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# **Immigration and the Geography of Discontent**

*The Role of Immigration in Far-Right Voting*

*across EU-Regions*

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## Abstract

Long-term spatial income disparities led to the retaliation of irrelevant places and individuals who voice their anger through the ballot box. The field of study that addresses these trends, the geography of discontent, gained increased attention from regional scientists in the last few years. This study aims to contribute to this literature by assessing immigration-related, economic, and socio-cultural far-right voting channels' contribution to voting decisions across European Union's regions. Moreover, building on recent literature, this thesis introduces a multiple roots framework for immigration's electoral backing which builds on the interaction between immigration and population change. In depopulation regions economic and social deterioration – marginalisation – translated into increased far-right electoral backing. Yet, immigration is hypothesised to reduce far-right voting in depopulation regions due to its capacity to improve regional economic performance. Furthermore, immigration-related sociocultural concerns are presumed to have a greater impact on voting behaviour in faster-growing regions, compared to depopulation regions. Subsequently, the immigration far-right voting channels are tested using the 8th and 9th waves of the European Social Survey with a two-level, individual, and NUTS I/II (regional), mixed effects logistic model. Moreover, this thesis provides a novel methodological approach – marginal effect plots – to assess the statistical relevance of immigration's same and cross-level interaction effects. The results confirm the relevance of far-right voting's multiple roots framework. Yet, in conflict with previous literature, this thesis finds no support for the labour market channel of far-right voting. Similarly, regional economic deprivation is discovered to be unrelated to scapegoating immigrants and far-right electoral support.

Keywords: Immigration, Compositional Amenities, Depopulation, Marginalisation, Geography of Discontent, Far-Right Politics, Multilevel Logistic Modelling.

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## List of Abbreviations

<b>Abbreviation</b>	<b>Meaning</b>
APEP	Anti-Political Establishment Parties
EU	European Union
FL	Far-Left
FR	Far-Right
ICC	Interclass Correlation Coefficient
MLM	Multilevel Modelling
NUTS	Nomenclature of Territorial Units for Statistics

## 1. Introduction

Anti-establishment and populist politics have gained momentum in recent years in Western countries. Two of the most well-known examples, both from 2016, are Brexit and the election of Donald Trump as president of the USA. The European mainland, however, also experienced its fair share of increasing electoral support for right-wing populist/far-right parties ranging from Viktor Orbán's Fidesz in Hungary, Geert Wilders' Party for Freedom (PVV) in the 2017 Dutch general elections, to Alternative for Germany's (AfD) support in former East-German constituencies (Arzheimer and Berning, 2019). After the euro crisis, the electoral success of far-right (FR) parties across the EU, came at the expense of mainstream political parties. In extreme cases, e.g., in the Netherlands and France, traditional former left-wing government parties saw their electoral support drop to historically low levels (Hobolt and Tilley, 2016). Right-wing populist parties are united by their similar political agenda, which blames a combination of factors and groups for the increasing inequality in trust, income, wealth, and employment: globalization (multinational enterprises), the European Union, the political elite, or immigrants.

According to FR politicians, immigration represents the root of current political discontent due to its (presumed) influence on cultural identity dilution and impact on national or regional economies. The immigration channels studied in the academic literature range from socio-economic concerns such as labour competition between natives and foreign-born workers, to the compositional concerns about the ethnical make-up of their neighbourhoods, co-workers, or the number of foreign pupils in their children's classes (Edo et al., 2019). According to empirical evidence, there is a significant association between higher immigration shares and a greater vote share for FR parties in national elections across EU countries (Halla et al., 2017).

Increasing interpersonal and interregional inequality play a vital role in our understanding of left- and right-wing populism's electoral success (Dijkstra et al., 2020). Consequently, in recent years the study of interregional voting patterns acting as a proxy for expressing discontent arose, the so-called Geography of Discontent. According to Rodriguez-Pose and co-authors (Dijkstra, Poelman, and Rodriguez-Pose, 2020), this mostly relates to places that do not matter: Voters in formerly prosperous regions that experienced (are experiencing) economic and industrial decline resulting in emigration and brain drain used the ballot boxes to express their discontent (ibid). Koeppen et al. (2021) argue that, in addition to regions that do not matter, people that do not matter are relevant as well, since individual political, socioeconomic, and cultural attitudes

affect anti-system voting. Previous research ascribed Anti-Political Establishment Parties' (APEP) electoral success to various contextual factors, including immigration and high unemployment. (ibid). Papers that account for immigration's contribution often use all-encompassing measures such as net migration shares (see Dijkstra et al., 2020). What is more, the authors attribute immigration's impact to a handful of suitable immigration-related voting channels ranging from labour market competition to compositional concerns. Nonetheless, such voting channels relate to radically different contexts and personal attitudes. Therefore, the research question in this paper will be: *What theoretical immigration-related far-right voting channels exist, and do they influence voting patterns across EU regions?* This thesis aims to investigate both economic and sociocultural determinants of immigration's effect on individual voting decisions, using a multilevel logistic model, by taking into consideration individual and contextual factors. The empirical analysis uses the eight and ninth waves of the European Social Survey's multilevel dataset since it includes variables on personal values and attitudes as well as regional characteristics.

This thesis' main contribution stems from the multiple roots of immigration-induced FR-voting across regions that faced opposing population trajectories. Building on the recent work of Mehic (2022) and Harteveld et al. (2022) I will argue and provide support for immigration reduced FR voting in demographically declining regions across the EU. This finding is based on the potential socioeconomic revitalization immigration offers to depopulation regions in the form of higher property prices and employment (e.g., Gonzales & Ortega, 2013). Regions encountering population growth, in contrast, were argued and proven to be voting FR on the ethnolinguistic composition of their living environments. Henceforth, this reaffirms the relevance of the so-called compositional amenities channels. Additionally, I have found that scarce resource competition with immigrants, predominantly about employment, is statistically insignificant. The lowest educated voters are equally as likely to support the FR as higher educated individuals relating to the labour substitutability between immigrants and natives. Likewise, regional labour market competition measured by the interaction of long-term unemployment and net migration either reduces or does not affect FR-voting probabilities.

The remainder of this paper is structured in the following way. First, a literature review explores three separate topics. (I) I will present a brief discussion of FR politics and the role of immigration in FR ideology. (II) Subsection 2.2 addresses the geography of discontent literature and explores the individual characteristics and regional factors that influence anti-establishment voting. (III) I will introduce regionally relevant economic and sociocultural FR voting channels

of immigration. The third section introduces the hypotheses, while the fourth discusses the data and methodology. The fifth section discusses the paper's findings. The second to last section discusses the paper's contributions and puts them into perspective while also introducing avenues for subsequent research. Finally, a conclusion is provided.

## 2. Literature Review

### 2.1 Defining far-right parties and understanding immigrations' contribution to far-right politics

Before analysing regional FR voting behaviour, we first need to understand what FR parties' views are and how and to what extent immigration plays a role.

Far-right politics exist in two distinctive streams: extremist right and the populist radical right. The former - sometimes referred to as neo-fascism – displays an affinity with fascism, while the latter denies any such ties and describes itself as anti-establishment<sup>1</sup> (Georgiadou et al., 2018). Nonetheless, both propagate nationalist ideas, oppose multicultural societies, favour restrictive migration policies, and have anti-system stances (ibid). A major component of FR parties' electoral support rests on the fear of *economic insecurity*: individuals already (or potentially) left behind in the light of globalization and modernization, and those who became unemployed because they worked in declining sectors e.g., manufacturing (Rydgren and Ruth, 2011). Empirical support suggests that labour market institutions could affect the voting behaviour of those left behind (Vlandas and Halikiopoulou, 2016). In regions where unemployment benefits are generous, FR-voting is uncorrelated with unemployment, while those places with less generous benefits experienced higher FR-voting shares from unemployment. Additionally, employment protection legislation can mediate the negative association between ungenerous unemployment benefits and unemployment on FR voting (ibid). The radical right is subsequently an attractive voting candidate due to its focus on exogenous changes to the labour market namely: migration, automation, and globalisation (Anneli et al., 2019, p. 2).

Furthermore, FR politics uses resentment and hatred (xenophobia) towards migrants, refugees, and ethnic minorities for political benefit (Hainmueller and Hopkins, 2014), which is said to

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<sup>1</sup> This paper's analyses will not differentiate between extremist right and populist radical right political parties.

relate to the notion of *cultural backlash*: The aversion towards progressive cultural change - cosmopolitanism, multiculturalism, human rights, and gender equality- which started in the post-war period. Older white males, among other population groups, opposed the progressive cultural change and felt marginalised within their own country for supporting traditional values (Inglehart and Norris, 2016). Steenvoorden and Hartevelde (2018) discuss that societal pessimism acts as an overarching explanation for radical right voting in addition to three traditional drivers: economic grievances, cultural grievances, and political discontent. Nevertheless, right-wing populism mostly targets ethnic minorities and foreigners as the enemy of the people, while left-wing populism targets the wealthy and large corporations (Rodrik, 2018). Societal pessimism can be defined as; the concern that society is in decline which cannot only be ascribed to objective conditions (ibid, p.29). This closely resembles sentimental views toward passed times, nostalgia. The authors find that social pessimism follows a U-shaped distribution on a political left-right axis and that it enhances the likeliness to vote for FR parties. In addition to demand-based support for FR politics are supply-based effects: party structure, ideology, and parties' political positions (Georgiadou et al., 2018; Rydgren, 2007). Nevertheless, this paper will focus on demand-side explanations for regional FR voting patterns. These demand-side explanations can be defined as a lack of representative democracy and feelings of disappointment as traditional political parties fail to address voters' needs and their external challenges (Cerqua et al., 2021). This paper will use the PopuList, a list of anti-establishment parties across EU countries (Rooduijn et al. 2019), developed by political scientists and journalists to identify FR political parties across European countries.

Accordingly, immigration plays a significant role in FR ideology, as it is one of the key components of the cultural backlash thesis. Voters in the US and EU tend to overestimate the number of foreign-born individuals in their own country, and this misperception affects voters' opposition to immigration (Citrin and Sides, 2008). Rodriguez-Justicia and Theilen (2022) state that there are two reasons for believing that the media and political parties contributed to this misperception. (I) Immigration has become a day-to-day topic in politics since the 2000s and affects voters' party preferences. (II) To achieve larger audiences, the media started to emphasize more sensational and extreme aspects of politics. In this changed media landscape anti-immigration parties find a perfect platform to express their positions, resulting in greater coverage of FR parties (ibid). Negative attitudes of citizens to immigration, are exploited by FR politics by exaggerating the impact on the host economy (Golder, 2003). Consequently, FR parties endorse stricter immigration legislation. According to Georgiadou et al. (2018) if those



groups deemed as economic losers blame immigration for their current condition, then this will accordingly translate into greater FR support. Numerous theories, such as the labour market channel, which aimed to link immigration to FR electoral accomplishments have been developed and extensively empirically validated. A discussion of theories with a spatial component is provided in section 1.3. But first I will introduce the literature on the regional voting patterns of those individuals and regions labelled as losers of modernization/globalisation, the so-called geography of discontent.

## 2.2 The Geography of Discontent

Personal and regional level characteristics that contribute to regional voting patterns have previously been extensively studied. The geography of discontent studies what drives voters in developed economies' declining regions to express their discontent, by voting for anti-political establishment parties or anti-EU integration parties (Koeppen et al., 2020). Work by Rodríguez-Pose (2018) provides a clear overview of this so-called "*revenge of places that do not matter*", which refers to ongoing economic decline, lack of perceived opportunities and neglect of declining regions, brain drains, and emigration provoking APEP voting (Dijkstra et al., 2019). These regions' electorates revolt and use the ballot box to vote for populists who blame the causes of recent economic demise: economic integration, migration, open markets, and globalisation (Horner et al., 2018).

According to McCann and Ortega-Argilés (2021), spatial income inequality is one of the key drivers of discontent across the UK. The policy narrative which builds on the models in urban economics - and to a lesser extent geographical economics – favours the uneven spread of economic activities (Rodríguez-Pose, 2018). Furthermore, it suggests that the clustering of economic activities in urban areas provides unique benefits referred to as agglomeration effects; the pooling of labour markets, the sharing of non-traded inputs (e.g., infrastructure), proximity to suppliers and final consumers, and knowledge spill overs (Duranton and Puga, 2004). These forces are said to be strongest in the largest urban areas, creating a productivity gap across regions (Combes et al., 2012). Not only the role of agglomeration economies but also trade openness and economic globalisation affected regions unequally. Papers in the field of new economic geography (Ezcurra and Rodríguez-Pose, 2013; Ezcurra and Del Villar 2021) provide empirical evidence for spatial divergence in regional income from opening to trade. Therefore, peripheral regions experienced employment losses by trade openness, while dynamic and more

competitive agglomerations experienced employment/economic growth (Rodríguez-Pose, 2018). Moreover, import shocks – from especially China and other low-wage countries – increased the support for extreme right-wing parties (Milner, 2021). Autor et al. (2020) discovered that rising Chinese import competition caused political polarization in the US. In US counties with majority white populations, the right-wing GOP (Grand Old Party: Republican Party) experienced increased support from higher Chinese trade exposure, while counties with a lion share of ethnic minority population groups experienced a shift towards liberal candidates at the expense of moderate Democratic politicians. Moreover, in general, trade exposure shifted electoral support towards Republican candidates (ibid). Another major catalyst of interregional employment growth inequality is automation. Im et al. (2019), Anneli et al. (2019), and Milner (2021) all found support for the causal link between APEP support voters' fears about automation-induced job replacement. This link builds on the notion that skill-biased technological change allows for the automation of routine occupations of middle-skill level in manufacturing and administrative sectors. In conclusion, the combination of economic globalisation (openness to trade), agglomeration effects, and automation, adds up to *great inversion* in advanced economies since the 1980s (Martin et al., 2018). This trend refers to a decline in regional income (compared to national averages), labour force participation, and limited employment opportunities (few high-quality jobs with high shared or routine and less-skilled employment) in smaller-metropolitan and rural manufacturing-dominated areas. In contrast, bigger metropolitan areas and their suburbs became dynamic economic centres with high-quality employment (Martin et al., 2018, pp. 9-10).

Long-term social and economic changes are intricately linked to globalisation and automation. Local economic and industrial decline have - according to Dijkstra et al. (2019) – played a crucial role in explaining the anti-EU vote. Similarly, Rodríguez-Pose et al. (2021) find that long-term depopulation and employment decline play a more vital role than social capital and interpersonal inequality in explaining the Trump vote in both the 2016 and 2020 US presidential elections. Regional differences affected the Brexit vote, as inhabitants of regions most economically dependent on the EU (in terms of trade) were more likely to vote to leave (Los et al., 2017). Otto and Steinhardt (2014) analysed immigration's effect on extreme right-wing and green party votes in Hamburg city's districts during local elections between 1987 and 2000. Extreme right-wing voting increased due to natives' concerns over the welfare state and local amenities (compositional amenities, see section 1.3). A more recent study by Koeppen et al. (2021) addressed the link between subjective well-being and APEP voting. They find that

subjective happiness increases APEP voting if an interaction between the regional unemployment rate and happiness is included.

According to Hartevelde et al. (2022, pp. 440-441), FR electoral success could be interpreted as the counter-reaction to the increased mobility of people and capital which generated cultural, social, economic, and demographic challenges. The combination of a less productive labour force, depopulation, and economic deterioration decreased regional tax bases. Consequently, local/regional authorities' capacities to maintain minimum level public services and infrastructure became constrained and so-called marginalisation occurred (Bock, 2016; Franklin and van Leeuwen, 2018). Moreover, poorer households who are left behind face economic insecurity and become locked in, cannot move elsewhere, as they are unable to sell their homes which decreased in value (van Leeuwen et al., 2021b). Marginalisation can be broadly ascribed to rural areas and is associated with geographical remoteness, primary sector dominance, insufficient public services, inadequate quality infrastructure such as roads, economic and demographic transitions, and outmigration (Bock, 2016; Hartevelde et al., 2022). Especially depopulation and outmigration are key factors for deteriorating regional socioeconomic conditions since mostly the younger, highly educated, and entrepreneurial individuals migrate to more productive (urban) regions to enhance their career opportunities and earnings (Hartevelde et al., 2022). Note however that depopulation is not only a rural phenomenon as parts of highly urbanised and densely populated countries, such as Dutch border regions, face similar prospects (Haartsen and Venhorst, 2010). If authorities fail to put a halt to deteriorating regional socioeconomic conditions, political discontent and anti-system sentiments increase.

Feelings of hopelessness and outmigration are key factors in the geography of discontent (Rodríguez-Pose, 2018). One wonders if depopulation influences populist voting. A paper by van Leeuwen et al. (2021b) however discovered that there is no populist mark-up in depopulation areas, but they did find that higher non-Western immigration regionally reduced populist right-wing votes (PVV, party for freedom) in the Netherlands. Marginalisation, in the form of increased unemployment recipient shares, increased left-wing populist voting (SP, socialist party) in the Netherlands. Hartevelde et al. (2022) studied the Freedom Party's (PVV, populist radical right) electoral support in the Netherlands. Their results suggest that anxiety about social change is the main driver of the party's success. Yet, social change manifests itself differently between rural and urban areas. In more urbanized regions a mixture of economic hardship and immigration played a key role in explaining PVV support, while voters in the

countryside were more inclined to vote this way due to local marginalisation. Consequently, social, and cultural capital erodes in these regions, further generating feelings of neglect and political discontent (Harteveld et al., 2022).

The previous paragraphs suggest that expressive voting by those *left behind* who *do not matter* seems to be caused by sociocultural and economic concerns, as well as economic decline. Ballas and Thanis (2022) argue that political and media discourse provides an additional explanation for political discontent. Finally, Cerqua et al. (2021) introduced the term *places that do not recover*, which refers to regions where local (or national) authorities were unable to set in motion a smooth reconstruction process after natural disasters. Failure to do so could be interpreted as the non-benevolence of authorities with affected citizen's conditions. Consequently, institutional distrust and political discontent increase.

