, and 1.67 for those who did not. This suggests that a shock during this period increases anti-immigration attitudes by 6.4 percentage points, which is about a 0.19 standard deviation change in the anti-immigration index. In the restricted sample, the mean level of anti-immigration attitudes for individuals who experienced a shock is 1.89, and 1.62 for those who did not, which implies a 5.4 percentage point increase.

For the main analysis, I estimate ordinary least squares regressions with survey weights and standard errors clustered at the country-cohort level. Specifically, I estimate the following equation:

Immigration Index<sub>i,j,k,y</sub> = 
$$\beta_0 + \beta_1 A_{i,k,j,y} + \Pi X_{i,j,k,y} + \delta_k + \eta_i + \gamma_y + \varepsilon_{i,j,k,y}$$
 (1)

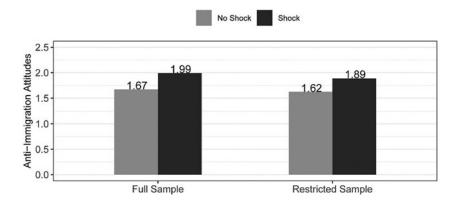
where A is the treatment; X is the vector of pre-treatment variables (parental citizenship, parental education, parental occupations, education, gender, minority, age, age squared, average country education, and educational quality);  $\delta_k$  are fixed effects for the country;  $\eta_j$  are fixed effects for birth cohort;  $\gamma_y$  are fixed effects for survey-wave;  $\varepsilon_{i,j,k,y}$  is the error term; i, k, j, and y index the individual, country, birth cohort, and survey-wave; and  $\beta_0$ ,  $\beta_1$ , and  $\Pi$  are parameters to be estimated.

Table 2 reports the results from the main analysis. I exclude the results for the controls for brevity, but they have the expected effects (see Fig. A2). Rows (1) and (3) report the effect of growing up in a recession for the restricted and full samples, respectively. The estimated coefficients for economic shock are positive and statistically significant (p < 0.01). In the restricted (full) sample, the estimated effect equals 0.118 (0.082), which is a 2.4 (1.6) percentage point increase (approx.) in anti-immigration attitudes. This represents a 0.049–0.073 standard deviation change in the immigration index (approx.).<sup>31</sup>

<sup>&</sup>lt;sup>29</sup>Average education level is the average years of education in the total population aged 15 years and older. Educational equality measures the extent that high quality basic education is guaranteed to all.

<sup>&</sup>lt;sup>30</sup>I examine the aggregate differences rather than differences across individual countries because no variation exists in 'economic shock' within a cohort at the country level. Since cohorts share a multitude of observable and unobservable characteristics, numerous alternative explanations exist for the results of any individual country. I gain leverage on the question of interest through the variation in economic conditions across countries and cohorts. Therefore, one should examine the overall difference.

<sup>&</sup>lt;sup>31</sup>The estimated effects are similar to those found in Acharya, Blackwell, and Sen (2016b); Goldman and Hopkins (2020), who take a similar historical approach to studying racial attitudes. Further, to provide a comparison between the effect of historical and current economic conditions, I estimate the effect of change in GDP capita a year before the survey (Table A14). The results suggest that the effect of an economic shock during the impressionable years is 3 times as larger as a two-standard deviation change in current GDPPC.



**Figure 1.** Mean of the dependent variable by whether the respondent experienced an economic shock between the ages of 18 and 25. The dependent variable has a range from 0 to 5. The restricted sample only includes countries that have complete economic data.

Table 2. Effect of an economic shock during the impressionable years (18-25) on immigration attitudes

	Estimate	95% C.I.	N	Sample
Economic shock	0.118	(0.073-0.164)	115,184	Restricted
Economic shock count	0.107	(0.054-0.160)	115,184	Restricted
Economic shock	0.082	(0.040-0.123)	125,515	Full
Economic shock count	0.074	(0.028-0.119)	125,515	Full

Standard errors clustered at the country-cohort level. There are 1,346 (1,459) country-cohort groups in the restricted (full) sample. Models include pre-treatment controls, cohort fixed effects, survey wave fixed effects, and country fixed effects.

In rows (2) and (4), I estimate models using the number of years a respondent experiences an economic shock during the impressionable years (log transformation). The results prove that the frequency of economic shocks increases its effect on anti-immigration attitudes. For instance, in the restricted sample, experiencing three years of poor economic conditions between the ages of 18 and 25 causes about a 3.1 percentage point increase in anti-immigration attitudes. The effect is similar when using the full sample.

