


A Panel Study of Attitudes toward Ethnic Minorities and the Role of Changes in Individuals' Economic Situations

Inge Hendriks ^{1*}, Marcel Lubbers², and Peer Scheepers¹

¹Department of Sociology, Radboud University Nijmegen, Nijmegen, The Netherlands

²ERCOMER, Department of Interdisciplinary Social Science, Utrecht University, Utrecht, The Netherlands

Abstract

This study applies the dynamic perspective of realistic conflict theory to assess whether and the extent that individuals' negative attitudes toward ethnic minorities changed and were linked to changes in individuals' economic situations. Employing Dutch panel data, we found that negative attitudes toward ethnic minorities were remarkably stable. Differences in attitudes toward ethnic minorities were more pronounced between individuals than within individuals. The small changes that did occur over the 10-year study period were hardly explained by economic characteristics. Only increased individual dissatisfaction with the national financial situation was associated with more negative attitudes. These results cast doubt on whether attitudes toward ethnic minorities are susceptible to change and raise questions about realistic conflict theory's relevance in explaining attitudinal change.

Key words: negative attitudes toward ethnic minorities; individual change; dynamics; panel study; economic determinants.

Introduction

In many European countries, immigration and settlement of ethnic minorities have become highly politicized, with rising tensions observed between those who welcome ethnic minorities and those who resist settlement of these groups (Van der Brug et al., 2015). Nonetheless, our knowledge remains rather limited on whether and how individuals' attitudes toward ethnic minorities have changed over the past 10 years, a period marked by the economic recession of 2008 and the asylum-seeker crisis of 2015. This

*Corresponding author: Department of Sociology, Radboud University Nijmegen, PO Box 9104, 6500 HE Nijmegen, The Netherlands. Email: i.hendriks@maw.ru.nl

study sought to make inferences about changes in individuals' negative attitudes toward ethnic minorities by analyzing 10 waves of panel data covering the 2008–2018 period.

Traditionally, sociologists have tried to explain attitudes toward ethnic minorities from an economic perspective. Essentially, they propose that ethnic competition for scarce (economic) resources induces intergroup antagonism (Blalock, 1967). Though ample studies have tested the impact of economic characteristics on negative attitudes toward various ethnic out-groups (e.g., Bansak et al., 2016; Coenders et al., 2013; Mayda, 2006; Meuleman et al., 2020), these studies cannot make claims about within-individual changes, as they rely solely on cross-sectional data.

Few studies have examined the dynamic character of ethnic competition, and even fewer have theorized on why changes in individuals' economic situations may increase negative attitudes toward ethnic minorities. Among the studies we do have, the evidence is mixed. Lancee and Pardos-Prado (2013) demonstrated that becoming unemployed increased people's concerns about immigration. However, Calahorrano (2013) and Schüller (2016) did not corroborate this dynamic effect. Findings are similarly mixed on the effects of changes in individual perceptions, such as one's satisfaction with the economy and financial worries, on attitudes toward ethnic minorities (Fitzgerald, 2012; Goldstein & Peters, 2014; Jacobs et al., 2019). These mixed results may be explained by differences in the contexts studied, as well as the studies' different and sometimes poor operationalizations of changes in individuals' economic situations.

Building on earlier work, this study provides a rigorous test of the dynamic framework of realistic conflict theory. Specifically, it investigates the effects of a range of economic changes in individuals' lives on negative attitudes toward ethnic minorities. Furthermore, inspired by Blalock's (1967) distinction between actual and perceived competition in the labor market, we distinguish between tangible, objective economic changes and subjective perceptions of one's economic situation. Doing so will provide insight into whether it is, in essence, experiencing an actual decline in economic resources or the perception of being more economically deprived that brings about more negative attitudes toward ethnic minorities (Billiet et al., 2014; De Weerd et al., 2007). Moreover, we test the extent to which economic transitions more strongly impact negative attitudes among individuals who are arguably more likely to be affected by changes in economic situation, i.e., individuals with a lower socio-economic status and younger cohorts.

The contribution of this study is twofold. First, it provides insight into the dynamics of individuals' negative attitudes toward ethnic minorities, by answering the descriptive question, "to what extent did individuals' negative attitudes towards ethnic minorities change during the 2008–2018 period?" For this, we employ unique data from the LISS (Longitudinal Internet Studies for the Social Sciences) panel, providing a representative sample of the Dutch population for the 2008–2018 period. Second, this study answers the explanatory question, "how can changes in individuals' economic situations explain (differences in) changes in individuals' negative attitudes towards ethnic minorities?" By addressing this question, we test the dynamic character of realistic conflict theory to provide deeper insight into whether ethnic minorities are perceived increasingly negatively by people who have become more economically deprived, in objective or subjective terms.

Theoretical framework

Realistic conflict theory: a dynamic approach

Realistic conflict theory is built around the central proposition that intergroup antagonism is induced by competition between members of social groups for scarce resources

(Blalock, 1967; Coser, 1956). Individuals are considered selfish actors seeking to maximize their rewards, living in societies characterized by competition for access to scarce resources, such as status, power, and (economic) privileges (Coser, 1956). Intergroup competition for these resources induces incompatible group interests and is argued to accentuate differences between members of different (ethnic) groups. Consequently, dominant groups in society may fear or apprehend ethnic minority groups, due to their perceived potential to undermine the natural superiority of the dominant group by claiming scarce resources (Blumer, 1958). Intergroup competition is hence argued to enhance solidarity among members of (dominant) groups and to induce antagonism toward members of different groups (Riek et al., 2006).

From a static perspective, Coenders et al. (2004b) argued that not all groups in society experience intergroup competition to the same extent. Hence, differences exist between individuals in negative attitudes toward ethnic minorities. The more a person's socio-economic position resembles that of out-group members, the greater the likelihood that person will experience intergroup competition from that specific out-group. Since ethnic minorities are more often positioned in the lower socio-economic strata of Dutch society (Huijnk & Andriessen, 2016), we expect individuals who find themselves in a similar socio-economic position to be more likely to experience competition with ethnic minorities for scarce resources (Coenders et al., 2004a; Riek et al., 2006; Scheve & Slaughter, 2001).

As this study seeks insight into changes in negative attitudes toward ethnic minorities, we approach realistic conflict theory from a dynamic perspective. We argue that differences in experiences of intergroup competition vary not only between individuals but also within individuals. For example, if individuals' socio-economic status deteriorates to a level that puts them in more direct competition with ethnic minorities, more negative attitudes toward ethnic minorities might be induced. In this dynamic view of the role of competition, it is primarily the decline toward a position in which competition with ethnic minorities is more likely that influences changes in attitudes toward these groups (Lancee & Pardos-Prado, 2013; Meuleman et al., 2009).