Institutions are closely related to those individuals and places that do not matter. Acemoglu et al. (2005) argue that formal institutions – the rule of law and property rights – are the main drivers of countries' long-run economic success. On a regional scale, institutional inequality exists throughout the European Union; within-country variation substantially differs as ranked by quality of education, and healthcare but also law enforcement's quality, corruption, and impartiality. Take for instance the intraregional inequality in Italy where Northern regions, such as Bolzano, institutionally outperform Southern regions like Calabria. Similarly, Flemish (Belgium) authorities surpass their Walloon and Brussels counterparts in institutional performance. What is more, Walloon's regional authorities' performance was comparable to that of the average Spanish and Portuguese regional governments (Charron and Lapuenta, 2013). Interregional formal institutional inequality matters, as institutions can attract or repel those industries or economic activities that generate high output and employment growth (Rodríguez-Pose, 2020). If governments fail to address the spatial inequalities, due to for instance a decline in manufacturing employment, then those voters affected experience a declining revert to anti-establishment voting (Díaz-Lanchas et al., 2021). In contrast to hard (formal) institutions, there are soft (informal) institutions, such as culture, trust, openness, networks, tolerance, diversity, creativity, and social capital (Rodríguez-Pose, 2020). These informal rules of human interaction also explained the distribution of Brexit votes.

Not only regional but also individual (compositional) determinants need to be studied to understand discontent voting. Van Leeuwen and Halleck Vega (2021a) demonstrated that individuals with similar attitudes often live in neighbourhoods with like-minded peers. This

could relate to employment, as is the case for factory-workers voting for labour parties, but more importantly, those who hold positive values regarding multiculturalism, sort themselves among like-minded individuals in larger cities (ibid). The spread of compositional determinants partially overlaps the contextual factors. Take for instance the work of Becker et al. (2017) who demonstrated that leave voters' characteristics - a historical dependence on manufacturing employment, low income, high unemployment, and intermediate-level education (Alaimo and Solivetti, 2019) - drove local voting shares. According to Garretsen et al. (2018), those regions that - on average - depended on EU trade, scored lower on psychological openness, which was identified to increase the leave voting share. Not only in the case of Brexit but also on the European mainland personal cultural values and attitudes impact populist electoral support (Inglehart and Norris, 2016; Gordon, 2018). What is more, Huijsmans et al. (2021) illustrate the attitudinal divergence in nationalist-cosmopolitan attitudes - relating to immigration, multiculturalism, and EU integration – between rural and urban areas in the Netherlands. An increase in regional mean age has been discovered to increase APEP voting (Dijkstra et al., 2019; Essletzbichler et al., 2018). Yet, age also impacted the Brexit vote as predominantly older voters voted leave, as they - together with the working class and less educated - were dubbed *the losers of globalization* that opposed European economic integration (Hobolt, 2016). In conclusion, these examples emphasize the key role of the three key individual characteristics of populist voters – income, education, and age – as identified by authors such as Hobolt (2016) and Becker et al. (2017) referred to as the *holy trinity*.

### 2.3 The Channels of Immigration and Voting Behaviour

The last section predominantly discussed the non-immigration-related reason for the geographical distribution of anti-political establishment, far-right, or anti-EU voting. This section however addresses economic and sociocultural immigration-related channels of FR voting. One of the first thoughts that comes to mind is the effect of migrants' votes during elections. If immigrants are legally allowed to vote, one would expect regions with proportionally higher shares of immigrants to have lower FR voting percentages (Ortega, 2005). Yet, for national elections in the EU and US – and other nations - citizenship is legally required to cast votes (see Arrighi and Bauböck, 2017). Nonetheless, the presence (or possibility thereof) of immigrants in one's neighbourhood/city/region (or the possibility thereof) provides opportunities for FR sentiments along economic and sociocultural dimensions. Henceforth, I

introduce various FR voting channels in light of immigration. These channels are: (1) the labour market, (2) public finances and welfare policies, (3) compositional amenities, (4) the contact hypothesis (Edo et al., 2019), (5) and social integration.

- (1) The labour market channel relates to natives' "theoretical" fears about the substitutability between immigrants and natives labour of similar skill levels and immigration's effect on natives' wages (Edo et al., 2019). Yet, Edo et al. (2019) find that the increase of FR voting was higher for lower education nationals. According to Borjas' (2003) analysis of labour market concerns in the US, mostly lower and middle-skilled native workers experienced a wage drop from immigration. This finding is supported by an urban analysis of wages and unemployment during the 1980s immigration inflows in US cities, where both increased (Card, 2001). In contrast, Peri (2012) found immigration did not affect US natives' employment and working hours. Yet, Peri (2016) discovered that high-skilled immigration could increase all workers' productivity (and thus wages) through human capital formation and innovation. Even if nominal wages (marginally) decline from immigration than it might be the case that prices of specific services (housekeeping or gardening/landscaping) fall – due to increased supply from low-skilled immigrants – such that local price level drops translate into unaffected real wages (Cortes, 2008). Manacorda et al (2012) and Longhi et al. (2005), however, found that new immigration negatively affects the wages of previous immigrants but not those of natives. This distinction likely relates to imperfect substitution between native and immigrant labour, such that new and old immigrants mostly compete with one another in labour markets (Manacorda et al., 2012). Mayda et al. (2022) demonstrated that – in US counties – high-skilled immigration decreased the Republican Party's voting share, while greater low-skilled immigration increases Republican voting. Yet, for France, Bolet (2020) finds that high-skilled immigration increases local radical right-wing voting. The author argues that higher qualified immigrants accept lower-skilled employment, and therefore provide a source of additional labour market competition to lower qualified natives (ibid). Roupakias and Chletsos (2020) highlight the importance of immigrants' origins. The authors reaffirm that immigration increases FR but not far-left (FL) support in Greece. More importantly, immigrants from non-OECD (Organisation for Economic Co-operation and Development) countries with ten or more years of tenure in Greece increase FR voting to a greater extent than OECD immigrants. Because these groups are (perceived to be) more likely to compete with natives over

employment. Still, FR parties acknowledge natives' labour market concerns and therefore include stricter immigration legislation in their political agenda (Edo et al., 2019).

- (2) In addition to increasing labour market competition, natives might worry about the financial strain, immigration puts on a nation's welfare system. Individual attitudes towards income and wealth redistribution might also be affected by migration (Edo et al., 2019). These concerns are grounded on the notion that low-skilled migrants are prone to be net receivers, whereas high-skilled migrants are net contributors to the welfare state. Empirical evidence on the effect of public finance and welfare effects is however mixed and is dependent on the research methodology. Firstly, there is a line of literature comparing migrants' probability of resorting to social protection schemes to that of natives, the so-called welfare magnet hypothesis (Edo et al., 2018). The generosity of social protection systems creates adverse selection, as higher generosity attracts net beneficiaries while net contributors are repelled. Less generous welfare states with lower taxes attract the former, while the latter migrate to countries with the most generous welfare benefits. Empirical evidence on fiscal contributions is unfortunately context-dependent (Edo et al., 2018). Others, like Rowthorn (2008) incorporate an accounting framework and find that the overall fiscal effect of migrants is quite small (+/-1% of GDP). Yet, in countries facing demographic collapse fiscal contributions tended to be higher, even though they were based on unrealistic assumptions. Hence, the author concludes that there is no strong fiscal case for or against sustainable large-scale migration. Rodriguez-Justicia and Theilen (2022) found that tax morale curtails for citizens who believe that immigration puts a strain on the welfare system. If the unwillingness to pay taxes (to finance the welfare state) is sufficiently high, the welfare state's erosion could become a self-fulfilling prophecy. Moreover, the authors analysed immigrants – and their descendants – long-term net present fiscal value, which illustrated an equivocal net gain. Most immigrants arrive at later life-cycle stages, such that especially high-skilled immigrants can help to alleviate the financial burden of future generations on the welfare system (Rodriguez-Justicia and Theilen, 2022, pp. 1805-1806). While it is true that immigrants are on average younger than natives, they do however contribute less fiscally (Edo et al., 2018). Lastly, immigration also puts a strain on local services, such as healthcare or public education, which thereupon gives rise to anti-immigration sentiments. (Cools et al., 2021).

The second part of this channel relates to the natives' views toward income redistribution. Alesina et al. (2021) displayed that inhabitants of Western and Southern European high immigration regions were more inclined to oppose income redistribution. This association is driven by large shares of FR voters, large welfare states, immigrants of Middle Eastern or Eastern-European origin, less-skilled immigrants, and greater residential segregation (ibid). The redistributive welfare-state and labour market channels might partly offset each other, as wealthy businesspersons might have contradictory views regarding unskilled migration. They could benefit from hiring unskilled migrants but resent paying for immigrants through welfare benefits (Facchini and Mayda, 2009).

- (3) Compositional amenities in the case of immigration relate to the religious, ethnic, and linguistic characteristics of their neighbours and co-workers. (Cools et al., 2021). If a native's perception of immigration's sociocultural enrichment is less optimistic then higher immigration would stimulate FR-voting. Furthermore, compositional concerns influence what schools to attend and where to live (ibid). Essletzbichler and Forcher (2022) discovered that higher immigration shares of specific origin, notably Muslim or Roma, increase FR-voting because natives fear migrants dilute local and/or national values. This reasoning, by Georgiadou et al., 2018 referred to as the salience-of-change, relates to changes rather than the level of immigration which fuels anti-immigration sentiments. What is more, sudden large-scale influxes of immigrants can alter the neighbourhood's ethnic composition and undermine the existing social networks and residents' sense of community (Newman and Velez, 2014). Hainmueller and Hiscox (2007) pointed out that the perceived association between education (skills) and view of immigration is unrelated to employment competition, as commonly believed, but instead relates to prejudice among lower educated natives. The seminal work of Card et al. (2012) demonstrated that compositional concerns are 2-5 times more important for explaining individual attitudes than wage or tax concerns. Using the European Social Survey, Malloy et al. (2021) present comparable results to Card et al. (2012). In their paper Halla, Wager, and Zweimüller (2017) analysed the effect that immigrants' presence has on FR voting in Austria. The authors found that an influx of migrants explained a tenth of the changes in communities' FPÖ (Freedom Party Austria, a FR party) voting share (ibid). Likewise, Harmon (2018) illustrated that increased ethnic diversity in Denmark shifted political power towards right-wing and anti-immigration parties, for both municipal and national elections.



- (4) Greater influxes of immigrants increase contact between native and immigrant population groups and therefore reduce prejudice and FR voting (Karreth et al., 2015). This is the so-called contact hypothesis developed by Allport (Edo et al., 2019). The empirical support for this hypothesis is however context-dependent. Dustmann et al.'s (2019) study of Danish elections results were in line with the contact hypothesis for larger urban municipalities, while the opposite holds for rural (smaller) municipalities. Steinmayr (2021) provided further proof as he found that the mere exposure to migrants (refugees) passing through Upper Austrian (in Northern Austria) municipalities increased FR voting by one and a half percentage points. Nonetheless, prolonged interactions between asylum seekers and native populations decreased the FR voting share by four percentage points.
- (5) The final channel relates to social integration, such as segregation and crime. Using neighbourhood-level data, Dinas and van Spanje (2011) studied Pim Fortuyn List's (Lijst Pim Fortuyn; LPF's) – a former Dutch anti-immigration party – support in the 2002 parliamentary elections and found that crime and immigration in voters' living environment increased LPF support among those who associated immigration with crime. Especially anti-immigration parties (often FR) emphasise this link for electoral benefits (Dinas and van Spanje, 2011, p.669). Similarly, Burscher et al. (2015) demonstrated that across eleven European countries, media exposure about immigrants' criminal activities increased natives' likelihood to back FR parties.

### 3. Theory and Hypotheses

Thus far, I discussed the relation between FR politics and immigration as well as presented a literature review which addressed both the geography of discontent and the socio-economic & cultural immigration channels that drive FR voting. This section introduces regional hypotheses that aim to bridge the gap between immigration and regional FR voting patterns. These hypotheses will link compositional (distribution of individuals and their characteristics) and contextual effects (the spatial context individuals operate in e.g., declining formerly manufacturing areas).

The previous sections introduced various socioeconomic immigration-related FR voting channels. Regional economic conditions indeed are influential contextual determinants of FR's electoral success. Especially, those regions left behind - such as former manufacturing areas

negatively affected by globalisation and deindustrialization - experienced declining income, ageing populations, and limited employment opportunities. As stated in Subsection 2.2 depopulation fuels these trends, referred to as marginalisation, and if authorities fail to counteract socioeconomic decline, discontent and thus FR electoral success increase.

Immigration however has the capacity to (partly) offset marginalisation in depopulation or less rapid growing regions. Mehic's (2022) recent study indicated that immigration-related increases in FR populism voting in Sweden were less pronounced in depopulation regions in the north of the country. According to Mehic (2022), immigration-related economic benefits such as increasing housing prices (for homeowners), increased economic activity (employment) (Gonzales & Ortega, 2013; Howard, 2020), and foreign direct investment (FDI) from the immigrant's country of origin (Foad, 2012), reduced FR electoral backing. By contrast, negative agglomeration externalities - such as the availability and affordability of housing (the possible consequence of the *great inversion* Martin et al. (2018)) - are more prominent in faster-growing regions. If thus "*excessively many*" migrants move to countries' highly populated regions, it could be that voters ascribe immigrants as the culprit of unstable housing markets. Especially in the short-run housing supply is inelastic such that increased housing demand inflates prices. Empirical evidence using the Mariel Boatlift indicated that immigration sharply increased the rents of lower-quality housing in Miami (Saiz, 2003). Furthermore, an immigration inflow of 1% of a city's size is associated with a 1% increase in rents in US cities (Saiz, 2007). Hence, FR parties emphasize and exaggerate immigration's contribution to agglomeration externalities to galvanize support among the electorate. I will refer to this hypothesis as the *too-full effect* of immigration. Even though the arguments presented conflict with each other, they lead to the following hypothesis:

**Hypothesis I:** *Higher immigration in depopulation regions (and lower growth regions) decreases the incidence of FR voting.*

In general, economic deterioration expressed by (long-term) unemployment increases FR support, as voters hold incumbent governments accountable for current conditions (Sipma and Lubbers, 2020). Poverty and despair increase intergroup conflict over scarce resources, such as employment, due to structural decline. Native residents will act to protect their group's interest and are likely to feel threatened by out-of-group members, such as immigrants or ethnic minorities. As a result of supporting FR parties, concerned native inhabitants hope to regain control over which and how many immigrants are allowed to enter the country (Scheepers et al., 2002). From a contextual perspective, a mixture of economic hopelessness and high

immigration plants a seed for FR-support, as these parties' scapegoat, among other factors, immigrants. (Georgiadou et al., 2018; Broz et al., 2021).

**Hypothesis II:** *On the regional scale greater immigration inflows combined with high long-term unemployment provide a basis for FR parties' support.*

As introduced in section 2.3 increasing regional immigration provides additional labour market competition between natives and foreign-born inhabitants, over lower and middle-skilled employment, regardless of regional economic circumstances. The increased scarcity of middle-skilled employment – manual and routine-based tenure facing replacement due to automation/robotisation and offshoring (Reijnders and de Vries, 2018) – already provides a basis for FR-support. FR-voting channel 1, already stated that especially lower and middle-skilled workers experienced wage drops from immigration. Including immigration into the mixture of scarce resource competition (employment) (Arzheimer, 2009), could cause lower and middle-skilled (educated) natives to favour FR parties because of their stricter migration legislation, which protects working-class interests. Henceforth, I introduce the following socioeconomic hypothesis:

**Hypothesis III:** *The higher educated (skilled) natives are less inclined to vote for FR parties over immigration-induced regional labour competition.*

Contrary to economic channels, sociocultural immigration channels suggest contradictory outcomes: immigration either increases or decreases FR electoral support (as mentioned in subsection 2.3 the compositional amenities versus contact hypothesis). On the one hand, natives may perceive increased immigration as a threat to current social dynamics and networks, as well as the ethnic, linguistic, and religious composition of neighbourhoods or regions. For this reason, natives might support FR-parties which oppose mass immigration. There is however also a contextual component, as increasing immigration could, regardless of prejudice and views, increase regional anti-immigration sentiments. Henceforth, both individual and contextual factors reinforce one another. On the other hand, as already mentioned in subsection 2.3, increased intergroup contact and personal relations with immigrants potentially improve natives' acceptance and tolerance of immigrants. In conclusion, I present two conflicting hypotheses:

**Hypothesis IVa:** *If natives perceive immigration as a threat to their cultural identity than FR electoral support increases. Moreover, higher regional immigration inflows amplify this effect.*

*Or*

**Hypothesis IVb:** *Higher immigration inflows in regions will increase the contact between natives and immigrants, resolving natives' prejudice towards immigrants and reducing the likelihood of them voting for FR candidates.*

Based on the previous paragraph, it seems reasonable to presume that residents of depopulation regions perceive immigration as an existential threat, due to the replacement of original inhabitants by foreigners and the dilution of traditional culture (See Bai and Federico (2021) for existential threats of white US citizens). In contrast, Mehic's (2022) reasoning alludes to the notion that non-economic immigration-related factors, for instance, crime and/or concerns about ethnic composition, propel FR support in urbanized regions. This thus suggests that electoral support differs along the rural-urban divide. In rural areas, marginalisation acts as the main driver of FR-voting (van Leeuwen et al., 2021b). As assumed by hypothesis I, build on Hartevelde et al. (2022), a similar pattern exists between the *places that do* and *places that do not matter*, as immigration might counteract regional socioeconomic decline. Henceforth, depopulation regions' electorates FR voting decision is only marginally influenced by sociocultural fears.

**Hypothesis V:** *Sociocultural immigration-related concerns are a marginal predictor of FR support in depopulation regions.*

## 4. Data and Methodology

Subsection 4.1 discusses the variables used and constructed in this study, with the help of the ESS. Furthermore, in subsection 4.2 I address the methodology by discussing mixed-effects (multi-level) logistic modelling and its advantage over conventional logistic techniques.

### 4.1 Data

This study uses the 8<sup>th</sup> and 9<sup>th</sup> waves of the multilevel European Social Survey dataset which includes individual-level, regional-level (NUTS I/II; individuals nested within regions), and national-level variables (European Social Survey, 2022). Table 1 presents the summary statistics for the individual and regional level variables used in this study. In addition, the same and cross-level interaction terms will be used to assess the hypotheses' statistical relevance. To minimize bias, countries in the ESS worked with similar questionnaires. To correct for any

potential left-over bias, I follow Koeppen et al. (2021) who constructed a weight variable<sup>2</sup>, which is the multiplication of the population weight (a country's population share of the total included countries population) by the design weight (to corrects for unequal selection probability among groups and regions). Respondents' votes in the last national election<sup>3</sup> were used to create the dependent variable, whether the vote was for a FR party or not. I consulted Rooduijn et al.'s (2019) PopuList to determine whether respondents voted FR, coded as 1, or any other party, coded as 0. The summary statistics of Table 1, indicate that 9,5% of all respondents voted FR during the last national election.