To test whether the effect of an economic shock during the impressionable years persists throughout one's life, I estimate models that include an interaction term between the economic shock and the respondent's age. The results are reported in Fig. A3 of the Appendix. The evidence suggests that experiencing a recession during the impressionable years has an enduring effect on immigration attitudes. In other words, the effect does not fade over time. Overall, these results provide strong support for the main hypotheses: growing up during a recession tends to cause a persistent increase in anti-immigration attitudes. Further, the effect increases as respondents experience longer periods of economic turmoil.

#### Other Age Ranges

One might wonder whether recessions at any age have a similar effect on immigration attitudes. To evaluate this possibility, I estimate models using alternative age ranges (2–9, 10–17, 26–33, 34–41, 42–49, and 50–57). Each age range has an interval of eight, which matches the range used in the main analysis. Figure 2 presents the results. The left (right) panel displays the estimated effects when using the dichotomous (count) independent variable. I include the results from the main analysis for easy comparison.<sup>32</sup>

<sup>&</sup>lt;sup>32</sup>For each age range, I only include respondents that have some probability of receiving the specific treatment (that is, those that are old enough).

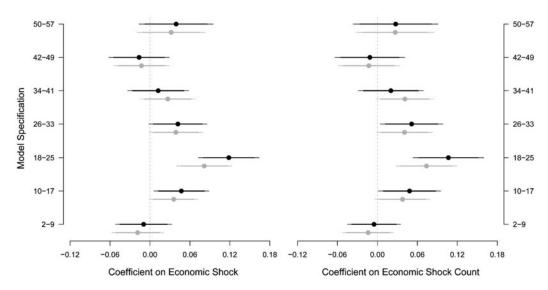


Figure 2. Effect of economic shocks on immigration attitudes for other age ranges and the impressionable years. Horizontal lines are 95 and 90 per cent confidence intervals with standard errors clustered at the country-cohort level. Estimates in black (grey) are based on the restricted (full) sample. Pre-treatment covariates, cohort fixed effects, survey wave fixed effects, and country fixed effects are included in all models.

The results demonstrate a clear empirical pattern: recessions outside of the impressionable years have little to no effect on the development of immigration attitudes. While there is some evidence that the impressionable period may be longer (10–17 and 26–33), the estimated effects are smaller and not always statistically significant. This finding is consistent with the political socialization literature that identifies young adulthood as a critical period for developing core economic and political beliefs (Alwin and Krosnick 1991; Kustov, Laaker, and Reller 2021). Overall, Fig. 2 provides persuasive evidence that only recessions during the impressionable years have a meaningful effect on anti-immigration attitudes.<sup>33</sup>

#### **Robustness Checks**

In this section, I demonstrate that the main results are robust to various alternative specifications. First, I estimate models using different measures for an economic shock. Specifically, my argument implies that more severe economic contractions during the impressionable years should cause a larger increase in anti-immigration attitudes. To test this effect, I estimate models when setting the yearly threshold at 6, 5, 3, 2, and 1 per cent, respectively. The results are reported in Fig. 3. I include the results from the main analysis for easy comparison. For brevity, I focus on the dichotomous independent variable, but the results for the count variable are similar (see Fig. A5 in the Appendix). The evidence suggests that the severity of an economic shock matters. As the contraction threshold is lowered, the effect of an economic shock during the impressionable years decreases. This aligns with the expectation that the worse the shock, the greater its effect on immigration attitudes.

Next, I estimate models that use continuous measures to directly capture the severity of the economic conditions during the respondents' impressionable years. Specifically, conditional on

<sup>&</sup>lt;sup>33</sup>In the Appendix, I also directly test the relative importance of experiencing an economic shock during the impressionable years compared to other periods. To do so, I estimate models that include the main independent variable and a binary measure that equals 1 if the respondent experienced an economic shock outside of the impressionable years (Fig. A4). The results are substantively similar.