When individuals are confronted with an objective, tangible change in their economic situation, they may find themselves in a situation of real conflict of interest with ethnic out-groups. However, it has also been argued that perceptions of a worsened socio-economic position might increase negative attitudes toward ethnic minorities, independent of any objective changes in the real economic situation (De Weerd et al., 2007; Goldstein & Peters, 2014). Here, the theoretical distinction between actual and perceived competition, as made by Blalock (1967), is of particular interest. Blalock's (1967) notion of actual competition may, namely, be absent, though individuals' subjective perceptions of economic deterioration may induce perceptions of more direct ethnic competition and threat. Previous studies confirm that such subjective perceptions are sufficient to evoke anti-immigrant sentiment (Goldstein & Peters, 2014; Sniderman et al., 2004).

Effects of individuals' changing economic conditions

According to Burns and Gimpel (2000), people with a higher income have an economically more secure labor market position, compared with people with a lower income. In other words, people with a higher income are more insulated from economic pressures

emanating from foreign competitors, compared with their less privileged counterparts (Burns & Gimpel, 2000; McLaren & Johnson, 2007). Individuals who experience a drop in income might lose their economically secure and privileged position, which could lead them to perceive an increased threat from ethnic minorities. We therefore hypothesize that *when individuals experience a drop in income, they express more negative attitudes toward ethnic minorities (Hypothesis 1)*.

Becoming unemployed can mean a particularly drastic and influential change in socio-economic position. Losing one's job is often involuntarily, and is generally paired with an unwanted and often unforeseen increase in economic vulnerability (Lancee & Pardos-Prado, 2013). In such a situation, individuals may face a sudden and substantial increase in ethnic competition, as they might now have to compete with ethnic out-groups in the labor market for the jobs on offer (Citrin et al., 1997). Subsequently, we expect that *when individuals become unemployed, they express more negative attitudes toward ethnic minorities (Hypothesis 2)*.

Not only the tangible change of becoming unemployed may increase negative attitudes. Becoming less secure about one's job might similarly influence an individual's attitude toward ethnic minorities. Rising concern about the risk of unemployment and the possibility of having to compete with ethnic out-groups in the labor market could, in itself, increase negativity toward ethnic minorities (Billiet et al., 2014). Therefore, we hypothesize that *when individuals become more insecure about their job, they express more negative attitudes toward ethnic minorities (Hypothesis 3)*.

Likewise, concern about a deteriorating socio-economic position and dissatisfaction with one's personal financial situation could increase an individual's negativity toward ethnic out-groups (Billiet et al., 2014; Kuntz et al., 2017). We therefore expect that *when individuals become more dissatisfied with their personal financial situation, they express more negative attitudes toward ethnic minorities (Hypothesis 4)*.

Changes in perceptions about the national economic situation could also evoke changes in attitudes toward ethnic minorities at the individual level (e.g., Bansak et al., 2016; Citrin et al., 1997; Lahav, 2004). In this regard, Lahav (2004) proposed differentiating one's narrow economic self-interest from sociotropic considerations relating to the state of the national economy. Thus, even when a person does not feel dissatisfied with their own personal economic situation, they could be dissatisfied with the economic situation of the country they live in. In that case, ethnic minorities might be considered a threat not to the individual's own economic situation, but to the economic situation of the national group they identify with (Kessler & Freeman, 2005). An increase in perceived ethnic threat to the economic position of one's group could induce more negative attitudes toward ethnic minorities among those who become more pessimistic about their country's economic situation. Taken together, we expect that *when individuals become more dissatisfied with their country's economic situation, they express more negative attitudes toward ethnic minorities (Hypothesis 5)*.

Differential effects for socio-economic groups and cohorts

Although the socio-economic status of ethnic minorities in The Netherlands has improved over the years, ethnic minorities remain overrepresented in disadvantaged socio-economic positions (Huijnk & Andriessen, 2016). We therefore assume that individuals who are already in the lower strata of society and then subsequently experience

a negative economic transition are more likely to find themselves in a situation of competition with ethnic minorities for scarce resources (Blalock, 1967; Coenders et al., 2004a). Hence, for individuals whose starting position is less advantaged, i.e., for those in lower socio-economic strata, negative economic transitions are more likely to lead to a situation in which ethnic competition is perceived or experienced. This might, subsequently, increase negativity toward ethnic minorities. We therefore hypothesize that *the effects of economic transitions on negative attitudes toward ethnic minorities (H1–H5) are stronger for individuals in lower socio-economic positions (Hypothesis 6)*.

Up to now, we have interpreted changes in attitudes toward ethnic minorities as a reaction to increased intergroup competition. This assumes lifelong openness to attitudinal changes for every individual, regardless of their phase in life. In contrast to this, the “impressionable years” hypothesis states that adolescence and early adulthood are most pivotal in attitude formation (Henry & Sears, 2009; McLaren & Paterson, 2020). Later in life, individuals are said to be less susceptible to attitudinal change, as attitudes formed during the impressionable years are then “crystallized” and relatively stable. Krosnick (1991) found this to be especially the case for symbolic attitudes, such as negative attitudes toward ethnic minorities.

In a study on the development of contemporary prejudice throughout the lifespan, Henry and Sears (2009) corroborated the “crystallization” of symbolic racism, as they observed the most within-individual change in early adulthood. McLaren and Paterson (2020) similarly stressed the notion of attitude formation during the impressionable years. In line with these authors, we argue that changes in attitudes toward ethnic minorities are more likely to occur among younger individuals whose attitudes are not yet solidified (Mitchell, 2019). Assuming relatively stable attitudes toward ethnic minorities after the socialization phase (Kustov et al., 2021), we expect economic transitions in life to be more likely to evoke changes in attitudes toward ethnic minorities among younger individuals, whereas older individuals' attitudes toward ethnic minorities are expected to be more stable. Taken together, we hypothesize that *the effects of economic transitions in individuals' lives on negative attitudes toward ethnic minorities (H1–H5) are stronger for the youngest cohort (Hypothesis 7)*.

Data and operationalizations

Data

To test our hypotheses, we used Dutch panel data covering the period 2008–2018. Like in other West European countries, differences between ethnic groups in society are perceived as highly salient in The Netherlands (Van Drunen et al., 2021). Turks, Moroccans, Surinamese, and Antilleans form the largest visible ethnic minority groups in The Netherlands. Although policies used to be of multiculturalist nature, from the 1990s onwards more politicians voiced criticism on the integration of ethnic minority groups and stricter policies with an emphasis on civic integration and socio-economic participation were implemented (Coenders et al., 2008). Therewith, the Netherlands has witnessed a rise in support for populist radical right parties since the early 2000s. Our study examined attitudes toward ethnic minority groups in the Netherlands during a time where the country is, similar to other European countries, confronted with the economic crisis of 2008 and the refugee crisis of 2015, that both had a major impact on the Dutch society.