All first-tier – individual – independent variables used, come from the European Social Survey. These include personal statistics such as age (in years), gender, and formal years of schooling among regional variables. In section 5.2 a categorical regressor of the highest education level substitutes formal years of schooling, to evaluate the robustness of the labour market channel. In addition, attitudinal and socioeconomic characteristics were taken into consideration. The first of these is a newly created categorical variable for employment status, which is a recoded version of the respondent's main activities in the last seven days. Following Koeppen et al. (2021) respondents' activities were recoded into three distinctive categories, namely, employed (paid work), unemployed (those without work looking or not looking for a job), and economically inactive (e.g., education, retired, and housework). The second socio-economic regressor is categorical household income. More specifically, a recoded version of the income of households from all sources was measured in a 1-10 income deciles scale. The lowest three income deciles are recoded into Low Income, the middle four deciles to Medium Income, and the upper three into High Income. Internet usage was controlled for, by recoding the categorical internet usage variable from five to three categories: (Almost) Never from *Never* and *Only occasionally*, Weekly based on *A few times a week* and *Most days*, and finally Daily based on *Every day*. A categorical variable for income redistribution was based on the question: Should the government reduce income inequality? Respondents could state that they: *Strongly Disagree & Disagree* (recoded to Disagree), *Neither Agree nor Disagree* (recoded to Neutral) and *Agree & Strongly Agree* (recoded to Agree). The level of religiosity is captured by a categorical variable based on the 0-10 score from the ESS recoded into *irreligious*, *somewhat*

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<sup>2</sup> The Null models in section 5.1 and 5.3 are unweighted.

<sup>3</sup> For Germany I used the election variable prtvede2, which was the second election. Lithuania had several electoral rounds. I chose the first round, variable prtvtbl1 since respondents' votes during this round were closest to their optimal choice.

*irreligious, neither religious nor irreligious, somewhat religious, and highly religious.* Finally, the respondent's domicile description was controlled for. The five categories are *A big city, Suburbs or outskirts of big city, Town or small city, Country village, or Farm or home in countryside.*

In addition, I included four immigration-related regressors based on ESS questions. The first of these is individuals' socio-cultural outlook on migration, measured on a three-tier scale (*Negative, Neutral, Positive*) based on two – social and cultural- 0-10 scale measures of individuals' immigration outlooks. Namely, respondents' views of immigration's cultural enrichment and quality of life of improvement (social) at the country level. This categorical regressor was created in the following way. First, a respondent's sociocultural outlook score was determined using the formula:

$$socioculturalscore_i = \sqrt{(culturalscore_i + 1) * (socialscore_i + 1)}$$

The sociocultural score of every respondent (*i*) equates to the square root of the cultural score +1 multiplied by the square root of the social score +1. Taking square roots prevents compensation of low cultural scores by high social scores and vice versa. The measure's range correspondingly moved up from 0-10 to 1-11, since multiplication by the square root of 0 - a score of zero for either or both measures – would translate into the most unfavourable sociocultural outlook. Second, a three-category sociocultural outlook regressor was constructed based on these scores namely: *Negative* (scores below 5.5), *Neutral* (scores between 5.5 and lower or equal to 6.5), and lastly *Positive* (scores above 6.5). The second immigration regressor related to voters' response to the question: *Is immigration bad or good for the country's economy?* measured on a 0-10 scale from, negative to the most positive perceptions. Once again, I created a three-tier categorical variable; *Negative* (scores below 5), *Neutral* (scores of 5), and *Positive* (scores above 5). The last immigration-related control is a dichotomous regressor, indicating whether the respondent was born in the country of residence or not. Finally, to check the robustness of the sociocultural outlooks (see Sections 5.1 and 5.2), I included a categorical covariate for the question; *“How many immigrants should be allowed from non-majority ethnical groups?”*.

**Table 1. Descriptive Statistics**

Variable	Obs	Mean	Std.Dev.	Min	Max
Far-right vote	26,036	.095	.294	0	1
Yes (%)	2,480 (9.5)	1	0	1	1
No (%)	23,556 (90.5)	0	0	0	0
Gender	26,033	1.524	.499	1	2
Male (%)	12,395 (47.6)	1	0	1	1
Female (%)	13,638 (52.4)	2	0	2	2
Born in Country	26,024	1.085	.281	1	2
Yes (%)	23,773 (91.3)	1	0	1	1
No (%)	2,251 (8.7)	2	0	2	2
Education (years)	25,785	13.026	3.719	0	54
Highest level of education	25,886	2.537	.983	1	4
Primary (%)	2,139 (8.3)	1	0	1	1
Secondary (%)	14,842 (57.3)	2	0	2	2
Post-Secondary Non-Tertiary (%)	1,760 (6.8)	3	0	3	3
Tertiary or Doctoral (%)	7,145 (27.6)	4	0	4	4
Age (years)	25,971	49.463	18.648	15	100
Socio-cultural view immigration	24,914	2.006	.897	1	3
Negative (%)	9,949 (39.3)	1	0	1	1
Neutral (%)	4,872 (59.5)	2	0	2	2
Positive (%)	10,093 (40.5)	3	0	3	3
Economic view immigration	25,297	2.029	.880	1	3
Negative (%)	9,457 (37.3)	1	0	1	1
Neutral (%)	5,698 (22.5)	2	0	2	2
Positive (%)	10,204 (40.2)	3	0	3	3
Allow Immigration from non-majority groups	25,521	2.510	.905	1	4
Many (%)	3,261 (12.8)	1	0	1	1
Some (%)	9,981 (39.1)	2	0	2	2
A few (%)	8,274 (32.4)	3	0	3	3
None (%)	4,005 (15.7)	4	0	4	4
Employment Status	25,966	1.913	.972	1	3
Employed (%)	13,491 (52.0)	1	0	1	1

Unemployed (%)	1,245 (4.8)	2	0	2	2
Economically Inactive (%)	11,230 (43.3)	3	0	3	3
Household Income	21,508	1.968	.749	1	3
Low Income (%)	6,392 (29.7)	1	0	1	1
Medium Income (%)	9,415 (43.7)	2	0	2	2
High Income (%)	5,701 (26.5)	3	0	3	3
Income inequality reduction	25,669	2.574	.710	1	3
Disagree (%)	3,323 (13.0)	1	0	1	1
Neutral (%)	4,282 (16.7)	2	0	2	2
Agree (%)	18,064 (70.4)	3	0	3	3
Use of internet	26,011	2.373	.830	1	3
(Almost)Never (%)	5,919 (22.8)	1	0	1	1
Weekly (%)	4,463 (17.2)	2	0	2	2
Daily (%)	15,629 (60.1)	3	0	3	3
Religiosity	25,821	2.721	1.366	1	5
Irreligious (%)	6,990 (27.1)	1	0	1	1
Somewhat irreligious (%)	5,437 (27.1)	2	0	2	2
Neither religious nor irreligious (%)	3,457 (13.4)	3	0	3	3
Somewhat religious (%)	7,645 (29.6)	4	0	4	4
Highly religious (%)	2,292 (8.9)	5	0	5	5
Domicile Description	26,012	2.944256	2.944256	1	5
A big city (%)	5,053 (19.4)	1	0	1	1
Suburbs or outskirts of big city (%)	2,546 (9.8)	2	0	2	2
Town or small city (%)	8,597 (33.1)	3	0	3	3
Country village (%)	8,430 (32.4)	4	0	4	4
Farm or home in countryside (%)	1,386 (5.3)	5	0	5	5
(NUTS) Crude rate of net migration (2011-2016 avg)	26,036	3.270	3.726	-5.15	13.717
(NUTS) Long-term unemployment rate (2016)	25,030	2.836	2.382	.7	14.8
(NUTS) Youth unemployment rate (2016)	24,943	17.192	9.900	4.4	58.7
(NUTS) Population Decline Categories	26,036	1.801	.5875	1	3



Decline (%)	7,600 (29.2)	1	0	1	1
Low Increase (0-10%) (%)	16,019 (61.5)	2	0	2	2
High Increase (10-20%) (%)	2,417 (9.3)	3	0	3	3
(NUTS) Population Change (2006-2016)	26,036	3.186	5.170	-9.080	18.069
(NUTS) Regional GDP per capita in EU28 (%) (2016)	25,386	103.420	45.836	25	223
(NUTS) Population density (pop/km <sup>2</sup> )	26,036	429.539	1016.566	3.4	7454.6

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I chose the first or second tiers of the EU's Nomenclature of Territorial Units for Statistics, NUTS I and NUTS II, as the regional second stage of the multi-level analyses (NUTS2 or NUTS1 for the UK and Germany, see Appendix I, Table A.I for the countries included). For continuous regional regressors, the base year is set to 2016. Moreover, all regional variables included in the ESS multilevel database come from Eurostat's regional statistics. The first of these is the region's long-term unemployment rate: unemployed for 12 or more months measured as a percentage of the active population (or the youth, 15-24-year-olds, the unemployment rate for robustness purposes). Furthermore, regional demographic change was calculated for the period 2006-2016, which is used in 5.2 to assess the robustness of population change's contribution to FR. Instead, in section 5.1 a categorical regressor of population change is used. The three categories are *Decline*, *Low Increase 0-10%* and *High Increase 10-20%*. To control for regional prosperity, GDP per capita in Euros in the percentage of the EU28 average is included. The final regional regressor is the six-year average (from 2011-2016) crude rate of net migration including statistical adjustments.

## 4.2 Methodology

Multilevel logistics modelling techniques (MLM) – sometimes referred to as mixed effects or hierarchical logistic models – allow for the estimation of binary choice models, with the incorporation of both compositional (individual) factors like age, gender, and education, while simultaneously controlling for the regional context (regional unemployment, or demographic change). Because both individual and regional factors are hypothesized to influence respondents' voting decisions multilevel estimation seems applicable. This is especially relevant for hierarchical data, as is the case in the ESS-multilevel dataset, with respondents nested within

regions. A key advantage of MLM is that it allows for the estimation of random intercepts and slopes dependent on geographical levels (Ballas and Tranmer, 2012), such as NUTS classifications. To that extent, these models allow for the assessment; of whether either *the people that do not matter* and/or *the places that do not matter* affect and moderate immigration's role in FR voting decisions. Jones et al. (1992) introduced multilevel analysis to electoral studies. Prior literature (Jones et al., 1992; Johnston et al., 2007) studied local and regional context's contribution to geographical voting patterns and confirmed that contextual factors are not just add-ons to individual-level determinants but are relevant from the onset e.g., England/the U.K. Koeppen et al. (2021) were the first to apply multilevel techniques in the geographies of discontent literature and reaffirmed the importance of the individual (people that do not matter), as well as region's (places that do not matter) roles, in APEP-voting differences across EU-regions. Since this thesis likewise aims to assess similar patterns, the incorporation of multi-level methods seems justified.

As stated in section 3, this study assesses hypotheses by cross-level interaction effects. What is more, such effects, if found to be statistically significant, indicate interdependence between composition and context. Nonetheless, interpreting interaction effects is not as straightforward in MLM as in ordinary least squares. In (multilevel) logistic regressions, marginal effects are not equivalent to the covariates' coefficients. In fact, marginal effects – on the probability that the dependent variable is equal to one – are conditional on the interaction's term coefficient & values, as well as those of other variables and corresponding coefficients (Ai and Norton, 2003). For this reason, I present several predicted marginal probability plots for the covariates, to create any inferences regarding the significance of the interaction terms. Moreover, this requires that all categorical controls be set to the reference category, while all continuous ones are set at the regression mean<sup>4</sup>. Thus far only Koeppen et al. (2021) use a comparable methodology to present the marginal effect of happiness on APEP voting, conditional on unemployment rates.

The incorporation of the multilevel binary logistic model will follow the four-step procedure, as introduced by Sommet and Morselli (2017). (1) A preliminary data preparation stage where regressors could be grand-mean centred (GMC), cluster-mean (CMC) centred, or uncentered. GMC refers to centring around the predictors' general mean, while CMC relates to centring

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<sup>4</sup> Regression mean refers to the mean of the observations included in the model. The reference country is Austria and the intercept's random effect is assumed to be zero.

predictors around the cluster's mean<sup>5</sup>. Note that level-2 variables can only be GMC since CMC would yield values equivalent to non-centring (ibid). Centring can be helpful to disentangle the total effects of coefficients into both a between and within effect (Yaremych et al., 2021). However, the centring decision should be based on the underlying hypotheses and theory (Sommet and Morselli, 2017), e.g.: if the primary interest is in the effect of level-1 variable  $X$  on outcome  $Y$ , the within-effect, than CMC centring is appropriate. Centring variables moreover helps in interpreting covariates' coefficients and the intercept since no meaningful zero point exists for continuous regressors such as years of formal education (Enders and Tofighi, 2007). Since hypothesis II relates to the individual level effect of education moderated by regional migration, I decided to centre education within clusters. Henceforth, this allows us to filter out between-NUTS region effects of differences in average education attainment on FR-voting (see Enders and Tofighi, 2007, for the centring of cross-level interaction effects). Yet, as will be demonstrated in section 5.1, the results suggest that uncentred education provides similar effects.

Next, I (2) estimate a null model (with random intercepts but without covariates), (3) estimate a model including covariates first and second level as well as intra-level interaction effects, and lastly (4) add cross-level interaction effects. Note, however, that from a theoretical standpoint there is little, to no reason for random slope variation of regressors across regions. An exception might be provided by household income. Yet, theoretical motivations for random slopes of household income on a per region basis is non-existent. Hence, the second step only estimates the constrained intermediate model (Sommet and Morselli, 2017).

## 5. Results

### 5.1 Baseline results

In Table 2 the results for the two-level null model are shown. The null model (without regressors but with random intercepts) has an inter-class correlation coefficient (ICC) of about 0.340, indicating that about a third of FR voting decision variations attributes to regional factors. Additionally, the LR-test statistic at a value of 1712.19 (-2LL shown in Table 2) with one degree

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<sup>5</sup> Grand-mean centring (GMC) is defined as:  $x_{GMC} = x_i - \bar{x}$ , where  $\bar{x}$  is the grand mean and  $x_i$  the values of observation  $i$ . Cluster-mean centring (CMC) is defined as:  $x_{CMC} = x_i - \bar{x}_j$ , where  $\bar{x}_j$  represents the cluster mean for region  $j$ .

of freedom, suggests that multilevel logistic estimation is the best fit (the null hypothesis of the regular logistic estimation is rejected at the 5% level). Consequently, the data's hierarchical structure should not be ignored, and multilevel logistic estimation is appropriate.

**Table 2. Two-level Null**

VARIABLES (Odds Ratios)	(1) Null Model
<b>Fixed Effects:</b>	
Constant	0.061*** (0.007)
<b>Random Effects:</b>	
Var (Constant)	1.692*** (0.251)
Observations	19,683
Number of Regions	139
Log likelihood	-4796.2878
-2LL (Multi vs Logit)	1712.19
ICC	0.340

Standard errors in parentheses  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 3. Intermediate and Final model**

VARIABLES (Odds Ratios)	(2) Intermediate Model without Interactions	(3) Intermediate Model with Interactions	(4) Final Model
<b>Fixed Effects:</b>			
Gender (Ref: Male)			
Female	0.678*** (0.0539)	0.678*** (0.0538)	0.666*** (0.0523)
Age of respondent (Years)	1.012*** (0.00288)	1.012*** (0.00289)	1.012*** (0.00286)
Born in country (Ref: Yes)			
No	0.716 (0.179)	0.720 (0.180)	0.729 (0.182)
Education (Years)	0.973** (0.0130)	0.973** (0.0130)	0.990 (0.0155)
Employment Status (Ref: Employed)			
Unemployed	0.760 (0.243)	0.762 (0.244)	0.775 (0.242)
Economically inactive	0.622*** (0.0601)	0.622*** (0.0600)	0.632*** (0.0605)
Level of Religiosity (Ref: Irreligious)			
Somewhat irreligious	0.895 (0.141)	0.894 (0.141)	0.878 (0.139)
Neither religious nor irreligious	0.931 (0.158)	0.929 (0.158)	0.933 (0.156)
Somewhat religious	0.981 (0.150)	0.977 (0.150)	0.988 (0.151)
Highly religious	1.215 (0.228)	1.213 (0.228)	1.252 (0.231)
Internet Usage (Ref: (Almost)Never)			
Weekly	1.132 (0.155)	1.132 (0.154)	1.106 (0.146)
Daily	1.177 (0.130)	1.176 (0.130)	1.163 (0.126)

Economic view Immigration (Ref: Neutral)			
Negative	1.253*	1.253*	1.266**
	(0.153)	(0.153)	(0.151)
Positive	0.632***	0.632***	0.634***
	(0.0755)	(0.0756)	(0.0765)
Socio-cultural view Immigration (Ref: Neutral)			
Negative	1.734***	1.732***	3.783***
	(0.195)	(0.195)	(1.476)
Positive	0.588***	0.588***	0.517
	(0.0862)	(0.0863)	(0.272)
Domicile Description (Ref: Big city)			
Suburbs or outskirts of big city	1.301	1.289	1.274
	(0.244)	(0.243)	(0.242)
Town or small city	1.246**	1.243**	1.235*
	(0.135)	(0.136)	(0.134)
Country village	1.213	1.209	1.198
	(0.157)	(0.157)	(0.155)
Farm or home in countryside	0.813	0.815	0.788
	(0.170)	(0.170)	(0.167)
View about Income Redistribution (Ref: Disagree)			
Neutral	1.065	1.070	1.065
	(0.164)	(0.165)	(0.162)
Agree	1.034	1.039	1.056
	(0.131)	(0.132)	(0.132)
Household Income (Ref: Low Income)			
Medium Income	1.153	1.155	1.137
	(0.126)	(0.126)	(0.123)
High Income	1.139	1.143	1.127
	(0.116)	(0.117)	(0.114)
(NUTS) Population Change (Ref: High Increase (10-20%))			
Decline	1.105	3.063**	3.301*
	(0.372)	(1.384)	(2.193)
Low Increase (0-10%)	0.872	2.309**	2.940*
	(0.210)	(0.954)	(1.828)
(NUTS) Crude rate of net migration (2011-2016 avg)	1.004	1.259***	1.367***
	(0.0280)	(0.0950)	(0.143)
<b>Ref:</b> (NUTS) Population Change (High Increase) * (NUTS) Crude rate of net migration (2011-2016 avg)			
(NUTS) Population Change (Decline) * (NUTS) Crude rate of net migration (2011-2016 avg)		0.860**	0.888*
		(0.0512)	(0.0558)
(NUTS) Population Change (Low Increase) * (NUTS) Crude rate of net migration (2011-2016 avg)		0.868***	0.888**
		(0.0434)	(0.0476)
(NUTS) GDP per capita (% of EU28 avg) (2016)	0.996	0.994**	0.994**
	(0.00274)	(0.00273)	(0.00280)
<b>Ref:</b> Socio-cultural view Immigration (Neutral) * (NUTS) Crude rate of net migration (2011-2016 avg)			
Socio-cultural view Immigration (Negative) * (NUTS) Crude rate of net migration (2011-2016 avg)			0.980
			(0.0323)
Socio-cultural view Immigration (Positive) * (NUTS) Crude rate of net migration (2011-2016 avg)			0.921**
			(0.0364)
Long-term Unemployment Rate (% of Economically Active 2016)	0.885***	0.920*	0.931
	(0.0365)	(0.0431)	(0.0438)
Long-term Unemployment Rate (% of Economically Active 2016) * (NUTS) Crude rate of net migration		0.974**	0.971***