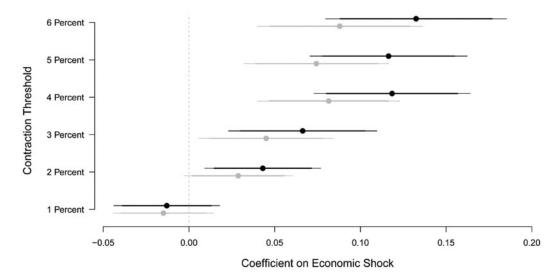


Figure 3. Effect of an economic shock during the impressionable years (18–25) on immigration attitudes using alternative contraction thresholds. Horizontal lines are 95 and 90 per cent confidence intervals with standard errors clustered at the country-cohort level. Estimates in black (grey) are based on the restricted (full) sample. Pre-treatment covariates, cohort fixed effects, survey wave fixed effects, and country fixed effects are included in all models.

a decrease in GDP per capita, I create a variable that equals the sum of the yearly contractions between the ages of 18 and 25. Simply stated, I sum the GDPPC contraction for every year a respondent experiences a decline between the ages of 18 and 25. I then rescale this variable so that higher values indicate worse economic conditions. Rows (1) and (2) in Table 3 report the results. The estimated effects are in the right direction but smaller than those in the main analysis. Finally, Rows (3) and (4) in Table 3 report the results when using data on unemployment. It is important to emphasize that historical unemployment data is incomplete and compiled from various sources that rely on very different methods. For example, data before 1960 are typically estimates for specific sectors or subgroups in the country. Nonetheless, the estimated effects are positive and statistically significant (p < 0.05). For instance, in the full sample, a two standard deviation increase in the unemployment measure causes a 1.6 percentage point (approx.) increase in anti-immigration attitudes. These results provide evidence that the main analysis is robust to alternative definitions of an economic shock and that the severity of historical economic conditions matters, which is consistent with the theoretical argument.

As a second robustness check, I demonstrate that the results are robust when using alternative datasets. I analyze data from the European Value Study (EVS) and the American National Election Studies (ANES) in the Appendix, Sections B and C. Broadly, the results are substantively similar to the main analysis. Moreover, the analysis of the ANES data demonstrates that the

Table 3. Effect of an economic shock during the impressionable years (18–25) on immigration attitudes using continuous measures of economic shocks

	Estimate	95% C.I.	N	Sample
Economic shock cont.	0.020	(0.000-0.040)	115,184	Restricted
Economic shock cont.	0.012	(-0.006-0.030)	125,515	Full
Unemployment rate	0.045	(0.007–0.084)	88,694	Restricted
Unemployment rate	0.054	(0.016-0.092)	93,905	Full

Standard errors clustered at the country-cohort level. Models include pre-treatment controls, cohort fixed effects, survey wave fixed effects, and country fixed effects.

theoretical argument is supported outside of Europe and when using different levels of economic variation.

Finally, in the Appendix, I perform a variety of additional robustness checks. First, since economic shocks only vary across cohorts and countries, I aggregate individual responses to the country-cohort level and estimate models with weighted least squares regression with the within-country-cohort sample size as weights. While Green and Vavreck (2008) show that this approach provides more accurate variance estimates, it is not preferred to the main analysis because it prevents the inclusion of individual-level controls. Second, I estimate models while excluding each country to ensure that no single country drives the results. Third, I estimate models while excluding each survey wave. Fourth, I test alternative definitions of impressionable years, anti-immigration attitudes, and additional measures of economic shocks. Finally, I estimate models that include additional regional time-varying controls. Across these robustness checks, I continue to find evidence that growing up in a recession causes an increase in anti-immigration attitudes.

#### Labour Market Competition or Anti-Immigrant Narratives?

I argued that the above patterns are likely caused by increased labour market competition and the salient anti-immigrant narratives that typically emerge during recessions. While plausible, these mechanisms are hard to demonstrate because direct tests would require highly detailed microlevel data, which are not available. Therefore, I pursue an alternative strategy to assess the plausibility of my argument. Specifically, in this section, I derive and examine several other empirical implications that differentiate their expected effects. While the following tests have limitations, they provide suggestive evidence of why recessions during impressionable years affect anti-immigration attitudes.

First, I test the proposed mechanisms by analyzing the effect of an economic shock on the different dimensions of immigration attitudes included in the ESS. For example, if recessions affect immigration attitudes by increasing labour market competition, the effect should be more pronounced on the economic dimensions of immigration compared to racial or cultural components. Alternatively, if recessions increase xenophobic rhetoric in the country and cause a more sociotropic response, the effect should be larger on the cultural and racial dimensions of immigration. This implication is consistent, with research demonstrating that perceived cultural threats outweigh economic threats (Sniderman, Hagendoorn, and Prior 2004). Table A8 in the Appendix reports the results when testing each survey item separately.

