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# The Exodus That Never Was? An Empirical Analysis on Territorial Conflict and Foot-Voting

Marc Sanjaume-Calvet[a] and Jordi Mas[b]

[a]Universitat Pompeu Fabra (UPF); [b]Universitat Oberta de Catalunya (UOC)

**ABSTRACT**

This article explores the relationship between ethnic conflict, political polarization, and foot-voting behavior in the context of the 2017 Catalan independence referendum. By examining demographic trends and migration patterns in Catalonia during a period of political unrest (2015–2020), this research assesses whether the territorial tensions triggered significant demographic shifts, similar to the "Quebec exodus" of the 1970s. Utilizing multivariate analysis, we test the exit (migration) behavior, focusing on the role of political identity, polarization, and economic factors in shaping migration decisions. The results reveal a surprising stability in Catalan demographics, as no significant migration trends were observed despite the heightened political conflict. The analysis suggests that the lack of credibility of a secessionist threat, the stability of Catalan linguistic and cultural policies, and the lack of violent conflict contributed to the negligible demographic impact of the Catalan independence process.

## Introduction

The recent debate on the reform of the "Charter of the French Language" in Quebec has reignited longstanding discussions about the demographic consequences of territorial and cultural tensions.[1] These tensions date back to the emergence of the pro-sovereignty movement in the 1960s and gained momentum during the 1970s, a transformative period for the province. The rise of this movement coincided with significant demographic shifts, particularly among linguistic minorities. Between 1976 and 1982, Quebec lost around 20% of its Anglophone population and 5% of its Allophone population, approximately 100,000 individuals. Alarmingly, only one in six of these migrants ever returned to the province.[2]

Within a generation, Quebec became politically dominated by French-speaking nationalist leaders who sought to institutionalize their cultural and social demands. These leaders introduced policies to reinforce the primacy of the French language in both public and private sectors and implemented reforms such as a socially oriented Quebec Labor Code. Their ultimate goal was the creation of an independent state, emancipating Quebec from its historical subordination to Anglo-Canadian dominance. By the end of this politically charged decade, the 1980 sovereignty referendum, decisively won by the unionist side, marked both the conclusion of an era and the beginning of profound constitutional change in Canada.[3] Anglophone and Allophone communities, perceiving the pro-sovereignty francisation programmes as a threat to their socioeconomic status and cultural autonomy, rallied against Quebec's sovereignty

**CONTACT** Marc Sanjaume-Calvet marc.sanjaume@upf.edu Universitat Pompeu Fabra, Barcelona, Catalonia (Spain), Ramon Trias Fargas, 25-27, Barcelona, Catalunya 08005.

project. This resistance manifested not only through strong support for the federalist Liberal Party and groups such as Alliance Quebec but also through migration, as many chose to "vote with their feet."[4]

In Catalonia, the demographic question did not gain momentum when self-rule was established in the 1980s. However, in the years leading up to the 2017 referendum,[5] there were prominent campaigns in the Catalan and Spanish media featuring well-known businesses that publicly announced the relocation of their headquarters[6] from Catalonia to other Autonomous Communities (ACs), such as Valencia or Madrid, citing social and political instability. The Spanish Government approved a decree facilitating these relocations by allowing companies to authorize a change of registered office without submitting it to a shareholder vote.[7] Nonetheless, little is known about whether these changes actually translated into a significant transfer of workers and/or Catalan residents to other regions. It is known, however, that many of these moves were part of broader business and political actors' counter-secessionist strategies.[8] Beyond corporate relocations, some professional associations reported that their members were leaving Catalonia. For instance, the professional association of judges stated that around one hundred judges moved to other ACs for political reasons.[9] Some citizens also expressed to the media their intention to depart to Madrid or other regions.[10] Yet, evidence on the actual behavior of individual citizens remains scarce, especially since Catalonia experienced an overall period of demographic growth over the past decade.

In this article, we examine the relationship between ethnic conflict, political polarization,[11] and foot voting within a decentralized system. We focus on the political tensions between Catalonia and Spain that culminated in the Catalan referendum on independence in 2017.[12] Has Catalonia experienced a phenomenon similar to Quebec's "exodus" of the 1970s? Specifically, did the rise of the Catalan pro-independence movement lead to significant demographic shifts? Despite considerable media attention and political debate, the potential demographic impact of Catalonia's territorial conflict remains largely unexplored. Recognizing the distinct patterns of internal mobility in different contexts, we analyze a potential Catalan "exodus" using detailed data at the census-section level, incorporating the socioeconomic and demographic characteristics of each area, internal migration trends, and aggregated electoral behavior.

Our results highlight the remarkable demographic stability of Catalonia during the 2017 independence referendum, in contrast to cases such as Quebec's pro-sovereignty movement, which triggered significant migration. Despite intense political tensions and media attention on business relocations, no notable population exodus occurred. We propose several possible explanations for this demographic stability, including the perceived improbability of independence, Catalonia's enduring autonomy, its established bilingual policies, and the absence of violent conflict, all of which helped to minimize fears of upheaval.