(2011-2016 avg)		(0.0111)	(0.0107)
Education (Years) * (NUTS) Crude rate of net migration (2011-2016 avg)			0.994 (0.00368)
<b>Ref:</b> Socio-cultural view Immigration (Neutral) * (NUTS) Population Change (High Increase)			0.421** (0.178)
Socio-cultural view Immigration (Negative) * (NUTS) Population Change (Decline)			0.470** (0.163)
Socio-cultural view Immigration (Negative) * (NUTS) Population Change (Low Increase)			2.063 (1.164)
Socio-cultural view Immigration (Positive) * (NUTS) Population Change (Decline)			0.985 (0.503)
Socio-cultural view Immigration (Positive) * (NUTS) Population Change (Low Increase)			0.0445*** (0.0432)
Constant	0.242** (0.167)	0.0767*** (0.0616)	0.0445*** (0.0432)
<b>Random Effects:</b>			
Var (Constant)	1.239*** (0.0616)	1.211*** (0.0567)	1.214*** (0.0555)
Observations	19,683	19,683	19,683
Number of Regions	139	139	139
Country Dummies	YES	YES	YES
Log pseudolikelihood	-4935.8343	-4932.4326	-4886.9083
ICC	0.061	0.055	0.056

Clustered (NUTS) standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

In Table 3, the results of the intermediate (2,3) and full (final in 4) models are shown, with clustered standard errors at the NUTS/regional level. A manual LR-test (chi-squared: 91.049, df: 7) reveals that the unrestricted model (4) with cross-level interactions outperforms the restricted (intermediate 3) model (e.g., the null hypothesis that the restricted model performs equally well is rejected). The ICC is comparable between both models at about 0.056. Yet, an LR-test comparing (2) and (3), only finds (3) to statistically outperform (2) at the 10% significance level (3df at 6.80).

Hypothesis I, as introduced in section 3, states that immigration moderates the effect of population change on FR voting. More specifically, immigration reduces FR voting probabilities in depopulation regions. As stated in Subsection 4.2 population change's marginal effect can only be interpreted conditional on the (continuous) mean net migration rate, sociocultural view of immigration, and values of all other covariates. The predicted marginal effect of population growth on FR-voting probabilities of the intermediate (3) and final model (4), are shown in Figures 1A and 2A, respectively. Figure 1A indicates that depopulation, as

well as low growth regions— during the period 2006-2016 – had lower FR voting probabilities, conditional on higher immigration, compared to the reference category of high growth regions.

Model (4) introduces an interaction term between population changes and sociocultural outlook on immigration, to assess the effect of sociocultural outlook across regions. If net emigration (net migration < 0) occurred, voters in depopulation and low-growth regions were more tempted to support FR parties than those in the fastest-growing regions (reference group). This outcome follows the narrative of the *places that do not matter* (Rodríguez-Pose, 2018; Rodríguez-Pose et al., 2021; McCann, 2021), as greater emigration (brain drain) increases regional marginalisation and puts a strain on public service provision, correspondingly fuelling discontent and FR support. For net immigration, the three marginal effect plots (Figure 2A) illustrate that regardless of sociocultural outlook - negative, neutral, or positive – a univocal decrease in FR voting is observed. Yet, individual sociocultural outlook matters, as the effect was only statistically significant for those with negative immigration views. These results are in line with Hartevelde et al.'s (2022) reasoning for FR support in rural areas, as well as hypothesis I.

Scarcity in employment opportunities (higher long-term unemployment) was hypothesized to promote FR support, for higher crude rates of net migration, as natives scapegoat immigrants for regional economic hardship (hypothesis II). The main effect of unemployment is statistically insignificant in (4). The long-run unemployment rate's marginal probability plots (3) & (4) are presented in Figures 1B and 2B, respectively. At crude (mean) net migration rates of 3 per 1000 and above, the marginal effect of long-term unemployment significantly reduces FR support. This outcome contradicts hypothesis II, as well as earlier work since scholars found that higher unemployment increases respondents' acceptance of anti-immigration rhetoric (for Greece see Roupakias & Chletsos (2020) and for France see Edo et al., 2019). Yet, a rationale for the observed trend follows from the potential toughening up on immigration of establishment and (far)-left parties throughout Europe (Alonso and Fonseca, 2012), such labour market concerns are not only included in the FR political agenda.

The final economic interaction evaluated individual labour market competition between natives and immigrants (hypothesis III). I assessed this by a cross-level interaction between education in years and net migration. The odds ratio has the expected sign in (4) since higher educated natives are less inclined to vote FR in general. As mentioned in the previous section, this hypothesis relates to the direct effect of individual education on FR electoral success moderated by net migration. Henceforth, a cluster-mean centred version of (4) is presented in Table A.II

Appendix II. The results indicate that the within-effect is equal to the total effect in (4). Consequently, this implies that regional average education in years' effect, the between-effect, is negligible. Therefore, usage of the uncentred years of schooling is appropriate. Figure 2C's formal education's marginal effects plot illustrates, that higher net migration during the last 6 years reduced FR electoral backing for higher educated individuals insignificantly at the 5% level. Therefore, immigration-related contextual concerns about the substitutability between native and foreign citizens' labour among voters are not supported, contrary to Edo et al. (2019). Yet, as mentioned in Section 2.3, Hainmueller and Hiscox (2007) stated that the relationship between education (or skills) and views of immigration, has little to do with employment competition and more with prejudice towards migrants, especially prevalent among lower educated natives.

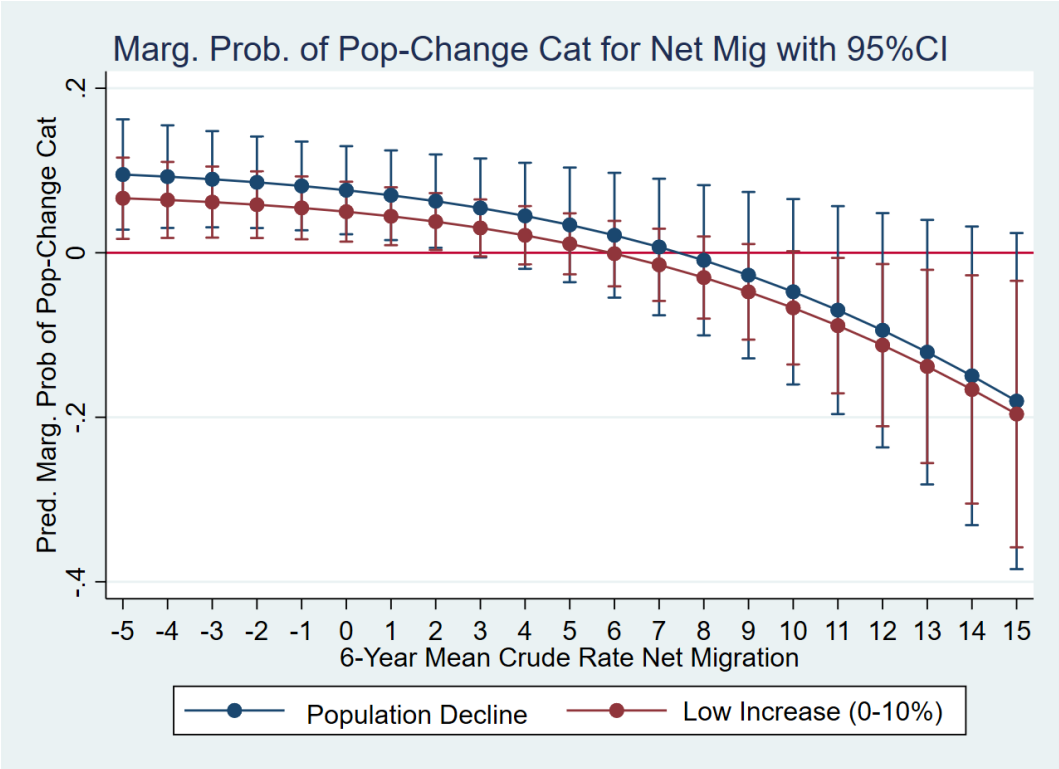
Figure 2D presents the marginal effect plot of respondents' outlook on immigration's sociocultural contribution and regional net migration. The results coincide with the hypothesized difference across declining and (fastest) growing regions. The top-left marginal effect plot in Figure 2D illustrates that those respondents with negative or positive outlooks are statistically equally probable – compared to the neutral reference group – to back the FR in depopulation regions. In regions facing positive, but lower, population growth (top-right panel), negative and positive sociocultural outlooks (reference; neutral) marginally decrease FR-voting for prolonged immigration (crude rates between  $-3$  and  $9$ ). In contrast, the bottom-left plot of 2D demonstrates that in the fastest-growing regions immigration-related sociocultural concerns are highly relevant. The results align with the narrative introduced by hypothesis V and Mehic (2022), but unfortunately not with either hypothesis IVa or IVb. On the one hand, prolonged exposure to (higher) immigration fuelled FR voting among respondents with unfavourable outlooks, reinforcing previously held concerns about the ethnical, linguistic, and social composition of the region. On the other hand, respondents who regarded immigration as social and cultural enrichment became increasingly unlikely to vote FR. Henceforth, immigration strengthened respondents' beliefs, such that neither the contact, nor compositional amenities hypothesis exclusively explains groups' voting behaviour.

While most individual-level controls, based on earlier literature (Koeppen et al., 2021; Alaimo and Solivetti, 2019; Becket et al., 2017), have the anticipated effect on FR voting, such as education, gender, and education, some surprising outcomes exist. Age, an often-cited principal factor for populist support, is only marginally important (1.012 odds ratio). Koeppen et al. (2021) presented a comparable effect of age on EU-wide APEP voting (1.009-1.014 odds ratio).

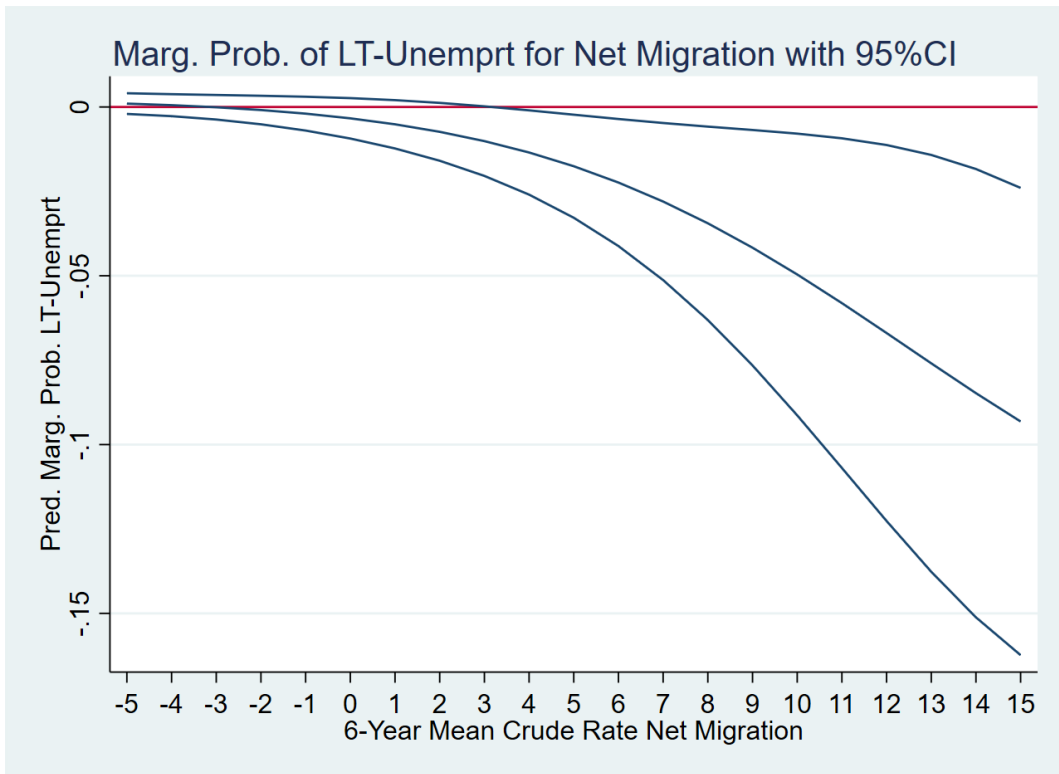


Natives and foreign-born residents are equally likely to back FR-parties. The categorical variable for employment status illustrates, that inactive natives are less likely to have voted FR than employed ones. A promising explanation grounds on the fact that economically inactive respondents face, in contrast to active ones, potential job loss from one of the often-cited FR scapegoats e.g., automation and globalisation. Natives' outlook on immigrants' contribution to the nation's economy, presumed to capture concerns e.g., about the net contribution to the welfare state (see section 2.3), is significant. Positive and negative views, in contrast to neutral outlooks, respectively increase or decrease the odds to vote FR. The NUTS-level control for regional income per capita as a percentage of the EU28 average indicates that richer regions are less like to vote for populist radical right and extremist right-wing parties, if interaction effects are included.

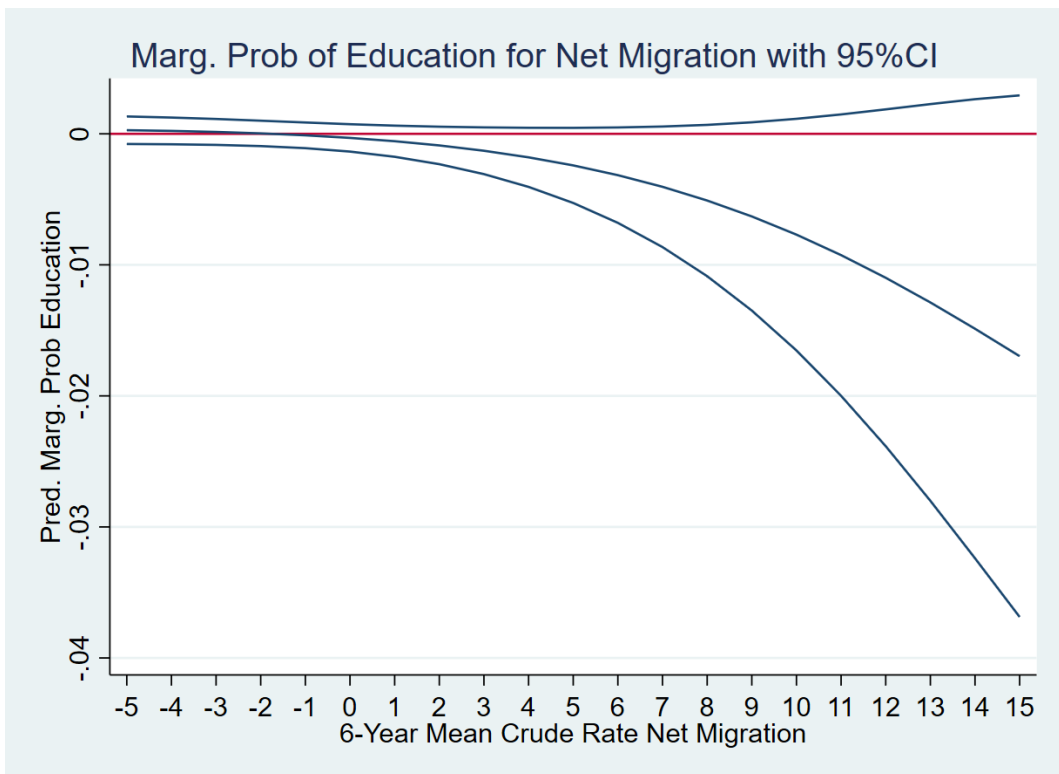
**Figure 1. Interaction plots of (3): A**