In this study, we made use of data of the LISS (Longitudinal Internet studies for the Social Sciences) panel, administered by CentERdata (Tilburg University, The Netherlands). This online panel comprises a probability-based sample of Dutch-speaking households randomly drawn from the national population register (Scherpenzeel & Das, 2010, see also www.lissdata.nl). We used 10 LISS panel waves spanning the 2008–2018 period. In all sampled households all members aged 16 and older were asked to participate in the panel on a yearly basis. Response rates generally varied between 65% and 85%. Respondent attrition was about 12% per year. Younger and lower educated individuals and those unwilling to provide income information appeared especially prone to attrition (Lugtig, 2014). To preserve panel representativeness, refreshment samples were added each year. Thus, the panel remained largely representative of the Dutch population with regard to gender, educational attainment, income, ethnicity, household composition, and province of residence (LISS, 2019).

As our study focused on individual changes in employment and financial situation, we included only respondents who were or had been in the labor force; i.e., those who were employed or unemployed but able and eligible to participate in the labor market. Also, we excluded non-Dutch respondents; i.e., those discerned as having been born outside the Netherlands or as having at least one parent born outside the Netherlands. After deleting respondents who participated only once (1,530 observations/respondents) and observations with missing values on one or more of the dependent or independent variables (1,310 observations), we were left with a final sample consisting of 22,509 observations of 4,041 respondents. Respondents participated in the panel 5.57 times on average. Among all respondents, 541 (13.4%) participated in all 10 waves.

Dependent variable

To measure *negative attitudes toward ethnic minorities*, respondents were asked to indicate their agreement with five statements: “there are too many people of foreign origin or descent in The Netherlands,” “it does not help a neighborhood if many people of foreign origin or descent move in,” “it is good for a society to be made up of people from different cultures,” “it should be easier to obtain asylum in The Netherlands,” and “legally residing foreigners should be entitled to the same social security as Dutch citizens.” Answer categories ranged from 1 (fully disagree) to 5 (fully agree). The last three items were recoded so that higher scores denoted more negative attitudes toward ethnic minorities. This produced a reliable scale (Cronbach’s $\alpha = .79$) with higher mean scores indicating more negative attitudes toward ethnic minorities. We chose to not round off respondents’ scores to ensure a more fine-grained measurement of changing attitudes toward ethnic minorities. The mean score on the variable negative attitudes toward ethnic minorities was 3.16 (Table 1). The standard deviation between respondents was at least double the standard deviation within respondents, indicating that there was more variation between individuals than within individuals in negative attitudes toward ethnic minorities.

Independent variables

People’s *employment status* was derived from two questions measuring respondents’ main activity and, if employed, their perceived level of job insecurity. First, we distinguished four categories of respondents’ main activity: “employed,” “unemployed,”

Table 1.
Descriptive statistics.

	Min.	Max.	Mean/ proportion	SD between respondents	SD within respondents
Negative attitude toward ethnic minorities	1	5	3.156	0.636	0.302
<i>Employed, job secure</i>	0	1	0.163		
<i>Employed, job somewhat secure</i>	0	1	0.383		
<i>Employed, job somewhat insecure</i>	0	1	0.191		
<i>Employed, job insecure</i>	0	1	0.047		
<i>Employed, job insecurity missing</i>	0	1	0.028		
<i>Unemployed</i>	0	1	0.038		
<i>Nonemployed</i>	0	1	0.099		
<i>Other</i>	0	1	0.050		
Household income					
<i>First decile</i>	0	1	0.094		
<i>Second decile</i>	0	1	0.090		
<i>Third decile</i>	0	1	0.092		
<i>Fourth decile</i>	0	1	0.093		
<i>Fifth decile</i>	0	1	0.095		
<i>Sixth decile</i>	0	1	0.091		
<i>Seventh decile</i>	0	1	0.094		
<i>Eighth decile</i>	0	1	0.091		
<i>Ninth decile</i>	0	1	0.091		
<i>Tenth decile</i>	0	1	0.092		
<i>Missing</i>	0	1	0.079		
Personal financial dissatisfaction	0	10	3.135	1.376	0.955
National financial dissatisfaction	0	10	4.483	1.207	1.167
Educational attainment	6	16.5	11.956	2.869	0.750
Domestic situation					
<i>Single</i>	0	1	0.169		
<i>Single, with child(ren)</i>	0	1	0.051		
<i>(Un)married cohabitation, without child(ren)</i>	0	1	0.331		
<i>(Un)married cohabitation, with child(ren)</i>	0	1	0.436		
<i>Other</i>	0	1	0.013		
Denomination					
<i>None</i>	0	1	0.591		
<i>Catholic</i>	0	1	0.147		
<i>Protestant</i>	0	1	0.129		
<i>Other Christian religion</i>	0	1	0.010		
<i>Other non-Christian religion</i>	0	1	0.004		
<i>Missing</i>	0	1	0.118		
Religious service attendance	1	4	1.518	0.750	0.420

Note. Data from LISS Panel 2008–2018, $N = 22,509$ observations of 4,041 respondents.

“nonemployed,” and “other.”¹ As only employed people can experience job insecurity, we further differentiated between various levels of job insecurity for employed people by analyzing employed respondents’ scores on the item, “it is uncertain whether my job will continue to exist.” Answer categories here ranged from 1 (disagree entirely) to 4 (agree entirely). Each answer category was combined with the main activity category “employed.” Also, an additional category was created that included all employed respondents with a missing value on job insecurity. Combining these questions resulted in the following eight categories of employment status: “employed, job secure”; “employed, job somewhat secure”; “employed, job somewhat insecure”; “employed, job insecure”; “employed, job insecurity missing”; “unemployed”; “nonemployed”; and “other.” Dummy variables were created for each of the categories.

Respondents’ household *income* was measured as net household income. For respondents with missing values, we used a preexisting measurement in the dataset with imputed scores based on characteristics of all household members combined. For each separate year, deciles were calculated. For each decile, we created dummy variables, as well as an additional dummy variable for respondents with a missing score on household income.

Personal financial dissatisfaction was derived from the question, “how satisfied are you with your financial situation?” On a 11-point scale respondents could indicate whether they tended toward ‘not at all satisfied’ or “entirely satisfied.” Answer categories were recoded in such a way that higher scores denoted higher levels of dissatisfaction.

The measurement of *national financial dissatisfaction* was similar to the measurement of personal financial dissatisfaction. Here the question posed was, “how satisfied are you with the current economic situation in the Netherlands?” Again, respondents could answer on an 11-point scale. We recoded the answers so that higher scores indicated higher levels of national financial dissatisfaction.

Control variables

We controlled for several possible confounders. *Educational attainment* was measured as the number of years needed to complete a particular educational level in the Dutch school system. To account for differences between respondents in *household composition*, we included five dummies. We measured religious *denomination* by asking respondents whether they considered themselves a member of a religion or church community, and if so which religion or church community. Furthermore, we included a variable measuring respondents’ *religious service attendance*. [Table 1](#) presents the descriptive statistics for our study.

Methods

To answer our descriptive question regarding the extent to which individuals’ negative attitudes toward ethnic minorities changed in the 2008–2018 period, we plotted predicted (population averaged) effects. Moreover, we created histograms depicting the distribution of within-individual changes in negative attitudes toward ethnic minorities.