The results provide evidence consistent with the idea that recessions cause a broader xenophobic response in the population. For example, while there is some evidence that an economic shock during young adulthood causes individuals to believe that immigrants are bad for the economy (question 1 from Table 1), the estimated effects are relatively small and not always significant. However, there is strong evidence that economic turmoil during this impressionable period causes a significant increase in the belief that immigration undermines cultural life (question 2).

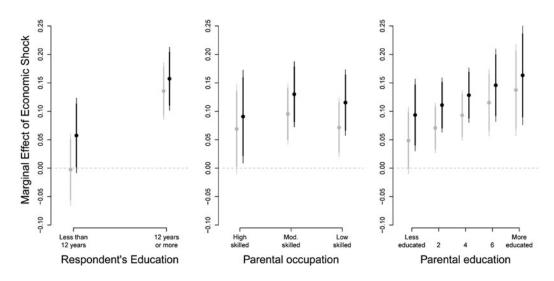
Further, consider questions 4 and 5, where the only difference is the race and ethnicity of the immigrant. Across the models, an economic shock felt during young adulthood has a qualitatively larger (smaller) effect on restricting immigrants of a different (similar) race. This result suggests that recessions cause individuals to evaluate immigration policies through a racial and ethnic lens. I investigate these differences further by estimating the effect of an economic shock during the impressionable years on racialized immigration attitudes, which equals 1 if the respondents held more restrictive preferences for immigrants of a different race. The results are reported in Fig. A6. The evidence indicates that growing up during a recession causes individuals to hold more (less) restrictive preferences toward immigrants of different (similar) racial and ethnic groups. Specifically, for the restricted sample, an economic shock causes a 1.7 percentage point increase in the likelihood that the respondents will hold racialized immigration attitudes.

These results suggest that recessions create an 'us' versus 'them' dichotomy and stoke ethnic and racial tensions, which is consistent with the idea that economic turmoil creates a political climate that ostracizes immigrants and other minority groups.

Second, I test the proposed mechanisms by leveraging variation in how an economic shock affects specific individuals within the country. Some individuals are more likely to be negatively affected by an economic downturn than others. A consistent finding in the economics literature is that young adults from lower socioeconomic backgrounds experience worse economic consequences during recessions (Von Wachter 2020). Families with high socioeconomic status can provide a form of insurance mechanism that mitigates the negative effects of a recession and unemployment. For instance, recent evidence finds that college students from privileged backgrounds are more likely to postpone graduation during recessions to avoid entering a depressed labour market (Finamor 2022). While young adults from advantaged backgrounds may face similar wage decreases, they are more likely to be insulated from the subsequent negative effects. Thus, if a recession occurs during the impressionable years and affects immigration attitudes by increasing labour market constraints and competition, the effect should be more significant for individuals from a lower socioeconomic background.

I test this implication using three measures of socioeconomic status. The first measure uses the respondent's education level, which equals 1 if they completed twelve or more years of schooling and 0 if they did not. The second measure uses the skill level of the father's occupation when the respondent was 14 years old. Specifically, whether the respondent's father held a high, moderate, or low-skilled job. The final measure uses parental education, which ranges from 0 (least educated) to 8 (most educated). If the labour market mechanism drives the main results, the effect of an economic shock during young adulthood should be larger for respondents who have lower levels of education, whose fathers have a less-skilled occupation, and whose parents obtained less education. For brevity, I focus on the dichotomous independent variable. Figure 4 displays the results.

The evidence provides limited support for the labour market mechanism. Instead, the results suggest that an economic shock during young adulthood mobilizes a larger segment of the



**Figure 4.** The marginal effect of an economic shock during the impressionable years (18–25) on immigration attitudes at different levels of respondent education, parental occupation, and parental education. Lines are 95 and 90 per cent confidence intervals with standard errors clustered at the country-cohort level. Models include pre-treatment controls, cohort fixed effects, survey wave fixed effects, and country fixed effects. Estimates in black (grey) are based on the restricted (full) sample.

population to oppose immigration. These findings are consistent with a broader sociotropic response to economic downturns and the anti-immigrant narrative mechanism. The left panel in Fig. 4 displays the estimated marginal effect of growing up in a recession by respondent education. It shows that economic shocks have a larger effect on individuals who completed at least twelve years of schooling. This result is the opposite of what the labour market mechanism predicts. While there are several potential explanations for this finding, the clear upshot is that economic shocks during young adulthood mobilize a broader opposition to immigration from segments of the population that are typically supportive.<sup>34</sup>