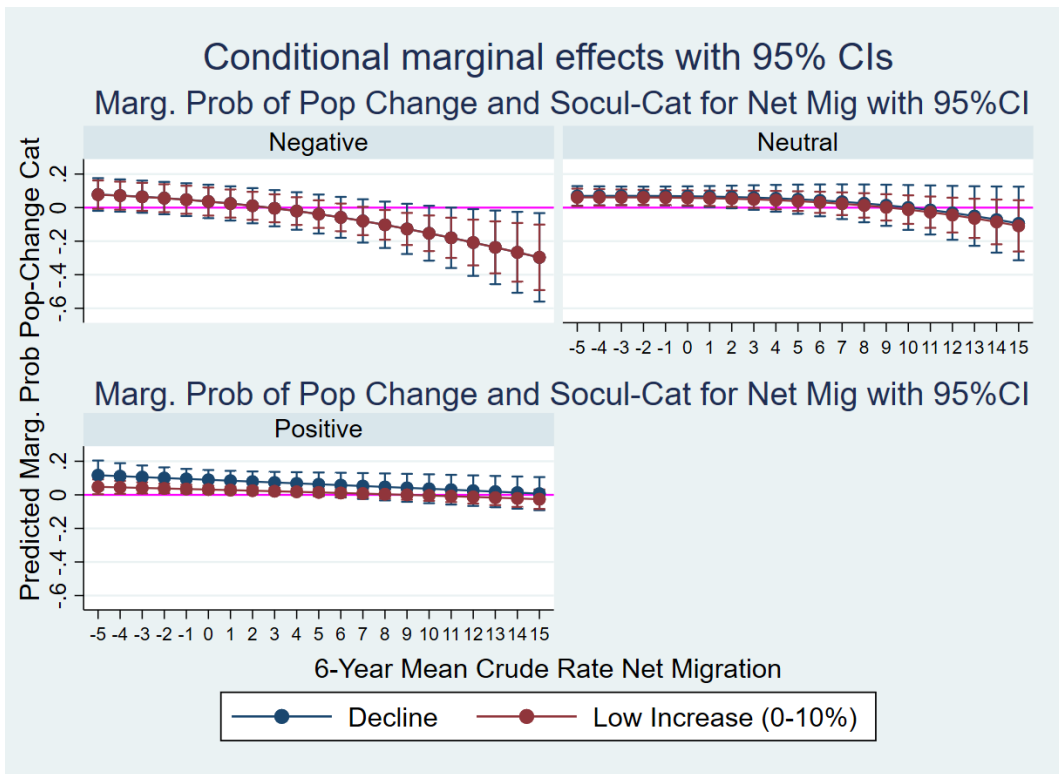
**Figure 1. B**



**Figure 2. Interaction plots (4): A**



**Figure 2.B**



**Figure 2.C**

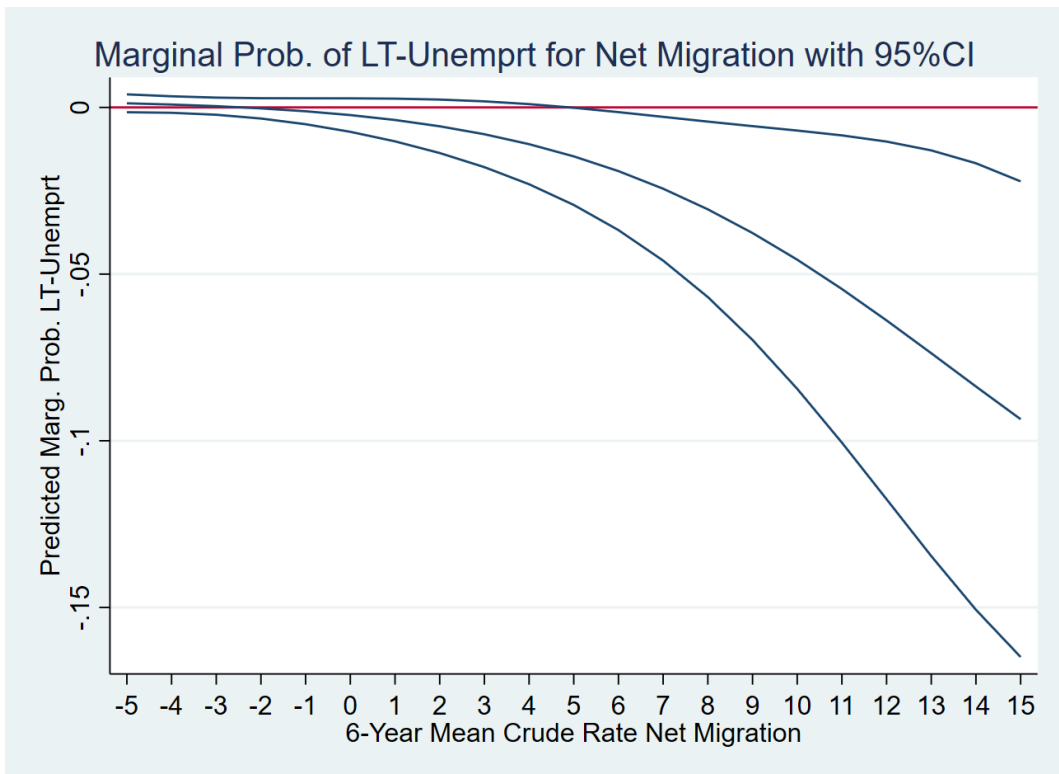
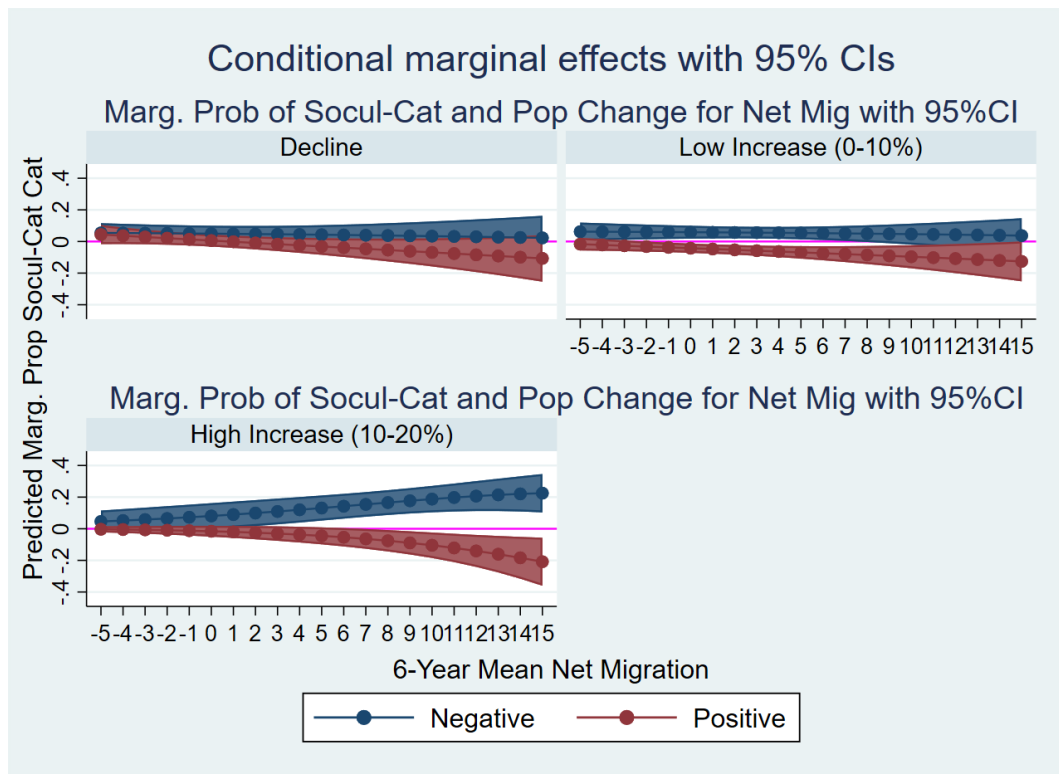


Figure 2.D



## 5.2 Alternative Covariates and Rural-Urban dichotomy

In this subsection, the robustness of the final model's results (model 4) is assessed by using alternative covariates. Moreover, the relevance of the rural-urban division in FR voting roots as proposed by Hartevelde et al (2022), is evaluated in the European context. First, to assess the relevance of hypothesis II, the long-term unemployment rate is substituted by the youth unemployment in model (5). High unemployment among young individuals, reflects greater economic insecurity in regions which in combination with higher immigration, provide the basis for FR electoral support. In contrast to long-term unemployment (Figure 2C), youth unemployment (Figure 3A) insignificantly affects FR voting probabilities. This outcome relates to the greater spread of youth unemployment across NUTS regions (see Table 1), creating larger confidence intervals for higher net immigration levels. Nonetheless, youth unemployment's marginal effect trajectory, strikingly resembles the long-run unemployment path in Figures 1.B and 2.B.

In the previous section (4.1), prolonged immigration reinforced respondents' sociocultural views of immigration. Yet, Essletzbichler and Forcher (2022) illustrated that anti-immigration

sentiments are contingent on immigrants' origin and/or religious background. Therefore, model (7) substitutes the sociocultural view of immigration, with a categorical variable for the question; *How many immigrants from non-majority ethnical backgrounds or races should be allowed to come and live in the country?* Respondents were presented with four answers: *Many* (reference group), *Some*, *A few*, and *None*. The marginal predicted probability plot of immigrant origin - in Figure 3C - illustrates a comparable pattern to Figure 2D, albeit greater in magnitude. Inhabitants of (the fastest) population growth regions who want *some*, *a few*, or *no* immigrants from non-majority backgrounds were more inclined to back the FR, compared to the reference group. In depopulation regions prolonged higher immigration fails to translate into significant FR voting probabilities across respondents with different non-majority background preferences. Consequently, prolonged exposure to - on average higher immigration - fails to reduce individuals' likeliness to support the FR, ergo, validating the relevance of the compositional amenities as presented by hypothesis IVa. Besides, as introduced by hypothesis V, the context of population change is noticeable, as sociocultural concerns are substantively less influential on FR sentiments in depopulation regions.

Model (6) assesses the relevance of net-migration's moderation effect on population change, by incorporating a continuous regressor, instead of the categorical regressor for population change. Figure 3B presents the predicted marginal probabilities plots of population change conditional on net migration by respondents' sociocultural outlook of immigration (negative, neutral, positive). The marginal effects correspond to the categorical population change effect, presented in Figures 1A and 2A. An increase in population growth combined with higher immigration for respondents with negative and neutral outlooks of immigration's sociocultural enrichment significantly increases FR voting probabilities. It, therefore, seems probable that the context of high immigration and depopulation counteracts natives' FR sentiments, as immigration curtails regional marginalisation.

In (8), the formal years of schooling were substituted by educational categories, to assess the robustness of individual labour market competition. Hypothesis III, as introduced in Section 3, states that lower to middle-skilled natives have higher FR voting propensities, due to employment competition between natives and immigrants. Yet, Figure 3D finds, just as in Figure 2A, no statistically different marginal effect of higher education – compared to the reference category of primary education – on FR voting. Hence, possible intergroup labour market competition induced by higher immigration is unaffected individual FR voting decisions.

Lastly, in (9) the population change has been replaced by a recoded version of the respondent's domicile description, to compare the rural-urban divide in immigration-related FR support, as introduced by Hartevelde et al. (2022). *Big city* and *Suburbs or outskirts of the big city* were recoded to Urban, *Town or small city* to Sub-Urban, and lastly, *Country village* and *Farm or home in countryside* to Rural. Marginal effect plots were constructed for respondents' sociocultural outlook on immigration (3E) and the domiciles' effect on FR-voting probabilities (3F). Figure 3E presents a comparable marginal effect of sociocultural immigration outlook across the rural-urban division to its effect on population change in Figure 2D. Prolonged higher immigration, namely strengthens respondents' sociocultural immigration views across the most urbanized as well as the fastest-growing regions. Furthermore, immigration's effect on the negative outlook respondents is negligible for rural and semi-urban areas, while the same could not be said about positive outlooks. Hartevelde et al. (2022) discovered, that anti-immigration sentiments are a predictor of the PVV vote in the Netherlands regardless of the dichotomous rural-urban divide. Figure 3E, however, illustrates that merely urbanized living environments in the EU experienced increases in immigration-induced FR-voting. Alba and Fonet (2017) state that immigration is mostly an urban phenomenon in Europe. Since the Netherlands has one of the highest population densities in the EU, the rural-urban division made by Hartevelde et al. (2022) might be incomparable to other member-states respondents' domicile descriptions. Thus, this distinction might as well explain the contradictory findings. Figure 3F presents the marginal effect plots of the rural-urban division conditional on net migration by the sociocultural outlook of immigration. What becomes evident is that respondents in urbanised and rural dwellings are equally unaffected by higher prolonged immigration in their decision to vote FR, regardless of sociocultural outlook.

**Table 4. Robustness Analysis**

VARIABLES	(5)	(6)	(7)	(8)	(9)
	Youth Unemp. Rt.	Con. Pop. Change	Immigrant's Origin	Educ. Category	Domicile Category
<b>Fixed Effects:</b>					
(NUTS) Crude rate of net migration (2011-2016 avg)	1.259**	1.106	1.230*	1.325***	1.205**
	(0.140)	(0.0966)	(0.140)	(0.128)	(0.0989)
(NUTS) Youth unemployment rate (2016)	0.986				
	(0.0145)				
(NUTS) Youth unemployment rate (2016) * (NUTS) Crude rate of net migration (2011-2016 avg)	0.998				
	(0.00232)				
(NUTS) Population change %		1.024			

(2006-2016)	(0.0494)	
(NUTS) Population change %	1.007**	
(2006-2016) * (NUTS) Crude rate of net migration (2011-2016 avg)	(0.00286)	
Socio-cultural view Immigration (Ref: Neutral)		
Negative * (NUTS) Population change % (2006-2016)	0.999	
	(0.0304)	
Positive * (NUTS) Population change % (2006-2016)	0.885***	
	(0.0279)	
Allow immigrants from different race/ethnic groups from majority (Ref: Many)		
Allow some	1.781	
	(1.012)	
A few	4.717**	
	(2.910)	
None	5.692***	
	(3.401)	
Allow some * (NUTS) Crude rate of net migration (2011-2016 avg)	1.154***	
	(0.0561)	
A few * (NUTS) Crude rate of net migration (2011-2016 avg)	1.105	
	(0.0754)	
None * (NUTS) Crude rate of net migration (2011-2016 avg)	1.169**	
	(0.0726)	
Allow immigrants from different race/ethnic groups from majority (Ref: Many) * (NUTS) Population Change (High Increase)		
Allow some * Decline	0.809	
	(0.489)	
Allow some * Low Increase	0.747	
	(0.452)	
A few * Decline	0.457	
	(0.314)	
A few * Low Increase	0.648	
	(0.346)	
None * Decline	0.557	
	(0.384)	
None * Low Increase	0.812	
	(0.435)	
Education category (Ref: Primary)		
Secondary		1.472**
		(0.259)
Post-Secondary Non-Tertiary		1.151
		(0.280)
Tertiary and Doctoral		1.179
		(0.257)
Secondary * (NUTS) Crude rate of net migration (2011-2016 avg)		0.975
		(0.0413)
Post-Secondary Non-Tertiary * (NUTS) Crude rate of net migration		0.983

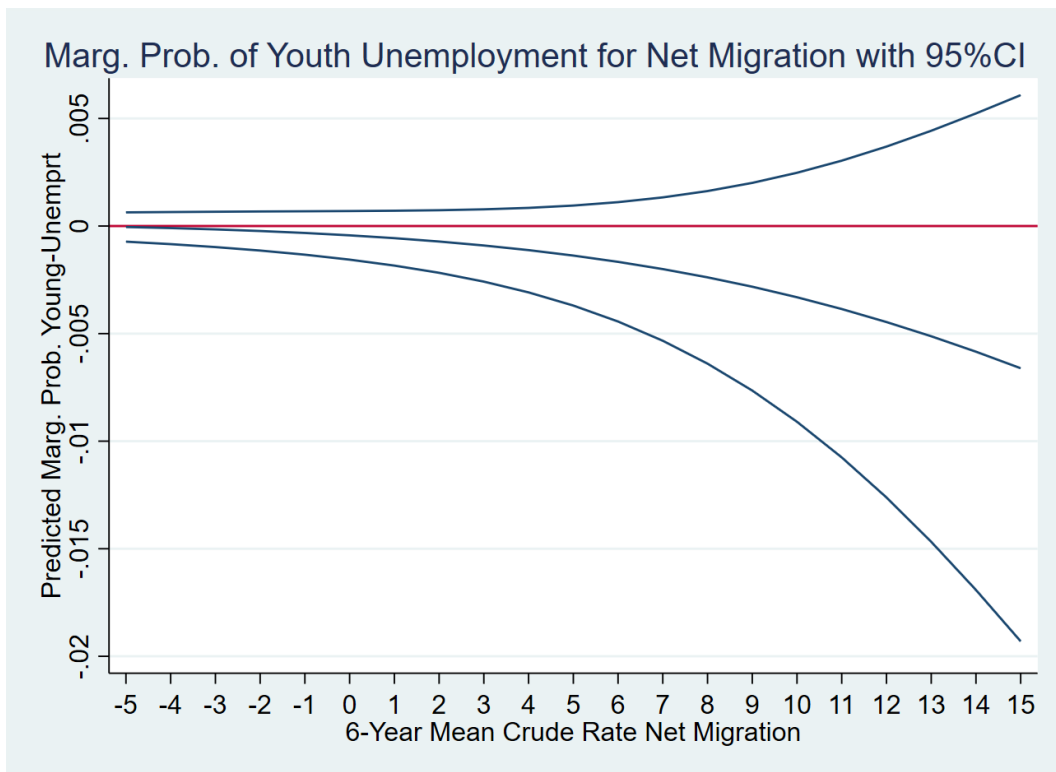
(2011-2016 avg)						
Tertiary and Doctoral * (NUTS)						(0.0515)
Crude rate of net migration (2011-2016 avg)						0.944
						(0.0463)
Domicile Category (Ref: Sub-Urban)						
Rural						0.942 (0.173)
Urban						0.570* (0.170)
Rural * (NUTS) Crude rate of net migration (2011-2016 avg)						0.977 (0.0305)
Urban * (NUTS) Crude rate of net migration (2011-2016 avg)						1.041 (0.0286)
Socio-cultural view Immigration (Ref: Neutral)						
Socio-cultural view Immigration (Negative) * Rural						1.079 (0.217)
Socio-cultural view Immigration (Positive) * Rural						1.049 (0.263)
Socio-cultural view Immigration (Negative) * Urban						1.636 (0.591)
Socio-cultural view Immigration (Positive) * Urban						1.539 (0.582)
Controls†	YES	YES	YES	YES	YES	YES
Observations	19,594	19,683	19,900	19,704	19,683	19,683
Number of Regions	136	139	139	139	139	139
Country Dummies	YES	YES	YES	YES	YES	YES
Log pseudolikelihood	-4869.5603	-4883.4486	-5041.0772	-4889.6927	-4904.5779	-4904.5779
ICC	0.067	0.058	0.059	0.056	0.061	0.061