¹ Respondents in paid employment, working in a family business and self-employed people were categorized as “employed.” (First-time) job seekers and those performing unpaid work while retaining unemployment benefits were categorized as “unemployed.” Respondents who are exempted from job seeking, who take care of the housekeeping, who are pensioned, who have a work disability or who perform solely voluntary work were considered “nonemployed.” The category “other” was comprised of respondents who are too young to have an occupation or are still in school, as well as respondents who indicated “something else.”

To understand the extent to which changes in negative attitudes toward ethnic minorities differed between various groups, we separately plotted the predicted effects and visualized the distribution of within-individual change for different socio-economic groups and cohorts.²

To test our dynamic hypotheses, we used fixed-effects models (Allison, 2009). These relied solely on within-person variation in negative attitudes toward ethnic minorities, therefore enabling us to examine whether changes in negative attitudes toward ethnic minorities were related to changes in individuals' economic situations. All unobserved time-invariant heterogeneity between individuals is partialled out in these models. In our fixed-effects analyses, we furthermore specified panel robust standard errors which allow for intragroup correlation to relax the requirement of independent observations.

The intraclass correlation of the fixed-effects null-model was 0.784, indicating that 78.4% of the variation in attitudes toward ethnic minorities could be attributed to differences between individuals. Since within-individual differences were overall less pronounced than between-individual differences, the fixed-effects models relied on smaller numbers of cases. Yet, since we pooled data of as much as 10 waves, we were not confronted with difficulties in model convergence. To compare our results to conventional between-individual effects, i.e., effects based on variation between respondents instead of within respondents, we present not only the within effects but the between effects as well. Also, we estimated fixed-effect models for the lowest socio-economic group as well as for the youngest cohort.

Results

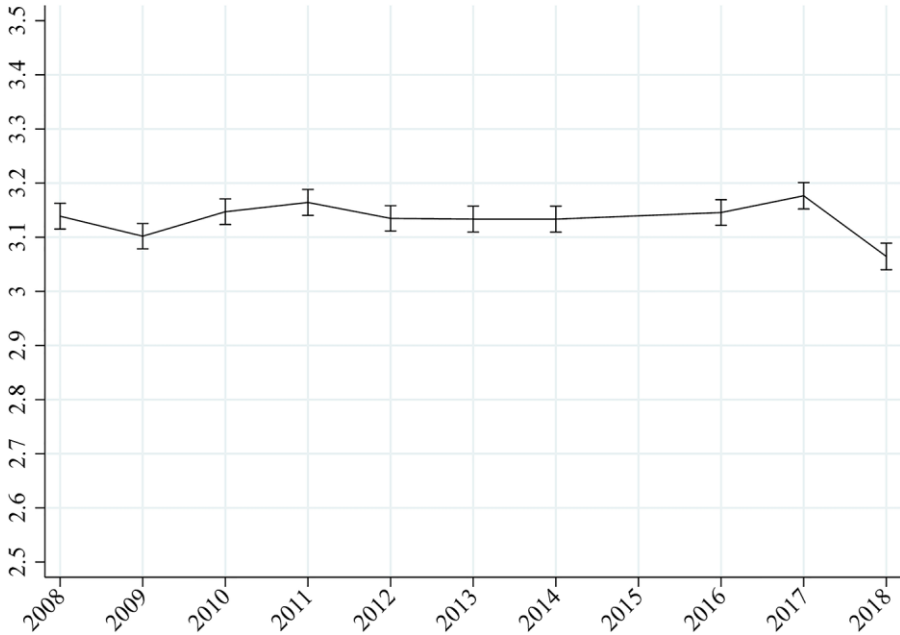
Descriptive analyses

Figure 1 presents the overall trend in individuals' attitudes toward ethnic minorities. Attitudes toward ethnic minorities appeared to be relatively stable. Nonetheless, attitudes became significantly less negative from 2017 to 2018. Figure 2 presents a histogram depicting the magnitude of within-individual change in our sample. We found similar patterns for both positive change (i.e., change toward a more negative attitude toward ethnic minorities) and negative change (i.e., change toward a more positive attitude toward ethnic minorities). The bar is highest at 0, indicating that no change at all was the within-individual change that occurred most often. Of the within-individual changes that did occur, most of the changes were within a one-point range on our measurement scale. In only 6.38% of all observations of change between two waves was the individual change larger than one point. A large majority of the respondents did not change at all or only a few decimals on our scale measuring negative attitudes toward ethnic minorities.

²As we did not have an accurate measurement of socio-economic situation, we used variables measuring household income and educational attainment. For household income, three almost equal categories were created based on respondents' mean scores on household income deciles, namely low (1–4), medium (4.1–7), and high (7.1–10). For educational attainment, we constructed three categories based on the classification of Statistics Netherlands, namely low (primary school, intermediate secondary education), middle (higher secondary education, intermediate vocational education), and high (higher vocational education, university). We made cohorts of about 10 years, namely ≤ 1954 , 1955–1964, 1965–1974, 1975–1984, and ≥ 1985 .

Figure 1.
Margins plot on negative attitudes toward ethnic minorities.

Note. Data from LISS Panel 2008–2018. *N* = 22,509 observations of 4,041 respondents.



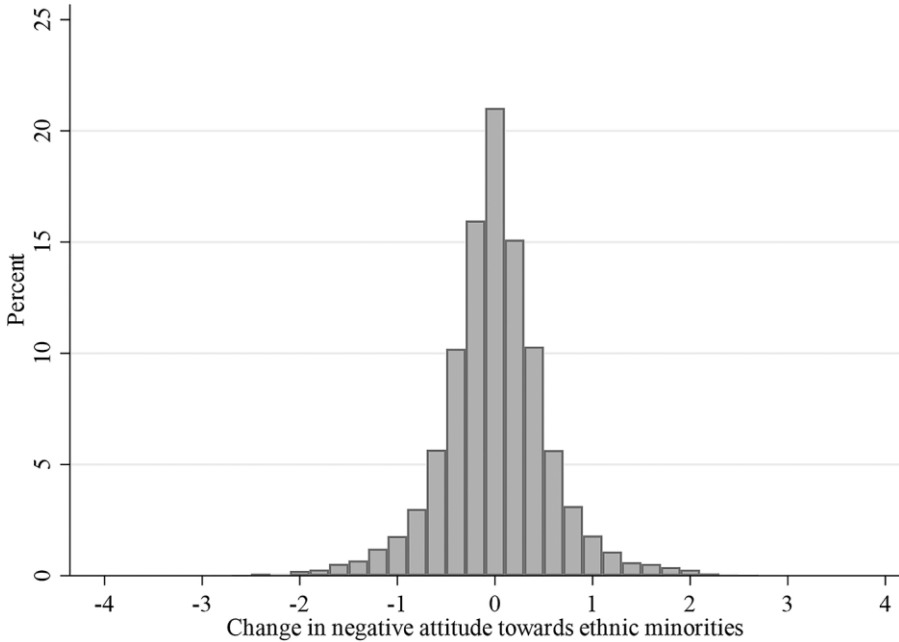
To investigate differential trends for different socio-economic groups and cohorts, we estimated separate margins plots for each (see [Supplementary Appendix A](#)). According to these, development of negative attitudes toward ethnic minorities followed a rather similar pattern for the different income and education groups. The groups did differ in their general levels of negative attitudes, especially regarding education. Higher educated respondents expressed less negative attitudes toward ethnic minorities, compared with middle and lower educated respondents. Different patterns in changes in attitudes toward ethnic minorities were found for the different cohorts, especially for the youngest cohort. Though the other cohorts experienced a slight increase or remained rather stable in negative attitudes toward ethnic minorities, for the youngest cohort we found a decrease in negative attitudes during the 2014–2018 period. Note, however, that even though a decreasing trend was found for this cohort, the youngest cohort was also the cohort that was most negative toward ethnic minorities in 2008.