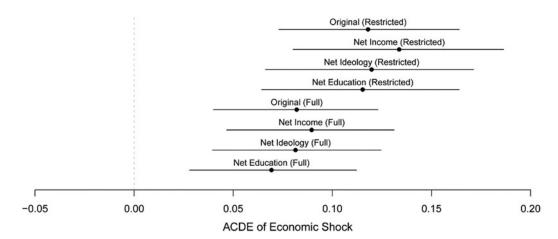
The centre panel in Fig. 4 demonstrates that the effect of an economic shock does not vary across the skill level of parental occupations. Specifically, a recession similarly affects respondents whose fathers were employed in high, moderate, and low-skilled occupations when they were 14 years old. The right panel in Fig. 4 shows the marginal effect of experiencing an economic shock during young adulthood at different parental education levels. While the results illustrate a slight positive relationship, the estimated effects are imprecise and insignificant (p > 0.10). Importantly, these results do not necessarily exclude labour market competition as a partial explanation; however, it suggests that a segment of the population is motivated by sociotropic concerns to oppose immigration.

When taken together, the evidence provides limited support for the labour market mechanism. While self-interest may play a partial role in the recession's effect on immigration attitudes, it will likely be minimal. Instead, the evidence is consistent with the anti-immigrant narrative mechanism. Specifically, the results indicate that an economic shock during young adulthood has a more pronounced effect on the cultural and racial dimensions of immigration rather than its potential economic consequences. Individuals who grow up in a recession are more likely to hold more (less) restrictive preferences toward immigrants of different (similar) ethnic and racial groups. This finding is consistent with recessions, creating salient narratives that describe immigration as a threat to the country's national identity and culture. Additionally, the evidence demonstrates that an economic shock during young adulthood has a similar – and in some cases a larger – effect on respondents likely to be insulated from the most severe economic consequences. This result is consistent with recessions that cause a broader sociotropic response and mobilize a larger segment of the population to oppose immigration (Sniderman, Hagendoorn, and Prior 2004).

#### **Testing Alternative Mechanisms**

The effect of an economic shock during young adulthood on immigration attitudes may operate indirectly through a mechanism identified in the previous literature. Specifically, economic conditions during young adulthood may affect one's current income, ideology, or education, which all are strongly linked to immigration attitudes. In other words, rather than an economic shock directly socializing young adults to oppose immigration, it may cause individuals to obtain less education, hold a right-leaning ideology, or earn lower incomes. Controlling for these variables in the main analysis likely induces post-treatment bias, which can either reduce or inflate the estimate (Rosenbaum 1984). Further, mediation analysis would violate the no intermediate confounders assumption. To test whether the effect of an economic shock operates indirectly through its effect on income, ideology, or education, I use sequential g-estimation developed in biostatistics by Vansteelandt (2009), introduced to political science literature by Acharya, Blackwell, and Sen (2016a).

<sup>&</sup>lt;sup>34</sup>The result could be driven by ceiling effects. Alternatively, since education is strongly associated with interest in the news and politics (Verba, Nie, and Kim 1987), educated individuals are more likely to be exposed to the anti-immigrant narratives that typically occur during recessions. Relatedly, since less educated individuals are often the core opponents of immigration, the anti-immigrant rhetoric that emerges during recessions could be targeted toward educated individuals to mobilize broader opposition to immigration. Moreover, this result is consistent with evidence on economic shocks and redistribution preferences for members of Congress in the US (Carreri and Teso 2023).



**Figure 5.** The effect of an economic shock during the impressionable years on immigration attitudes net current income, ideology, and education. Lines are 95 per cent confidence intervals from 1,000 bootstrapped replications – original estimates from Table 2.

This two-step estimator calculates the average controlled direct effect (ACDE) of an economic shock during young adulthood on immigration attitudes, which is the effect of the shock if income, ideology, or education were fixed at a particular level.<sup>35</sup> Sequential g-estimation demediates the dependent variable to exclude the confounding effect of the potential mediator. A non-zero ACDE would suggest that an economic shock does not operate exclusively through its indirect effect on income, education, or ideology. Figure 5 presents the results of the sequential g-estimation.<sup>36</sup> I have included the main results for easy comparison. Standard errors are corrected to account for the two-step process of the estimator. When income, ideology, and education are demediated, the ACDE is statistically significant and similar to the main analysis. Thus, the results suggest that an economic shock does not affect immigration attitudes via its effect on the respondent's income, education, or ideology.