Clustered (NUTS) standard errors in parentheses

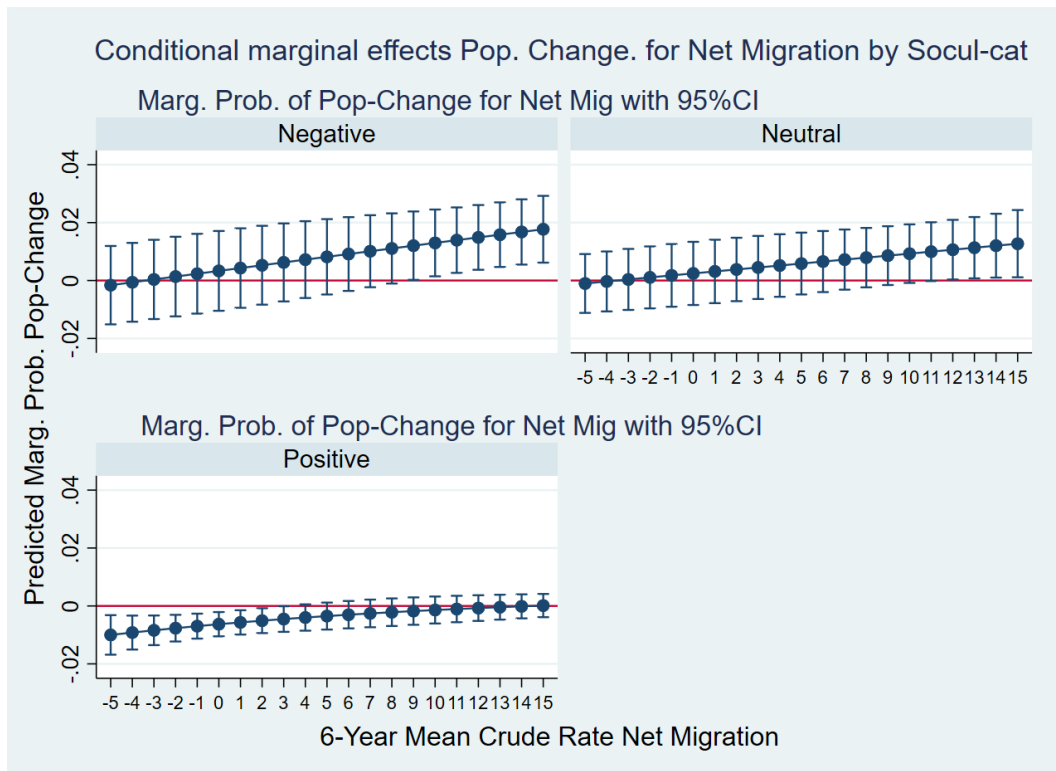
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1, † For odds ratios and random effects of other regressors see Appendix III Table A.III



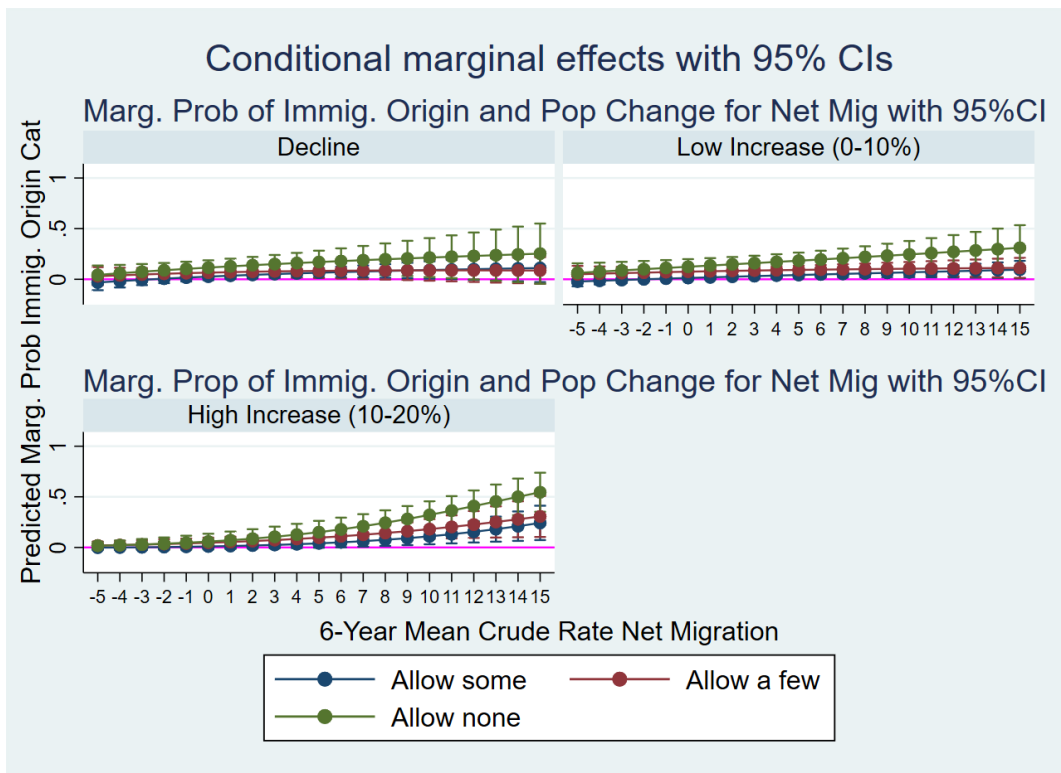
**Figure 3. Marginal effects plots Table 4: A**



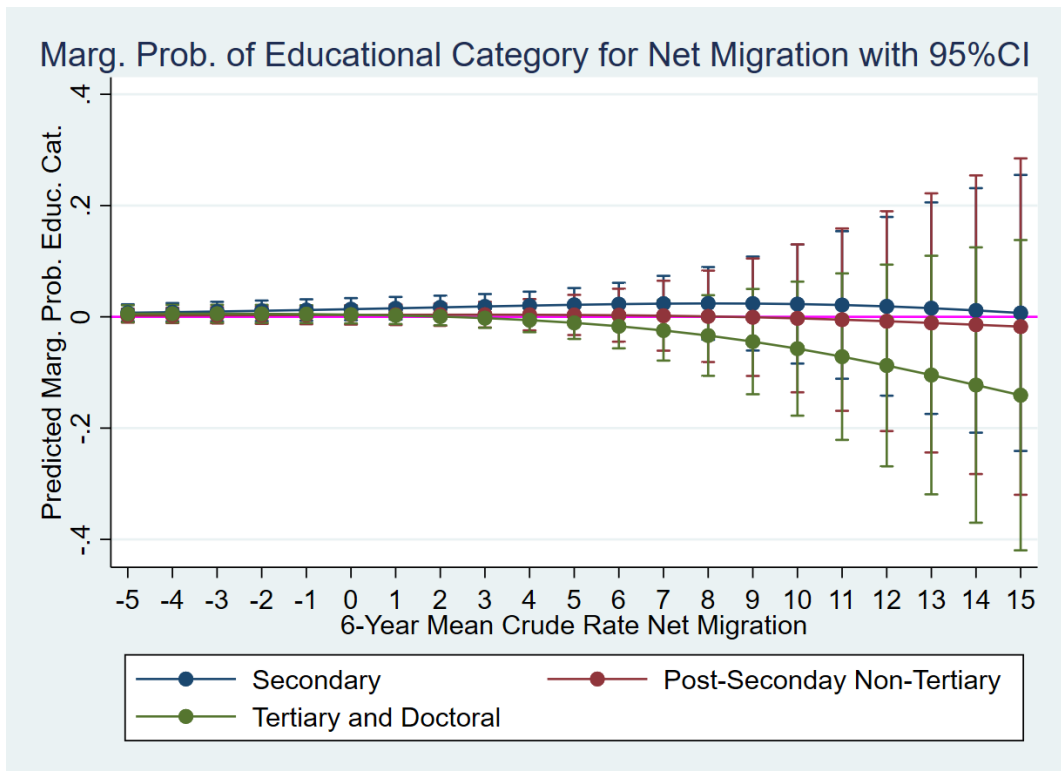
**Figure 3.B**



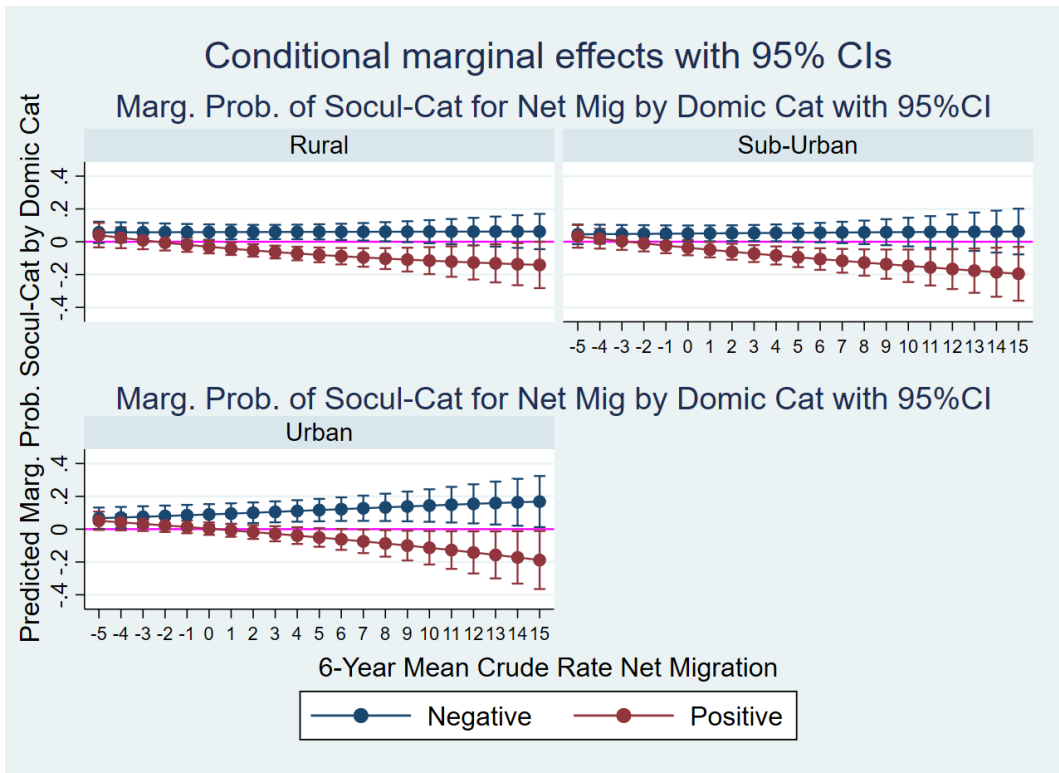
**Figure 3.C**



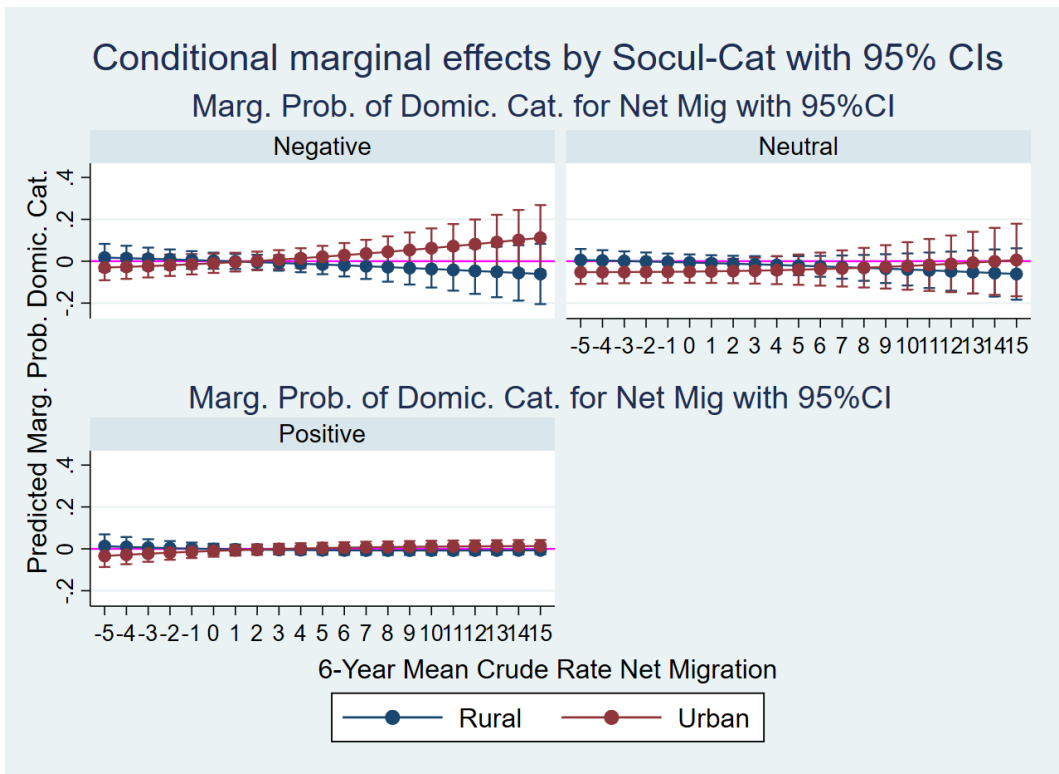
**Figure 3.D**



**Figure 3.E**



**Figure 3.F**



### 5.3 Results using the ninth edition of the European Social Survey

In this section, I assess whether an analysis of immigration's role in FR-voting using the ninth edition of the ESS – with the base year of 2018 – provides comparable results to the analysis of Sections 5.1 and 5.2. Between the publication of the eighth (2016) and ninth (2018) editions of the ESS, national elections have taken place in Cyprus and Spain. Henceforth, the number of countries included increased, although the UK and Hungary were excluded from the final model specification, due to data limitations. Moreover, in Italy, the geographical scale changed from NUTS II, to NUTS I. All countries and their NUTS levels can be found in Appendix IV, moreover, basic summary statistics are presented.

Model 10 in Table 5 indicates that the two-level mixed effect model's fit outperforms a regular logit. The interclass correlation coefficient is at 0.179 noticeably lower for the ESS9 Null model – in contrast to ESS8 of 0.340 - but advocates in favour of mixed effects modelling. What is more, the constant's fixed effect and random component are statistically significant.

**Table 5. Two-level Null ESS9**

VARIABLES (Odds Ratios)	(10) Null Model
<b>Fixed Effects:</b>	
Constant	0.0641*** (0.00539)
<b>Random Effects:</b>	
Var (Constant)	2.047*** (0.239)
Observations	22,896
Number of Regions	136
Log Likelihood	-5454.177
-2LL (Multi vs Logit)	723.24
ICC	0.179

Standard errors in parentheses  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 6. Intermediate and Final model ESS9**

VARIABLES (Odds Ratios)	(11) Intermediate Model without Interactions	(12) Intermediate Model with Interactions	(13) Final Model
<b>Fixed Effects:</b>			
Gender (Ref: Male)			
Female	0.646*** (0.0547)	0.645*** (0.0546)	0.649*** (0.0550)
Age of respondent (Years)	1.007*** (0.00230)	1.007*** (0.00230)	1.007*** (0.00231)
Born in country (Ref: Yes)			
No	0.711 (0.153)	0.713 (0.154)	0.689* (0.144)
Education (Years)	0.982 (0.0122)	0.983 (0.0123)	0.985 (0.0149)
Employment Status (Ref: Employed)			
Unemployed	0.961 (0.234)	0.960 (0.234)	0.910 (0.222)
Economically inactive	0.794** (0.0805)	0.795** (0.0805)	0.781** (0.0793)
Level of Religiosity (Ref: Irreligious)			
Somewhat irreligious	0.951 (0.122)	0.950 (0.122)	0.957 (0.126)
Neither religious nor irreligious	0.993 (0.141)	0.992 (0.141)	0.991 (0.140)
Somewhat religious	1.169 (0.156)	1.168 (0.157)	1.179 (0.158)
Highly religious	1.374* (0.247)	1.374* (0.247)	1.412* (0.253)
Internet Usage (Ref: (Almost)Never)			
Weekly	1.214 (0.203)	1.215 (0.203)	1.227 (0.208)
Daily	1.464*** (0.184)	1.459*** (0.184)	1.464*** (0.186)
Economic view Immigration (Ref: Neutral)			
Negative	1.481*** (0.151)	1.479*** (0.151)	1.463*** (0.152)
Positive	0.608*** (0.0671)	0.608*** (0.0671)	0.615*** (0.0689)
Allow immigrants from different race/ethnic groups from majority (Ref: Many)			
Allow some	2.213*** (0.449)	2.211*** (0.449)	3.675*** (1.715)
Allow a few	5.014*** (1.222)	5.006*** (1.220)	9.817*** (4.860)
Allow none	8.747*** (2.289)	8.725*** (2.285)	5.464*** (3.088)
Domicile Description (Ref: Big city)			
Suburbs or outskirts of big city	1.132 (0.182)	1.127 (0.181)	1.137 (0.186)
Town or small city	1.165 (0.135)	1.160 (0.134)	1.152 (0.131)
Country village	1.271** (0.151)	1.266** (0.150)	1.268** (0.151)
Farm or home in countryside	1.182 (0.204)	1.180 (0.204)	1.186 (0.200)
View about Income Redistribution (Ref: Disagree)			
Neutral	0.957	0.957	0.932

	(0.147)	(0.148)	(0.142)
Agree	0.817*	0.815*	0.814*
	(0.100)	(0.100)	(0.0983)
Household Income (Ref: Low Income)			
Medium Income	1.373***	1.368***	1.351***
	(0.136)	(0.136)	(0.133)
High Income	1.195	1.191	1.183
	(0.144)	(0.144)	(0.140)
(NUTS) Population Change (Ref: High Increase (10-20%) 2008-2018)			
Decline	0.505**	0.869	0.769
	(0.141)	(0.467)	(0.686)
Low Increase (0-10%)	0.604***	0.966	1.545
	(0.113)	(0.489)	(1.049)
(NUTS) Crude rate of net migration (2013-2018 avg)	0.981	1.081	1.038
	(0.0193)	(0.0809)	(0.117)
Education (Years) * (NUTS) Crude rate of net migration (2013-2018 avg)			0.999
			(0.00298)
<b>Ref:</b> (NUTS) Population Change (High Increase) * (NUTS) Crude rate of net migration (2013-2018 avg)			
(NUTS) Population Change (Decline) * (NUTS) Crude rate of net migration (2013-2018 avg)		0.964	0.968
		(0.0583)	(0.0650)
(NUTS) Population Change (Low Increase) * (NUTS) Crude rate of net migration (2013-2018 avg)		0.962	0.976
		(0.0489)	(0.0568)
<b>Ref:</b> Allow immigrants from different race/ethnic groups from majority (Many) * (NUTS) Population Change (High Increase)			
Allow some * (NUTS) Population Change (Decline)			0.876
			(0.691)
Allow some * (NUTS) Population Change (Low Increase)			0.504**
			(0.175)
Allow a few * (NUTS) Population Change (Decline)			0.783
			(0.599)
Allow a few * (NUTS) Population Change (Low Increase)			0.381**
			(0.159)
Allow none * (NUTS) Population Change (Decline)			1.820
			(1.572)
Allow none * (NUTS) Population Change (Low Increase)			0.989
			(0.513)
Long-term Unemployment Rate (% of Economically Active 2018)	0.950	0.960	0.961
	(0.0382)	(0.0402)	(0.0397)
Long-term Unemployment Rate (% of Economically Active 2018) * (NUTS) Crude rate of net migration (2013-2018 avg)		0.987*	0.984**
		(0.00722)	(0.00757)
(NUTS) GDP per capita (% of EU28 avg) (2018)	0.996*	0.996**	0.995**
	(0.00207)	(0.00208)	(0.00214)
<b>Ref:</b> Allow immigrants from different race/ethnic groups from majority (Many) * (NUTS) Crude rate of net migration (2013-2018 avg)			
Allow some * (NUTS) Crude rate of net migration (2013-2018 avg)			1.016
			(0.0470)