The histograms, depicting within-individual change in negative attitudes toward ethnic minorities (see [Supplementary Appendix B](#)), hardly deviated for respondents in the lower income deciles and for those with lower educational attainment. For the youngest cohort, we found relatively fewer observations in which within-individual change equaled zero (i.e., no change) compared with the older cohorts; respectively, 17.5% compared with 21.5%. This indicates that those born after 1985 were slightly more likely to have changed their attitude toward ethnic minorities. Nonetheless, also for the youngest cohort, most changes were within a one-point range.

Figure 2.

Histogram of the percentage of within-individual changes in negative attitudes toward ethnic minorities between waves.

Note. Data from LISS Panel 2008–2018. $N = 22,509$ observations of 4,041 respondents.



Fixed-effects analyses

Table 2 presents the results of the fixed and between effects analyses of negative attitudes toward ethnic minorities. Regarding the first objective economic characteristic, a drop in household income, the fixed effects indicate that experiencing this did not significantly influence changes in individuals' attitudes toward ethnic minorities. No significant effects were found for becoming unemployed either. Table 2, as well as an additional model with the objective characteristics only (see Supplementary Appendix C), demonstrates that becoming unemployed (in contrast to being employed and having a secure job, as well as being employed in general) did not increase negative attitudes toward ethnic minorities. Furthermore, an additional test showed that a transition to long-term unemployment did not significantly influence individuals' negative attitudes toward ethnic minorities. Our first and second hypotheses, therefore, could not be confirmed.

Note that differences between individuals in household income and employment status also generally did not explain differences in negative attitudes toward ethnic minorities. Only respondents in the third income decile were found to be somewhat more negative toward ethnic minorities; all other between effects were not significant. Further, nonemployed respondents appeared to be less negative toward ethnic minorities than employed respondents (both in general and those with a secure job). Thus, individuals' objective situations appeared to have no significant influence on attitudes toward ethnic minorities, either from a dynamic or from a static perspective.

Table 2.

Fixed and between effects analysis with panel robust standard errors on negative attitudes toward ethnic minorities.

	Fixed effects		Between effects	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Household income				
<i>First decile</i>	ref.		ref.	
<i>Second decile</i>	-0.010	0.018	0.040**	0.058
<i>Third decile</i>	-0.009	0.020	0.154	0.057
<i>Fourth decile</i>	-0.015	0.022	0.065	0.059
<i>Fifth decile</i>	-0.019	0.022	0.091	0.061
<i>Sixth decile</i>	-0.019	0.023	0.095	0.062
<i>Seventh decile</i>	-0.012	0.023	0.092	0.062
<i>Eighth decile</i>	-0.001	0.024	0.091	0.064
<i>Ninth decile</i>	-0.012	0.025	-0.002	0.062
<i>Tenth decile</i>	-0.014	0.027	0.095	0.060
Employment status				
<i>Employed, job secure</i>	ref.		ref.	
<i>Employed, job somewhat secure</i>	0.008	0.009	-0.006	0.040
<i>Employed, job somewhat insecure</i>	0.009	0.011	-0.079	0.045
<i>Employed, job insecure</i>	0.003	0.016	-0.014	0.079
<i>Unemployed</i>	-0.009	0.019	-0.143	0.076
<i>Nonemployed</i>	0.001	0.015	-0.209***	0.058
<i>Other</i>	0.027	0.027	-0.125	0.063
Personal financial dissatisfaction	0.004***	0.003	0.015***	0.009
National financial dissatisfaction	0.011*	0.003	0.121***	0.010
Educational attainment	-0.010*	0.005	-0.053	0.003
Domestic situation				
<i>Single</i>	ref.		ref.	
<i>Single, with child(ren)</i>	0.012	0.033	0.082**	0.052
<i>(Un)married cohabitation, without child(ren)</i>	0.010	0.028	0.097	0.035
<i>(Un)married cohabitation, with child(ren)</i>	0.007	0.028	0.139***	0.035
<i>Other</i>	0.011	0.047	0.199	0.103
Denomination				
<i>None</i>	ref.		ref.	
<i>Catholic</i>	0.019*	0.013	0.201***	0.037
<i>Protestant</i>	0.039*	0.018	0.095*	0.048
<i>Other Christian religion</i>	0.057	0.036	0.166***	0.130
<i>Other non-Christian religion</i>	-0.022	0.051	-1.097***	0.168
Religious service attendance	0.004***	0.007	0.048*	0.020
Constant	3.215***	0.063	2.918***	0.118

Note. Data from LISS Panel 2008–2018. Year dummies included but not reported. $N = 22,509$ observations of 4,041 respondents.

* $p < .05$, ** $p < .01$, *** $p < .001$ (tested two-tailed).

Table 2 also includes the fixed and between effects of job insecurity, personal financial dissatisfaction, and national financial dissatisfaction to estimate whether changes in individuals' subjective situations evoked changes in attitudes toward ethnic minorities. Both the fixed and between effects of job insecurity among the employed respondents were nonsignificant. Consequently, we reject our third hypothesis, which expected increased job insecurity to induce more negative attitudes toward ethnic minorities.

Moreover, we found no significant fixed effect of changes in personal financial dissatisfaction. We therefore cannot confirm that within-individual increases in personal financial dissatisfaction were associated with increasingly negative attitudes toward ethnic minorities, which negates our fourth hypothesis. Neither was a significant between effect found, indicating that different levels of personal financial dissatisfaction could not explain differences between individuals in their attitudes toward ethnic minorities.

Though a change in personal financial dissatisfaction did not significantly influence negative attitudes toward ethnic minorities, changes in national financial dissatisfaction did appear to be relevant. As individuals became more dissatisfied with their national financial situation, their attitudes toward ethnic minorities became more negative as well. Our fifth hypothesis is thereby supported. We also found a significant positive between effect of national financial dissatisfaction. Thus, individuals who were more dissatisfied with the national financial situation had more negative attitudes toward ethnic minorities. Note that the between effect of national financial dissatisfaction was at least 10 times larger than the within effect, indicating that national financial dissatisfaction is a much better predictor of differences between individuals than differences within individuals.