#### Conclusion

How do recessions affect immigration attitudes? The logic of why recessions cause an increase in anti-immigration attitudes is compelling; however, existing empirical evidence only provides lack-lustre support. In this article, I reconciled the contradictory results in previous studies by drawing on the political socialization literature. Specifically, I argued that a key determinant of immigration attitudes is an individual's historical economic environment. I developed a theory of how growing up during a recession affects the socialization of young adults and causes a lasting increase in anti-immigration attitudes. I delineated two mechanisms to explain this effect. First, recessions increase labour market competition and are economically costly for young adults. Second, economic downturns typically cause a rise in anti-immigrant rhetoric that frames immigration as a broader cultural and economic threat to the country. Since young adults have limited political experiences, economic downturns define events in developing their core beliefs. In short, growing up during a recession affects how young adults think about immigration for the rest of their lives.

<sup>&</sup>lt;sup>35</sup>The ATE is a combination of the ACDE, an indirect effect of the mediator, and an interaction term. For unbiased estimates of the ACDE, a sequential unconfoundedness assumption must hold, which consists of two 'no omitted variables' assumptions.

<sup>&</sup>lt;sup>36</sup>*Income* has a range from 1 (bottom ten per cent) to 10 (top ten per cent). In 2,008, the ESS introduced a new method to measure household income. I follow the procedure in Deeming and Jones (2015) to merge the two methods. *Education* measures the respondents' years of schooling. *Ideology* is measured from zero (left) to ten. I include union membership, type of city, income, education, and ideology as intermediate confounders.

I found evidence consistent with the theoretical argument using survey data from the ESS. First, an economic shock during the impressionable years causes a lasting increase in anti-immigration attitudes, and this relationship is not found in other age ranges. Second, I provided evidence that more severe economic contractions cause a larger increase in anti-immigration attitudes. Third, I found suggestive evidence that recessions have a larger effect on the ethnic and cultural dimensions of immigration and cause individuals to adopt racialized immigration preferences. Further, I showed that historical economic conditions cause a more sociotropic response in the population that mobilizes a broader opposition to immigration. These findings are consistent with the idea that recessions create salient anti-immigrant narratives that connect the issue to broader cultural threats. Finally, I demonstrated that the effect of an economic shock on immigration attitudes does not operate through an indirect effect on income, ideology, or education.

The findings in this article have several important implications for future research. First, the results empirically support the proposition that immigration attitudes likely develop when individuals are young adults (Kustov, Laaker, and Reller 2021). Thus, scholars must investigate other socialization channels that might affect the development of immigration attitudes. While this article provides evidence of the importance of the economic environment, other conditions may matter. For example, while recent evidence suggests that the refugee crisis did not affect public attitudes toward immigration (Mader and Schoen 2019), it is likely that it significantly impacted the socialization of young adults.

Second, the results suggest that historical economic conditions may have had a long-term impact on immigration politics. Specifically, I provided tentative evidence that recessions during young adulthood affect the development of immigration attitudes for large segments of the population. Consequently, as these cohorts age, their influence over policy will increase, which indicates that the effect of an economic shock can persist for decades.

Finally, this article sheds light on the broader consequences of growing up in a recession. Specifically, recent research demonstrates that economic shocks during young adulthood cause individuals to favour redistribution and support policies that benefit the poor (Giuliano and Spilimbergo 2013). My findings provide important scope conditions and offer additional insights into the potential underlying mechanisms. Specifically, economic shocks during the impressionable years will likely only increase support for redistribution along ethnic or parochial lines.<sup>37</sup> By focusing on ethnic competition over limited resources and potential threats to national identity, the political narratives that emerge during economic turmoil cause young adults to develop racial preferences over redistribution. This idea is consistent with the recent rise of populist parties that embrace anti-immigration policies and welfare chauvinism.

Overall, historical experiences likely matter and understanding how an individual's past influences current beliefs about immigrants is critical to explain the politics of immigration. The results suggest that policymakers need to be aware of the lasting implications that recessions may have on public opinion toward immigration. This is particularly important when considering the lasting political consequences of the 2008 recession.

Supplementary material. The supplementary material for this article can be found at https://doi.org/10.1017/S000712342300011X.

Data availability statement. Replication Data for this article can be found in Harvard Dataverse at: https://doi.org/10.7910/DVN/XGRETE.

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<sup>&</sup>lt;sup>37</sup>See Kustov (2021) for a discussion of parochial altruism, immigration, and redistribution.

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