Allow a few * (NUTS) Crude rate of net migration (2013-2018 avg)			1.036 (0.0543)
Allow none * (NUTS) Crude rate of net migration (2013-2018 avg)			1.140** (0.0649)
Constant	0.0679*** (0.0431)	0.0348*** (0.0309)	0.0302*** (0.0317)
<b>Random Effects:</b>			
Var (Constant)	1.217*** (0.0505)	1.212*** (0.0501)	1.211*** (0.0502)
Observations	22,733	22,733	22,733
Number of Regions	136	136	136
Country Dummies	YES	YES	YES
Log pseudolikelihood	-5224.6235	-5222.991	-5200.8812
ICC	0.056	0.055	0.055

Clustered (NUTS) standard errors in parentheses

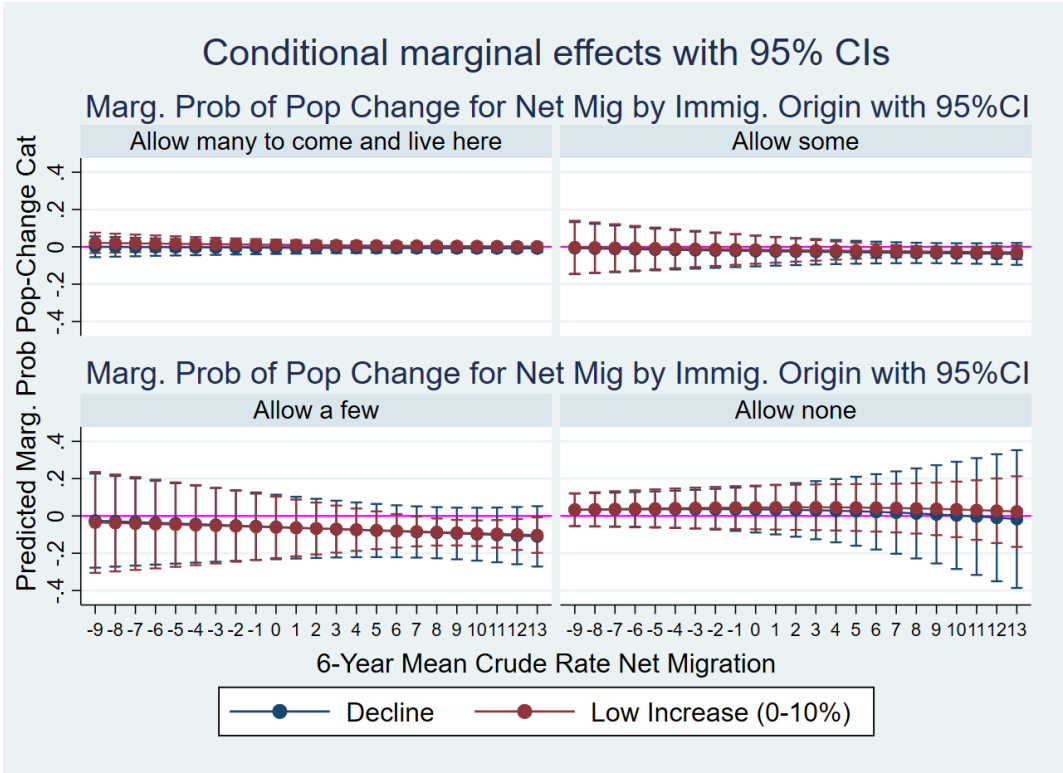
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 6 presents the results – in odds ratios – for the intermediate models (11) & (12) and the final model (13). Marginal effect plots for the final model, are presented in Figures 4A-D. The first of these, Figure 4A, depicts the marginal effect of population change categories, conditional on net migration and respondents' preferences for non-majority background immigrants, on FR-voting between 2008-2018. Inhabitants of neither declining regions, nor low growth regions, are statistically less likely to vote FR, than those in faster-growing regions, for any number of immigrants of non-majority background respondents deemed plentiful. In contrast to Figures 1A, 2A, and 3A, and Mehic (2022), the current specification deems the economic benefits of immigration in depopulation regions as irrelevant. The scarcity of resources, including employment, presented in Figure 4B illustrates that increases in net migration fail to provide statistically meaningful changes in the marginal effect of long-term unemployment on FR-voting probabilities. This finding conflicts with the narrative brought forward by Georgiadou et al. (2018) and Broz et al. (2021), which states that natives scapegoat immigrants for the current region's economic circumstances.

The marginal effect of individual labour market concerns (Figure 4C) unfortunately faced a similar fate as in previous specifications (see Figures 2C & 3C), since its effect is statistically insignificant. Prolonged exposure to higher immigration (Figure 4D), is once more associated with FR electoral success among voters who avert the settlement of out-of-group members. Yet, no clear differences arose across regions facing different population trajectories: ethnic and linguistic regional compositions had comparable effects, in both depopulation and growing areas. These results contradict earlier support for hypothesis V.

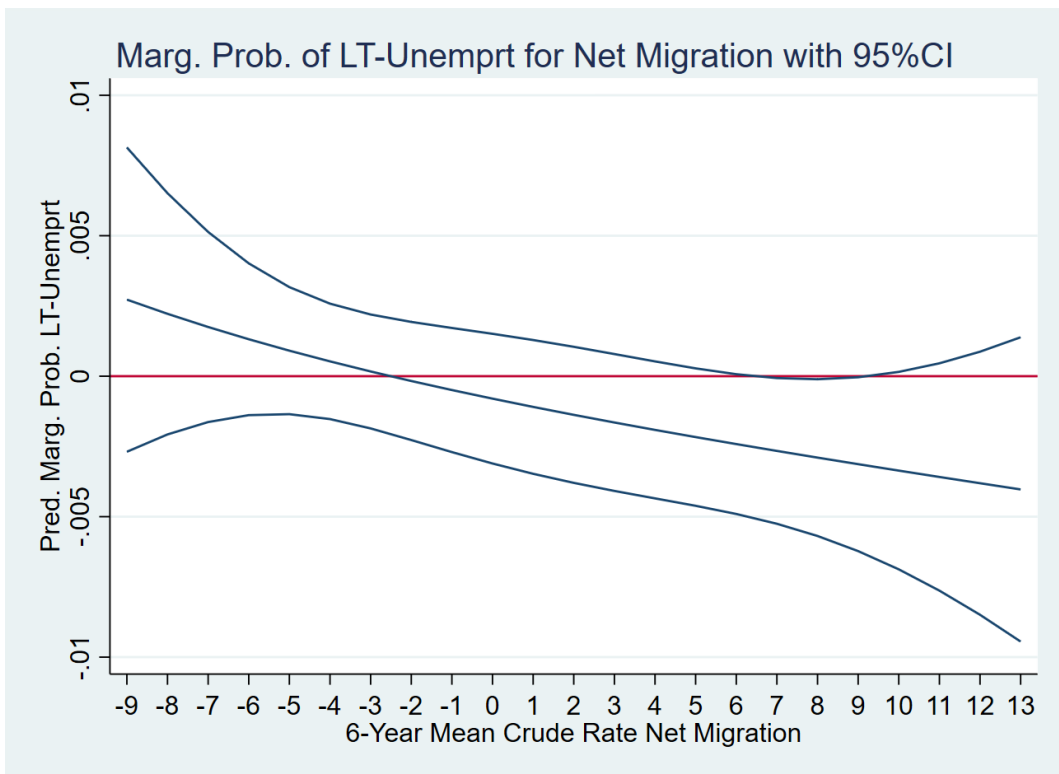
Moreover, remarkable patterns arose for three of the control variables. First, households with medium incomes, compared to low-income ones, tend to be more likely to vote FR. While this seems counterintuitive at first it fits the trend of increased discontent with declining middle classes throughout Europe and other Western economies (Dijkstra et al., 2020; Roupakias and Chletsos, 2020; Rodríguez-Pose et al., 2021). Moreover, daily internet usage also translated into increased FR-electoral backing, compared to (almost) no internet usage. One might expect that the widespread social media usage, created an echo chamber for FR ideas. Lastly, respondents who stated to live in country villages are the ones who are most likely to back FR parties, supporting the notion of rural marginalisation (Harteveld et al., 2022).

**Figure 4. ESS9 Marginal effects plots: A**





**Figure 4.B**



**Figure 4.C**

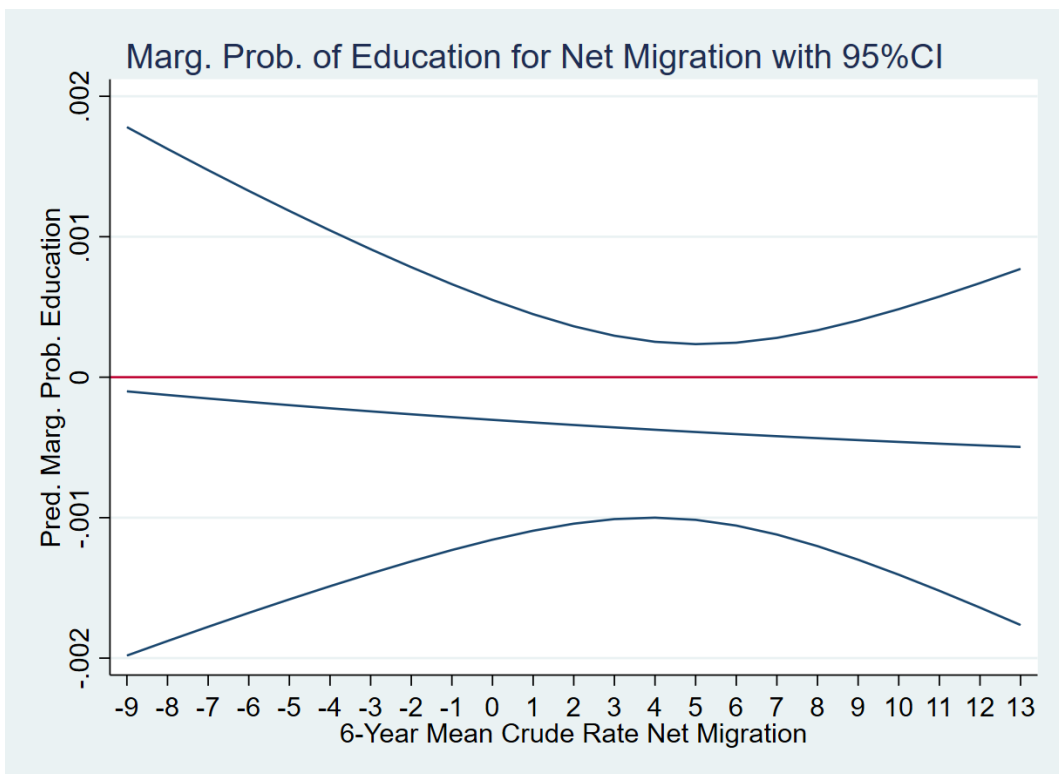
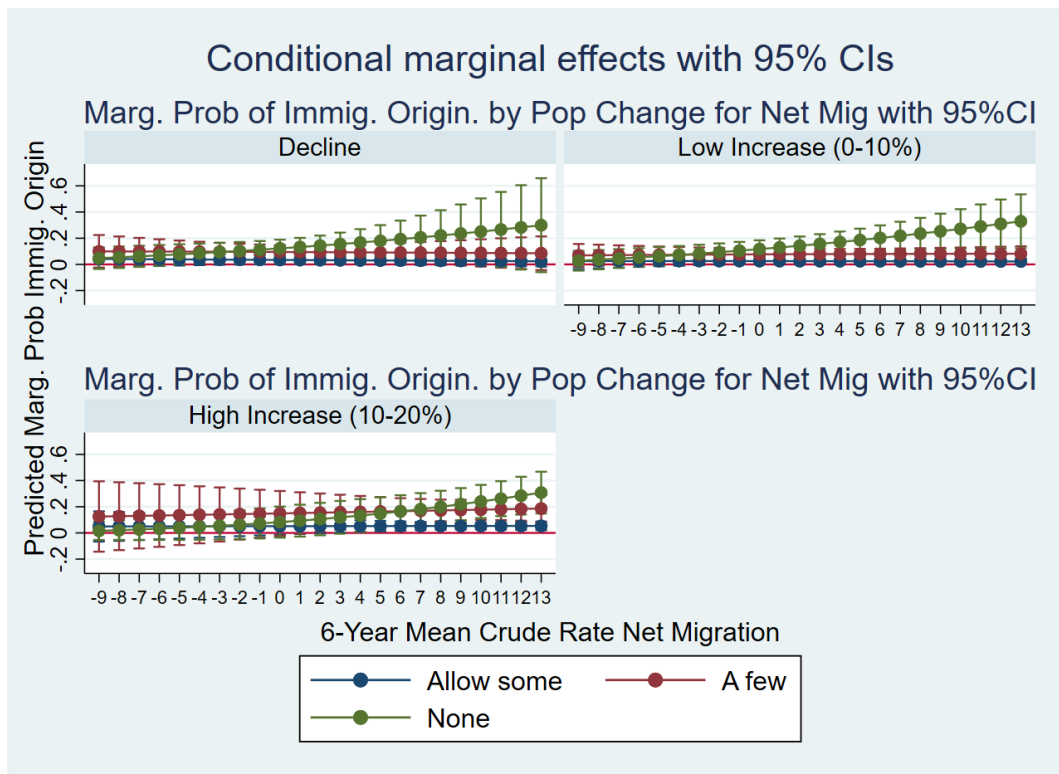


Figure. 4D



## 6. Discussion

Previous academic work identified a wide range of immigration-related FR voting channels, from concerns e.g., impacts on the welfare state (Edo et al., 2018; Edo et al., 2019), to sociocultural concerns about the ethnical and cultural composition of individual's living environment (ibid). This study broadens the current understanding of immigration's influence, on regional FR voting behaviour across the European Union. One of the most cited channels, increased labour market competition (Borjas, 2003; Edo et al., 2019; Roupakias and Chletsos, 2020; Mayda et al., 2022), has been studied at both the contextual and individual levels. Yet, this paper's results contradict the notion that lower- to middle-skilled employed natives would be more likely to have stronger anti-immigration sentiments from increased immigration. This, was said to be related to the increased labour market competition between natives and immigrants of similar skill levels (see Borjas, 2003). Ideally, labour market competition would be estimated by interacting natives with immigrants' education attainments, as done by Edo et al. (2019). Unfortunately, regional-level data for immigrants' education attainments is non-existent. Furthermore, it might be unlikely that local labour market people operate in overlaps

with NUTS II areas. For this reason, future research should concentrate on, for instance, commuter zones. Nonetheless, the current specification fails to convincingly disprove the labour market channel's relevance.

Yet, the measure of economic hardship - the long-term unemployment rate - faces a similar fate, from a contextual perspective. Materially deprived places, those with higher long-term unemployment, became less likely to vote FR from higher immigration. Nonetheless, these moderating effects were not supported, for either an alternative measure or dataset (ESS9). Consequently, scapegoating immigrants for economic misfortune is non-influential for FR's fortune, contrary to earlier studies (Georgiadou et al., 2018; Broz et al., 2021).

Increasing interregional inequality plays a key role in the geography of discontent literature. The *great inversion* is assumed to fuel discontent voting in declining economic regions, such as former manufacturing areas. This study proxied spatial long-term decline, by population growth during the periods 2006-2016 and 2008-2018. In line with the rural-urban division in FR-voting rationale, introduced by Harteveld et al. (2022), I introduced a comparable reasoning grounded on population trajectories. From a sociocultural perspective, this thesis reaffirmed the relevance of regional compositional concerns (Card et al., 2012; Cools et al., 2021; Essletzbichler and Forcher, 2022). Nevertheless, immigration-related concerns about ethnolinguistic regional compositions were discovered to be less pronounced in depopulation regions.

Deindustrialization and the exodus of young, highly educated, and entrepreneurial residents reduced the region's economic resilience, as well as authorities' ability to provide essential services and infrastructure. These prospects, referred to as marginalisation, were argued by Harteveld et al. (2022), to be the root of FR support in rural regions. This thesis, similarly, argues that marginalisation drives FR's success in depopulation regions. Empirical support provided by Rodríguez-Pose et al. (2021) found that depopulation affected Trump's success in his presidential election bid. Yet, as hypothesized and partly confirmed in this study, immigration counteracts economic deterioration – marginalisation - in depopulation regions. Two potential arguments were presented to explain this phenomenon. First, Mehic (2022) argued that the Swedish countryside lacks immigration's economic benefits, such as increasing property prices and economic activity (Gonzalez and Ortega, 2013; Howard, 2020), in comparison with urban areas. Voters in regions adversely affected by urbanisation recognise immigration's economic contribution and were thus less likely to vote FR (Mehic, 2022). This reasoning might instead also apply to depopulation and growing regions as well. Alternatively,

from an economic perspective clustering economic activities and individuals is associated with positive agglomeration externalities, which provide increasing returns to scale, through matching, sharing, and learning (Duranton and Puga, 2004). Yet, excessive clustering translates into negative externalities such as congestion and soaring rents & property prices. If immigrants settle in these regions FR politicians blame immigrants for - among other factors - unaffordable housing. I referred to this as the *too-full effect* of immigration. Future research should point out whether the FR voting gap between growing and declining regions, is grounded on the spatially unequal spread of immigrants and their economic benefits, or the agglomeration externalities associated with excessive migration settlement in faster-growing regions.

This thesis was unable to address all regionally relevant FR voting channels of immigration, due to either temporal constraints, or data unavailability. The first of these relates to the quality and availability of public goods and amenities, such as healthcare (Cools et al., 2021). Natives might have an aversion towards migrants, due to concerns about increasing crime. Bianchi et al.'s (2012) study partly justified the legitimacy of these concerns, as a weakly positive link was found between immigration and robberies. FR parties pay exceptionally high attention to the criminal activities of ethnic minorities, refugees, and immigrants in general for electoral gain. Moreover, Dinas and van Spanje (2011) proved that these concerns improved anti-immigration parties' success. The welfare state channel of immigration also has a contextual component, as inhabitants of European regions facing higher immigration – mostly migrants from Eastern European or the Middle East – are more inclined to oppose income redistribution (Alesina et al., 2021).