We tested our sixth and seventh hypotheses by examining whether the expected effects were present among groups in society that are arguably more likely to be affected by changes in the economic situation; i.e., individuals with a lower socio-economic status and young cohorts (see Appendix A). Among those with a lower socio-economic status, none of the changes in the objective or subjective economic situation were found to be associated with changes in attitudes toward ethnic minorities. For those with a lower income and those having lower educational attainment, we found that only changes in national financial dissatisfaction evoked a change in negative attitudes toward ethnic minorities, comparable to the general model discussed above. This refutes our sixth hypothesis, which suggested that deterioration of the economic situation would have a stronger effect on negative attitudes toward ethnic minorities among those in lower socio-economic positions.

Economic changes in an individual's life did not appear to have stronger effects among the youngest cohort. Though overall we found a significant effect of national financial dissatisfaction on within-individual changes in negative attitudes toward ethnic minorities, we could not corroborate that finding in separate analyses for the youngest cohort. We did find, however, that a change to unemployment was associated with less negative attitudes toward ethnic minorities compared with a change to employment, which is the opposite of what we expected. Altogether, we found no evidence that deterioration of the individual economic situation had a stronger effect in increasing negative attitudes toward ethnic minorities among individuals in a cohort presumed to be relatively more prone to attitudinal change. We therefore must reject our seventh hypothesis.

Robustness checks

To check the robustness of our analyses, we performed several additional tests. Detailed results of these are available upon request. First, we performed additional analyses to test whether the effects of economic changes were symmetric for those who experienced an increase in negative attitudes toward ethnic minorities and those who experienced a decrease in negative attitudes. Our conclusions did not change when excluding either those whose negative attitudes toward ethnic minorities decreased or increased. We also examined whether the effects were similar for those who experienced a positive and those who experienced a negative transition regarding their economic situation, i.e., the independent variables. For none of our independent variables did we find deviating, contrasting effects for positive versus negative transitions in individuals' economic situations.

We further tested whether our expectations could be corroborated in specific contexts. First, we checked whether economic transitions evoked changes in negative attitudes toward ethnic minorities during the economic crisis. For the 2008–2010 period, we found that no changes in national financial dissatisfaction but changes in household income were the main predictor of changes in negative attitudes toward ethnic minorities. Changing toward a lower income decile rather than changing toward a higher decile (but not the highest) was associated with an increase in negative attitudes toward ethnic minorities.

Second, we examined whether effects were different during the refugee crisis. Though overall changes in national financial dissatisfaction had an effect on individuals' negative attitudes toward ethnic minorities, we did not find this effect for the 2014–2017 period. Again, we found some significant effects of changes in household income here, but the effects were only present for some income deciles compared with the reference category, and not in the expected direction. Other changes in individuals' economic situations did not have a significant effect. So, even in times of crisis, we found no unambiguous evidence of a dynamic effect of economic changes on negative attitudes toward ethnic minorities.

Conclusion

This study rigorously tested dynamic hypotheses derived from realistic conflict theory. Employing 10 waves of longitudinal panel data, we examined the extent to which individuals' attitudes toward ethnic minorities changed between 2008 and 2018 and whether changes in individuals' economic situation could account for these changes. We found relatively strong stability in individuals' attitudes toward ethnic minorities over the 10-year study period, though that period was marked by the economic recession of 2008 and the asylum-seeker crisis of 2015. Within-individual changes in negative attitudes toward ethnic minorities appeared to be rather small. Though our scope was limited to the Dutch case, this study corroborates findings of [Kustov et al. \(2021\)](#) as to the relative stability of immigration attitudes in West European countries in general.

Previous studies have assessed some effects of changes in individuals' economic situations on anti-immigrant attitudes, but their findings have been mixed regarding the role of changing economic conditions in explaining individual attitudinal change (e.g., [Calahorrano, 2013](#); [Goldstein & Peters, 2014](#); [Lancee & Pardos-Prado, 2013](#); [Schüller, 2016](#)). Even though we employed 10 waves of high-quality panel data and accounted for a range of both objective and subjective economic characteristics, we could not reaffirm

some of the previously found effects. Our results suggest that single and occasional economic changes in individuals' lives are not sufficiently influential to evoke substantial changes in perceptions that one's group risks becoming systematically disadvantaged, in turn increasing negative attitudes toward ethnic minorities. Only an increase in individuals' national financial dissatisfaction seemed to evoke changes in negative attitudes toward ethnic minorities. Note, however, that these effects were not stronger among those who are arguably more likely to be affected by changes in the economic situation, i.e., individuals' with a lower socio-economic status and younger cohorts.

In our study, we differentiated between objective and subjective individual economic change to examine their respective roles in changing attitudes toward ethnic minorities, though we found such individual changes to be very limited. We determined that, in general, subjective economic perceptions mattered more than objective economic experiences, regarding both differences within and between individuals. This suggests that perceptions of being or becoming economically deprived explain negative attitudes toward ethnic minorities better than actual or increasing economic hardship. [Blalock's \(1967\)](#) notion of "false perceptions of competition" may be in play here. If it is not the actual economic situation but rather the perceived economic situation that turns out to matter, the main question shifts to why people perceive a specific economic situation or why people perceive competition when the objective situation does not justify such a perception.

Notwithstanding this distinction between the actual and perceived economic situation, the limited support we found for the role of changes in the individual's economic situation in changing attitudes toward ethnic minorities contributes to a broader discussion on the role of the economy in driving attitudinal changes and on attitudinal changes in general. The relatively small impact of changes in economic situations accords with the broader literature on the impact of economic change on anti-immigration-related behavior. [Gidron and Mijs \(2019\)](#), for instance, find that changes in material circumstances do not increase support for populist radical right parties with an anti-immigration discourse. Moreover, our results suggest that we cannot simply presuppose that attitudes toward ethnic minorities are susceptible to change. This leads us to question the relevance of the dynamic perspective of realistic conflict theory and of testing whether economic changes can explain attitudes toward ethnic minorities, as these attitudes were relatively stable in our sample. This study found that differences in attitudes toward ethnic minorities *between* individuals were much more pronounced than differences *within* individuals, thereby corroborating previous findings on the relevance of economic characteristics in explaining between-individual differences in particular. We therefore endorse the conclusion of [Lancee and Pardos-Prado \(2013\)](#), stating that differences in negative attitudes toward ethnic minorities are presumably not the result of individuals' changing economic conditions but are "likely to be rooted in permanent constructions of ethnic threat" (p. 127).

This said, we propose that a fruitful area for further work is to assess the role of anti-immigrant sentiments in explaining, e.g., upsurges in protest against the settlement of immigrants or refugees. The persistency of intergroup attitudes as found in this study suggests that it is not likely that changes in individuals' attitudes toward ethnic minorities underlie such upsurges. It is, therefore, worth exploring that other factors can explain utterances of anti-immigrant sentiments on the macro-level, for instance by considering the role of salience of the immigration issue.