A major cautionary note comes from the fact that the net-migration measure for NUTS regions, fails to differentiate between interregional and international migration. Additionally, pooling ESS waves is impossible, due to the survey's non-panel structure. Furthermore, the question remains to what extent the chosen geographical scale applies to voters' perception of identity. Individuals' sense of identity might be either based on lower geographical scales, such as their neighbourhood, but could also reach as far as parts of a continent, namely Europe. Group identity, therefore, has the potential to overlap geographic boundaries, thus affecting a person's perception of, for example, the compositional amenities channel.

Historical examples of place-based development policies, for instance, the Tennessee Valley Authority (Kline and Moretti, 2014) illustrated that narrowing the interregional income gap is associated with considerable equity-efficiency trade-offs. For this reason, the World Bank (2009) amongst others (e.g., Kline and Moretti, 2013), advocated for people-based policies to

move people to the places that provide economic opportunities within declining regions, instead of bringing opportunities to declining regions. Nevertheless, these policies generated resentment towards authorities among voters in neglected places and planted the seed for discontent (Rodríguez-Pose, 2018). Revenge of these places and people expressed itself in increased electoral support for anti-establishment parties (FR or FL) who blame automation, globalisation, deindustrialisation, and immigration for socioeconomic deteriorations. Regions that experienced long-term population and economic decline, were relatively more inclined to support populist right-wing parties and presidential candidates (see Rodríguez-Pose et al., 2021). This thesis demonstrated that immigration is indeed a factor, which should not be overlooked in research on regional voting FR patterns. Moreover, this thesis propelled the notion that immigration could partially alleviate spatial inequalities and helps to counter the geography of discontent. Materialising immigration's benefits in places that have seen better days is challenging for two reasons. (I) Immigrants are most often not drawn to economically depressed regions (Alba and Foner, 2017). (II) I have shown that compositional concerns - the opposition towards ethnolinguistic diversification - is a comparably stronger predictor of FR voting in the fastest growing areas. For this reason, the settlement of immigrants in fast-growing agglomerations causes native-born inhabitants to move out of ethnically diversifying neighbourhoods, such that property prices fall (Cochrane and Poot, 2021).

## 7. Conclusion

An extensively studied topic in political science and economics is the link between immigration and FR voting. The recent surge in academic interest in regional anti-system voting patterns has provided a broad overview of geographically relevant contextual and compositional factors. The geography of discontent aims to analyse the rebellion of those places and people left behind, who express their frustration using the ballot box. Regional voting is affected by immigration for a variety of reasons, ranging from economic, to sociocultural concerns. Yet thus far no study dissected immigration's multifaceted contribution to FR voting. Henceforth, this thesis aimed to present and identify the relevant immigration-related FR voting channels.

With the help of a multi-level logistic model, this thesis provided a broad overview of immigration's contribution to FR electoral success across EU regions, based on data from the 8<sup>th</sup> and 9<sup>th</sup> editions of the European Social Survey. Moreover, from a methodological perspective, this thesis introduces a novel approach, marginal effects plots, to assess the

significance of moderating effects. This study's extensive literature review addressed immigration's role in FR politics, the reasons behind the geographical distribution of anti-system voting, and immigration-related FR voting channels. The empirical analyses conducted, demonstrates in contrast to earlier work, that increased labour market competition between low and middle-skilled natives and immigrants is non-associated with FR voting. Furthermore, the hypothesized scapegoating of immigrants for economic hardship, proxied by long-term or youth unemployment, is either found to decrease or is unrelated to FR voting.

The thesis' main contribution stems from the fact that immigration's contribution to the FR's electoral success depends on regional population developments. The combination of increased factor mobility (offshoring), automation, and deindustrialisation instigated the demise of former industrial and rural regions. What ensued was depopulation, as young talented individuals moved to the new dynamic economic centres, where the tertiary sector flourished. Those residents left behind in *places that matter the least* became locked in and faced grim socioeconomic prospects. The current policy paradigm, which favours the clustering of economic activities and people, fails to address spatial inequalities and marginalised voters' concerns. Henceforth, depopulation fosters anti-system and FR sentiments. In line with recent literature, I reaffirmed that increasing immigration rates reduces FR voting in depopulation regions, compared to growing regions. I argued that this relates to immigration's impact on property prices, employment, and economic activity in general.

From a theoretical sociocultural perspective, prolonged immigration increases FR voting, since natives worry about the changing ethnolinguistic compositions of regions. On the contrary, some authors argue that immigration decreases FR support because interethnic contact reduces prejudice. This thesis provided evidence for the former of these hypotheses, as especially non-majority background immigration was associated with FR support. Yet, the spatial unequal population growth influences the relevance of sociocultural concerns. In the faster-growing regions, *the places that do matter*, sociocultural concerns increased the likeliness of FR voting to a greater extent vis-a-vis depopulation regions.

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## Appendix I: Country and NUTS level

**Table A.I** NUTS classification per Country (ESS8)

Country	NUTS level
Austria	NUTS 2
Belgium	NUTS 2
Czechia	NUTS 2
Estonia	NUTS 2
Germany	NUTS 1
Finland	NUTS 2
France	NUTS 2
Hungary	NUTS 2
Italy	NUTS 2
The Netherlands	NUTS 2
Poland	NUTS 2
Sweden	NUTS 2
United Kingdom	NUTS 1

## Appendix II. Within-region clustered Education in Years

**Table A.II** CMC Education in Years

VARIABLES (Odds ratios)	Education Clustered Within Region
<b>Fixed Effects:</b>	
Gender (Ref: Male)	
Female	0.666*** (0.0523)
Age of respondent (Years)	1.012*** (0.00286)
Born in country (Ref: Yes)	
No	0.729 (0.181)
Education (Years; Regional Mean Clustered)	0.990 (0.0156)
Employment Status (Ref: Employed)	
Unemployed	0.774 (0.242)
Economically inactive	0.632*** (0.0604)
Level of Religiosity (Ref: Irreligious)	
Somewhat irreligious	0.878 (0.139)
Neither religious nor irreligious	0.933 (0.156)
Somewhat religious	0.988 (0.151)
Highly religious	1.253



	(0.231)
Internet Usage (Ref: (Almost)Never)	
Weekly	1.106 (0.146)
Daily	1.163 (0.126)
Economic view Immigration (Ref: Neutral)	
Negative	1.267** (0.151)
Positive	0.634*** (0.0765)
Socio-cultural view Immigration (Ref: Neutral)	
Negative	3.796*** (1.481)
Positive	0.518 (0.273)
Domicile Description (Ref: Big city)	
Suburbs or outskirts of big city	1.274 (0.242)
Town or small city	1.236* (0.134)
Country village	1.199 (0.155)
Farm or home in countryside	0.789 (0.167)
View about Income Redistribution (Ref: Disagree)	
Neutral	1.065 (0.162)
Agree	1.056 (0.132)
Household Income (Ref: Low Income)	
Medium Income	1.137 (0.122)
High Income	1.127 (0.113)
(NUTS) Population Change (Ref: High Increase (10-20%))	
Decline	3.199* (2.099)
Low Increase (0-10%)	2.865* (1.755)
(NUTS) Crude rate of net migration (2011-2016 avg)	1.256*** (0.106)
<b>Ref:</b> (NUTS) Population Change (High Increase) * (NUTS) Crude rate of net migration (2011-2016 avg)	
(NUTS) Population Change (Decline) * (NUTS) Crude rate of net migration (2011-2016 avg)	0.897* (0.0555)
(NUTS) Population Change (Low Increase) * (NUTS) Crude rate of net migration (2011-2016 avg)	0.893** (0.0465)
(NUTS) GDP per capita (% of EU28 avg) (2016)	0.994** (0.00275)
<b>Ref:</b> Socio-cultural view Immigration (Neutral) * (NUTS) Crude rate of net migration (2011-2016 avg)	
Socio-cultural view Immigration (Negative) * (NUTS) Crude rate of net migration (2011-2016 avg)	0.980 (0.0322)
Socio-cultural view Immigration (Positive) * (NUTS) Crude rate of net migration (2011-2016 avg)	0.921** (0.0364)

Long-term Unemployment Rate (% of Economically Active 2016)	0.924*
	(0.0430)
Long-term Unemployment Rate (% of Economically Active 2016) * (NUTS) Crude rate of net migration (2011-2016 avg)	0.972**
	(0.0107)
Education (Years; Regional Mean Clustered) * (NUTS) Crude rate of net migration (2011-2016 avg)	0.995
	(0.00373)
<b>Ref:</b> Socio-cultural view Immigration (Neutral) * (NUTS) Population Change (High Increase)	
Socio-cultural view Immigration (Negative) * (NUTS) Population Change (Decline)	0.419**
	(0.177)
Socio-cultural view Immigration (Negative) * (NUTS) Population Change (Low Increase)	0.468**
	(0.163)
Socio-cultural view Immigration (Positive) * (NUTS) Population Change (Decline)	2.058
	(1.162)
Socio-cultural view Immigration (Positive) * (NUTS) Population Change (Low Increase)	0.983
	(0.503)
Constant	0.0449***
	(0.0423)
<b>Random Effects:</b>	
Var (Constant)	1.214***
	(0.0556)
Observations	19,683
Number of Regions	139
Country Dummies	YES
Log pseudolikelihood	-4887.1288
ICC	0.056

Clustered (NUTS) standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## Appendix III. Table 4 Controls

**Table A.III** Table 4 Controls

VARIABLES (Odds Ratios)	(5) Youth. Unemp. Rt.	(6) Con. Pop. Change	(7) Immigrant's Origin	(8) Education Category	(9) Domicile Category
<b>Fixed Effects</b>					
Gender (Ref: Male)					
Female	0.663*** (0.0525)	0.662*** (0.0520)	0.674*** (0.0520)	0.668*** (0.0524)	0.668*** (0.0529)
Age of respondent (Years)	1.011*** (0.00286)	1.011*** (0.00286)	1.010*** (0.00278)	1.013*** (0.00286)	1.012*** (0.00287)
Born in country (Ref: Yes)					
No	0.723 (0.180)	0.741 (0.182)	0.647 (0.174)	0.759 (0.191)	0.714 (0.178)
Education (Years)	0.988 (0.0155)	0.989 (0.0156)	0.998 (0.0153)		0.990 (0.0161)
Employment Status (Ref: Employed)					
Unemployed	0.776 (0.243)	0.768 (0.239)	0.693 (0.215)	0.773 (0.249)	0.760 (0.235)
Economically inactive	0.631***	0.631***	0.662***	0.645***	0.632***

	(0.0608)	(0.0605)	(0.0637)	(0.0608)	(0.0616)
Level of Religiosity (Ref: Irreligious)					
Somewhat irreligious	0.874	0.881	0.885	0.876	0.887
	(0.139)	(0.140)	(0.138)	(0.137)	(0.141)
Neither religious nor irreligious	0.947	0.934	0.940	0.935	0.948
	(0.158)	(0.157)	(0.161)	(0.157)	(0.159)
Somewhat religious	0.988	0.989	0.973	0.990	0.990
	(0.151)	(0.151)	(0.152)	(0.153)	(0.154)
Highly religious	1.252	1.256	1.222	1.261	1.242
	(0.232)	(0.231)	(0.238)	(0.236)	(0.231)
Internet Usage (Ref: (Almost)Never)					
Weekly	1.097	1.105	1.189	1.071	1.111
	(0.146)	(0.145)	(0.148)	(0.141)	(0.148)
Daily	1.165	1.158	1.264**	1.127	1.161
	(0.127)	(0.125)	(0.137)	(0.126)	(0.126)
Economic view Immigration (Ref: Neutral)					
Negative	1.263*	1.273**	1.306**	1.269**	1.261*
	(0.151)	(0.152)	(0.157)	(0.153)	(0.151)
Positive	0.630***	0.641***	0.558***	0.637***	0.637***
	(0.0764)	(0.0761)	(0.0693)	(0.0765)	(0.0750)
Socio-cultural view Immigration (Ref: Neutral)					
Negative	3.876***	1.697***		3.968***	1.496**
	(1.516)	(0.226)		(1.570)	(0.299)
Positive	0.531	0.805		0.527	0.680*
	(0.278)	(0.119)		(0.272)	(0.154)
Domicile Description (Ref: Big city)					
Suburbs or outskirts of big city	1.297	1.282	1.284	1.280	
	(0.246)	(0.244)	(0.248)	(0.240)	
Town or small city	1.246**	1.237**	1.234*	1.205*	
	(0.135)	(0.134)	(0.142)	(0.133)	
Country village	1.200	1.202	1.229	1.174	
	(0.155)	(0.156)	(0.161)	(0.152)	
Farm or home in countryside	0.796	0.793	0.950	0.777	
	(0.169)	(0.169)	(0.198)	(0.165)	
View about Income Redistribution (Ref: Disagree)					
Neutral	1.072	1.052	1.075	1.045	1.065
	(0.163)	(0.160)	(0.171)	(0.158)	(0.160)
Agree	1.047	1.053	1.039	1.039	1.036
	(0.131)	(0.131)	(0.131)	(0.134)	(0.127)
Household Income (Ref: Low Income)					
Medium Income	1.147	1.134	1.148	1.132	1.144
	(0.124)	(0.122)	(0.127)	(0.120)	(0.125)
High Income	1.122	1.128	1.128	1.135	1.139
	(0.114)	(0.114)	(0.114)	(0.116)	(0.119)
Education (Years) * (NUTS) Crude rate of net migration (2011-2016 avg)	0.995	0.995	0.994		0.994
	(0.00370)	(0.00373)	(0.00381)		(0.00389)
(NUTS) Population Change (Ref: High Increase (10-20%))					
Decline	3.277*		5.351**	3.569*	
	(2.075)		(3.858)	(2.392)	
Low Increase (0-10%)	2.809*		3.253*	3.107*	
	(1.688)		(2.040)	(1.964)	
<b>Ref: (NUTS) Population Change (High Increase) *</b>					
(NUTS) Crude rate of net migration (2011-2016 avg)					
(NUTS) Population Change (Decline) * (NUTS) Crude rate of net migration (2011-2016 avg)	0.921		0.849***	0.886*	
	(0.0599)		(0.0533)	(0.0563)	
(NUTS) Population Change (Low Increase) * (NUTS) Crude rate of net migration (2011-2016 avg)	0.925		0.872**	0.885**	
	(0.0500)		(0.0477)	(0.0480)	

(NUTS) GDP per capita (% of EU28 avg) (2016)	0.998 (0.00303)	0.993** (0.00334)	0.995* (0.00289)	0.995* (0.00280)	0.994** (0.00244)
<b>Ref: Socio-cultural view Immigration (Neutral) * (NUTS)</b> Population Change (High Increase)					
Socio-cultural view Immigration (Negative) * (NUTS) Population Change (Decline)	0.404** (0.172)			0.394** (0.169)	
Socio-cultural view Immigration (Negative) * (NUTS) Population Change (Low Increase)	0.460** (0.160)			0.445** (0.158)	
Socio-cultural view Immigration (Positive) * (NUTS) Population Change (Decline)	1.987 (1.117)			2.012 (1.113)	
Socio-cultural view Immigration (Positive) * (NUTS) Population Change (Low Increase)	0.959 (0.488)			0.973 (0.489)	
<b>Ref: Socio-cultural view Immigration (Neutral) * (NUTS)</b> Crude rate of net migration (2011-2016 avg)					
Socio-cultural view Immigration (Negative) * (NUTS) Crude rate of net migration (2011-2016 avg)	0.980 (0.0323)	1.002 (0.0330)		0.978 (0.0318)	0.996 (0.0296)
Socio-cultural view Immigration (Positive) * (NUTS) Crude rate of net migration (2011-2016 avg)	0.922** (0.0364)	0.973 (0.0389)		0.919** (0.0361)	0.868*** (0.0311)
Long-term Unemployment Rate (% of Economically Active 2016)		0.918* (0.0432)	0.933 (0.0458)	0.927* (0.0422)	0.930 (0.0428)
Long-term Unemployment Rate (% of Economically Active 2016) * (NUTS) Crude rate of net migration (2011-2016 avg)		0.978** (0.0103)	0.969*** (0.0112)	0.969*** (0.0107)	0.977** (0.0101)
Constant	0.0317*** (0.0316)	0.194** (0.142)	0.0162*** (0.0152)	0.0253*** (0.0238)	0.202*** (0.107)
<b>Random Effects:</b> Var (Constant)	1.262*** (0.0632)	1.215*** (0.0578)	1.227*** (0.0638)	1.213*** (0.0548)	1.237*** (0.0642)
Observations	19,594	19,683	19,900	19,704	19,683
Number of Regions	136	139	139	139	139
Country Dummies	YES	YES	YES	YES	YES

Clustered (NUTS) standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## Appendix IV: European Social Survey ninth edition

**Table A.IV** NUTS classification per Country (ESS9)

Country	NUTS level
Austria	NUTS 2
Belgium	NUTS 2
Bulgaria	NUTS 2
Croatia	NUTS 2

Cyprus	NUTS 1
Czechia	NUTS 2
Denmark	NUTS 2
Estonia	NUTS 2
Germany	NUTS 1
Finland	NUTS 2
France	NUTS 2
Italy	NUTS 1
The Netherlands	NUTS 2
Poland	NUTS 2
Slovakia	NUTS 2
Spain	NUTS 2
Sweden	NUTS 2

**Table A.IV** Descriptive Statistics (ESS9)

Variable	Obs	Mean	Std.Dev.	Min	Max
Gender	22,733	1.516	.5	1	2
Age of respondent (Years)	22,733	51.439	18.184	15	90
Born in country	22,733	1.09	.286	1	2
Education (Years)	22,733	13.278	4.208	0	60
Employment Status	22,733	1.911	.972	1	3
Level of Religiosity	22,733	2.757	1.367	1	5
Internet Usage	22,733	2.44	.821	1	3
Economic view	22,733	2.118	.874	1	3
Immigration					
Allow immigrants from different race/ethnic groups from majority	22,733	2.454	.904	1	4
Domicile Description	22,733	2.845	1.225	1	5
View about Income Redistribution	22,733	2.604	.7	1	3
Household Income (NUTS)	22,733	1.987	.756	1	3
Crude rate of net migration (2013-2018 avg) (NUTS)	22,733	2.802	4.088	-9.367	12.4
Population Change (NUTS)	22,733	1.771	.629	1	3
GDP per capita (% of EU28 avg) (2018) (NUTS)	22,733	102.857	48.817	17	229
Long-term Unemployment Rate (% of Economically Active 2018)	22,733	2.552	2.365	.3	18.8