Finally, testing theories on intergroup relations from a dynamic perspective confronts us with a larger puzzle about the stability rather than variability of attitudes toward ethnic

minorities and with differences between the static and the dynamic versions of these theories. To better understand changes in negative attitudes toward ethnic minorities, future research might therefore focus on and elaborate the underlying theoretical assumptions of dynamic versions of theories on intergroup relations, such as realistic conflict theory.

Supplementary material

Supplementary Data are available at *IJPOR* online.

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References

- Allison, P. D. (2009). *Fixed effects regression models*. SAGE Publications, Inc.
- Bansak, K., Hainmueller, J., & Hangartner, D. (2016). How economic, humanitarian, and religious concerns shape European attitudes toward asylum seekers. *Science*, 354(6309), 217–222. <https://doi.org/10.1126/science.aag2147>
- Billiet, J., Meuleman, B., & De Witte, H. (2014). The relationship between ethnic threat and economic insecurity in times of economic crisis: Analysis of European Social Survey data. *Migration Studies*, 2(2), 135–161. <https://doi.org/10.1093/migration/mnu023>
- Blalock, H. M. (1967). *Toward a theory of minority group relations*. Capricorn.
- Blumer, H. (1958). Race prejudice as a sense of group position. *The Pacific Sociological Review*, 1(1), 3–7. <https://doi.org/10.2307/1388607>
- Burns, P., & Gimpel, J. G. (2000). Economic insecurity, prejudicial stereotypes, and public opinion on immigration policy. *Political Science Quarterly*, 115(2). <https://doi.org/10.2307/2657900>
- Calahorrano, L. (2013). Population aging and individual attitudes toward immigration: Disentangling age, cohort and time effects. *Review of International Economics*, 21(2), 342–353. <https://doi.org/10.1111/roie.12040>
- Citrin, J., Green, D. P., Muste, C., & Wong, C. (1997). Public opinion toward immigration reform: The role of economic motivations. *The Journal of Politics*, 59(3), 858–881. <https://doi.org/10.2307/2998640>
- Coenders, M., Gijsberts, M., Hagendoorn, L., & Scheepers, P. (2004a). Introduction. In M. Gijsberts, L. Hagendoorn, & P. Scheepers (Eds.), *Nationalism and exclusion of migrants: Cross-national comparisons* (pp. 1–28). Ashgate.
- Coenders, M., Gijsberts, M., & Scheepers, P. (2004b). Resistance to the presence of immigrants and refugees in 22 countries. In M. Gijsberts, L. Hagendoorn, & P. Scheepers (Eds.), *Nationalism and exclusion of migrants: Cross-national comparisons* (pp. 97–120). Ashgate.
- Coenders, M., Lubbers, M., & Scheepers, P. (2013). Resistance to immigrants and asylum seekers in the European Union: Cross-national comparisons of public opinion. In G. Freeman, R. Hansen, & D. Leal (Eds.), *Immigration and public opinion in liberal democracies* (pp. 21–50). Routledge.

- Coenders, M., Lubbers, M., Scheepers, P., & Verkuyten, M. (2008). More than two decades of changing ethnic attitudes in the Netherlands. *Journal of Social Issues, 64*(2), 269–285. <https://doi.org/10.1111/j.1540-4560.2008.00561.x>
- Coser, L. A. (1956). *The function of social conflict*. Free Press.
- De Weerd, Y., Catellani, P., De Witte, H., & Milesi, P. (2007). Perceived socio-economic change and right-wing extremism: Results of the SIREN-survey among European workers. In J. Flecker (Ed.), *Changing working life and the appeal of the extreme right*. Ashgate.
- Fitzgerald, J. (2012). Social engagement and immigration attitudes: Panel survey evidence from Germany. *International Migration Review, 46*(4), 941–970. <https://doi.org/10.1111/imre.12006>
- Gidron, N., & Mijs, J. J. (2019). Do changes in material circumstances drive support for populist radical parties? Panel data evidence from The Netherlands during the Great Recession, 2007–2015. *European Sociological Review, 35*(5), 637–650. <https://doi.org/10.1093/esr/jcz023>
- Goldstein, J. L., & Peters, M. E. (2014). Nativism or economic threat: Attitudes toward immigrants during the Great Recession. *International Interactions, 40*(3), 376–401. <https://doi.org/10.1080/03050629.2014.899219>
- Henry, P. J., & Sears, D. O. (2009). The crystallization of contemporary racial prejudice across the lifespan. *Political Psychology, 30*(4), 569–590. <https://doi.org/10.1111/j.1467-9221.2009.00715.x>
- Huijnk, W., & Andriessen, I. (2016). *Integratie in zicht? De integratie van migranten in Nederland op acht terreinen nader bekeken*. The Netherlands Institute for Social Research. https://www.scp.nl/Publicaties/Alle_publicaties/Publicaties_2016/Integratie_in_zicht
- Jacobs, L., Boukes, M., & Vliegthart, R. (2019). Combined forces: Thinking and/or feeling? How news consumption affects anti-Muslim attitudes through perceptions and emotions about the economy. *Political Studies, 67*(2), 326–347. <https://doi.org/10.1177/0032321718765696>
- Kessler, A. E., & Freeman, G. P. (2005). Public opinion in the EU on immigration from outside the community. *Journal of Common Market Studies, 43*(4), 825–850. <https://doi.org/10.1111/j.1468-5965.2005.00598.x>
- Krosnick, J. A. (1991). The stability of political preferences: Comparisons of symbolic and nonsymbolic attitudes. *American Journal of Political Science, 35*(5), 547–576. <https://doi.org/10.2307/2111553>
- Kuntz, A., Davidov, E., & Semyonov, M. (2017). The dynamic relations between economic conditions and anti-immigrant sentiment: A natural experiment in times of the European economic crisis. *International Journal of Comparative Sociology, 58*(5), 392–415. <https://doi.org/10.1177/0020715217690434>
- Kustov, A., Laaker, D., & Reller, C. (2021). The stability of immigration attitudes: Evidence and implications. *The Journal of Politics, 83*(4), 1478–1494. <https://doi.org/10.1086/715061>
- Lahav, G. (2004). Public opinion toward immigration in the European Union. *Comparative Political Studies, 37*(10), 1151–1183. <https://doi.org/10.1177/0010414004269826>
- Lancee, B., & Pardos-Prado, S. (2013). Group conflict theory in a longitudinal perspective: Analyzing the dynamic side of ethnic competition. *International Migration Review, 47*(1), 106–131. <https://doi.org/10.1111/imre.12015>

- LISS. (2019). *Representativiteit van het LISS panel 2015*. CentERdata. <https://www.lissdata.nl/sites/default/files/bestanden/Representativiteit%20van%20het%20LISS%20panel%202015.pdf>
- Lugtig, P. (2014). Panel attrition: Separating stayers, fast attriters, gradual attriters, and lurkers. *Journal of Sociological Methods Research*, 43(4), 699–723. <https://doi.org/10.1177/0049124113520305>
- Mayda, A. M. (2006). Who is against immigration? A cross-country investigation of individual attitudes towards immigrants. *The Review of Economics and Statistics*, 88(3), 510–530. <https://doi.org/10.1162/rest.88.3.510>
- McLaren, L., & Johnson, M. (2007). Resources, group conflict and symbols: Explaining anti-immigration hostility in Britain. *Political Studies*, 55(4), 709–732. <https://doi.org/10.1111/j.1467-9248.2007.00680.x>
- McLaren, L., & Paterson, I. (2020). Generational change and attitudes to immigration. *Journal of Ethnic and Migration Studies*, 46(3), 665–682. <https://doi.org/10.1080/1369183x.2018.1550170>
- Meuleman, B., Abts, K., Schmidt, P., Pettigrew, T. F., & Davidov, E. (2020). Economic conditions, group relative deprivation and ethnic threat perceptions: A cross-national perspective. *Journal of Ethnic and Migration Studies*, 46(3), 593–611. <https://doi.org/10.1080/1369183x.2018.1550157>
- Meuleman, B., Davidov, E., & Billiet, J. (2009). Changing attitudes toward immigration in Europe, 2002–2007: A dynamic group conflict theory approach. *Social Science Research*, 38(2), 352–365. <https://doi.org/10.1016/j.ssresearch.2008.09.006>
- Mitchell, J. (2019). Context and change: A longitudinal analysis of attitudes about immigrants in adolescence. *Socius: Sociological Research for a Dynamic World*, 5, 1–11. <https://doi.org/10.1177/2378023119855157>
- Riek, B. M., Mania, E. W., & Gaertner, S. L. (2006). Intergroup threat and outgroup attitudes: A meta-analytic review. *Personality and Social Psychology Review*, 10(4), 336–353. https://doi.org/10.1207/s15327957pspr1004_4
- Scherpenzeel, A. C., & Das, M. (2010). “True” longitudinal and probability-based internet panels: Evidence from the Netherlands. In M. Das, P. Ester, & L. Kaczmirek (Eds.), *Social and Behavioral Research and the Internet: Advances in Applied Methods and Research Strategies* (pp. 77–104). Taylor & Francis.
- Scheve, K. F., & Slaughter, M. J. (2001). Labor market competition and individual preferences over immigration policy. *The Review of Economics and Statistics*, 83(1), 133–145. <https://doi.org/10.1162/003465301750160108>
- Schüller, S. (2016). The effects of 9/11 on attitudes toward immigration and the moderating role of education. *KYKLOS*, 69(4), 604–632. <https://doi.org/10.1111/kykl.12122>
- Sniderman, P. M., Hagendoorn, L., & Prior, M. (2004). Predisposing factors and situational triggers: Exclusionary reactions to immigrant minorities. *American Political Science Review*, 98(1), 35–49. <https://doi.org/10.1017/S000305540400098X>
- Van der Brug, W., Gianni, D. A., Berkhout, J., & Ruedin, D. (2015). *The politicisation of immigration*. Routledge.
- Van Drunen, Y., Spruyt, B., & Van Droogenbroeck, F. (2021). The salience of perceived societal conflict in Europe: A 27 country study on the development of a measure for generalized conflict thinking. *Social Indicators Research*, 158, 595–635. <https://doi.org/10.1007/s11205-021-02693-9>

APPENDIX A

Fixed effects analysis of negative attitudes towards ethnic minorities, estimated for particular groups

	Lower income only		Lower educated only		Youngest cohort only	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Household income						
First decile	ref.		ref.		ref.	
Second decile	0.003	0.020	0.027	0.030	-0.078	0.050
Third decile	0.008	0.024	0.039	0.036	-0.107	0.062
Fourth decile	-0.004	0.029	0.029	0.040	-0.056	0.061
Fifth decile	-0.029	0.036	-0.039	0.042	-0.028	0.061
Sixth decile	0.042	0.045	-0.030	0.043	-0.007	0.068
Seventh decile	-0.006	0.077	-0.008	0.046	0.042	0.068
Eighth decile	0.115	0.060	0.013	0.051	-0.002	0.069
Ninth decile	-0.088	0.118	-0.022	0.052	-0.019	0.069
Tenth decile	-0.287	0.151	0.029	0.062	-0.028	0.079
Employment status						
Employed, job secure	ref.		ref.		ref.	
Employed, job somewhat secure	-0.007	0.017	0.016	0.021	0.011	0.035
Employed, job somewhat insecure	-0.012	0.021	-0.009	0.025	-0.046	0.048
Employed, job insecure	0.003	0.028	-0.060	0.036	-0.017	0.070
Unemployed	-0.038	0.034	-0.075	0.041	-0.134*	0.063
Non-employed	-0.018	0.025	-0.013	0.029	0.103	0.092
Others	0.010	0.040	0.011	0.070	-0.087	0.049
Personal financial dissatisfaction	0.006	0.005	-0.006	0.006	0.001	0.008
National financial dissatisfaction	0.020***	0.005	0.014*	0.006	0.020	0.011
Educational attainment	0.001	0.008	-0.008	0.010	-0.007	0.009
Domestic situation						
Single	ref.		ref.		ref.	
Single, with child(ren)	-0.021	0.051	-0.093	0.069	-0.001	0.092
(Un)married cohabitation, without child(ren)	-0.012	0.050	-0.029	0.064	-0.026	0.057
(Un)married cohabitation, with child(ren)	-0.082	0.052	0.034	0.068	-0.090	0.065
Others	0.032	0.088	0.014	0.105	-0.042	0.080
Denomination						
None	ref.		ref.		ref.	
Catholic	-0.011	0.026	-0.051*	0.025	0.094	0.058
Protestant	0.025	0.032	0.059	0.037	-0.039	0.059
Other Christian religion	-0.014	0.069	-0.089	0.081	0.031	0.097
Other non-Christian religion	-0.096	0.077	-0.057	0.082	-0.348	0.215
Religious service attendance	0.001	0.013	0.008	0.014	-0.015	0.023

Continued

Continued

	Lower income only		Lower educated only		Youngest cohort only	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Constant	3.069 ^{***}	0.104	3.373 ^{***}	0.120	3.539 ^{***}	0.134
<i>N</i> observations	7,074		5,257		2,462	
<i>N</i> respondents	1,334		921		509	

Note. Data from LISS Panel 2008–2018. Year dummies included but not reported.

* $p < .05$, ** $p < .01$, *** $p < .001$ (tested two-tailed).

Biographical Notes

Inge Hendriks is a PhD student at the Department of Sociology, Faculty of Social Sciences at Radboud University Nijmegen, The Netherlands.

Marcel Lubbers is a Full Professor of Interdisciplinary Social Sciences, Faculty of Social Sciences at Utrecht University, The Netherlands.

Peer Scheepers is a Full Professor of Research Methodology, Faculty of Social Sciences at Radboud University Nijmegen, The Netherlands.