Our contribution to the existing literature is threefold. First, we focus on the political determinants of foot voting in decentralized systems. To our knowledge, political variables such as polarization have not yet been empirically tested for their impact on foot-voting behavior. Second, our analysis seeks to measure citizens' preferences more precisely than most previous studies on foot voting, since in the Catalan case individuals' positions on the territorial question were unambiguously expressed through

their vote. In this type of research, citizens' preferences are usually inferred by assumption or derived from surveys,[13] rather than through actual voting behavior. Third, this paper contributes to the broader literature on nationalism and secessionism. The effects of self-determination conflicts on foot voting have only been briefly explored, most notably in the case of Quebec, where migratory flows were linked to cultural, social, and institutional changes[14] or in studies of international population displacements caused by violent conflict.[15]

## Literature review

The influence of government policies on citizens' preferences has been extensively examined in academic research.[16] This literature assumes that, in democratic systems, discontented citizens reveal their preferences through either voice or exit.[17] Citizens' "voice" is conventionally expressed through voting, as well as through other forms of formal and informal political participation such as demonstrations, fundraising, petition signing, or lobbying. Alternatively, voters may choose to exit the political "market" and use their feet to move to another jurisdiction that better aligns with their preferred policies. The interaction between voice and exit is mediated by loyalty, defined in the foot-voting literature as encompassing all forms of "barriers to exit," including affective as well as economic dimensions. Loyalty typically manifests through a range of attachments to a particular community, and its presence is considered to increase the likelihood of voice.[18]

The exit option as a means of expressing policy preferences was first proposed by Charles Tiebout,[19] who argued that citizens may "vote with their feet." That is, physically move to jurisdictions whose policies more closely match their preferences. Individuals would thus choose among local governments offering different combinations of tax burdens and public services. Consequently, in decentralized systems, foot voting would primarily be driven by poor economic performance at the subnational level. In this context, population growth should be observed in districts experiencing improvements in public goods, as described in the literature.[20]

Other studies have shifted attention from the government's supply of public goods to the socioeconomic determinants of demand. Competing economic theories have linked foot voting to income levels. Some associate labor mobility with the middle class,[21] while others argue that poorer and lower-middle-class workers, including the unemployed, have the most to gain from moving to areas where they can be more productive and achieve higher incomes.[22] Further research suggests that not only income but also productivity shapes individuals' preferences for redistribution, which in turn affects their likelihood of mobility.[23] Foot voting has also been associated with job-related factors[24] and quality-of-life considerations such as gentrification and air quality.[25] Most of these studies adopt a quantitative approach, using aggregated data from census sources and socioeconomic surveys.

Beyond socioeconomic factors, the relationship between migration and foot voting has been relatively underexplored.[26] In domestic contexts, some studies have examined foot voting as a response to racial discrimination in the United States.[27] A few others have considered the role of political institutions, such as the electoral system,[28] or have suggested that the lack of individual decisiveness. That is, the low probability

of one's vote affecting an outcome may lead individuals toward foot voting or abstention.[29]

Much of the literature addressing the political factors behind foot voting has focused on the context of international migration. In such cases, exit typically occurs in repressive or authoritarian states where voice is limited or unavailable.[30] In some instances, rulers may even deliberately increase the incentives for citizens to choose exit.[31] However, research in these contexts also indicates that voice and exit are not necessarily negatively correlated.[32] They may occur sequentially, with migration emerging as a long-term option once political contestation proves ineffective.[33] Regarding loyalty, citizens are less likely to migrate when they maintain strong emotional or social ties, such as a pronounced sense of patriotism.[34]

## *Ethnic public goods and polarization*

Although voters' preferences may be driven by economic factors related to utility maximization, a large body of literature argues that they are also strongly influenced by individual identity. By ethnic identity we refer to nominal membership in an ascriptive category determined by attributes inherited by descent, such as race, language, or religion.[35] Such ethnic markers shape individuals' identities, which in turn influence their political preferences.[36] For example, in linguistically diverse contexts, language may function both as an ethnic and a national identity marker, shaping individuals' preferences on key political issues such as equal opportunities, autonomy, or social cohesion.[37] Since identity shapes vote choice, it can also affect foot-voting behavior.

In decentralized political systems, political actors may encourage foot voting in relation to ethnonational identity by influencing individuals' preferences through mechanisms of social interaction.[38] At this stage of our research, we argue that foot voting may be motivated by two main mechanisms: the degree of provision of ethnic public goods and the degree of ethnic polarization. The first mechanism concerns the distance between an individual's identity and the ethnic public good being provided. On the one hand, individuals may identify with several groups and feel varying degrees of attachment to each. Acting in accordance with their individual identity provides them with a form of symbolic utility.[39]

On the other hand, ethnonational identity can be considered a public good, one whose provision is usually undertaken by government.[40] Such provision tends to emphasize distinctiveness in relation to other identities. Consequently, citizens whose identity aligns with the collective identity being promoted derive greater utility, whereas those attached to a different national identity gain less.[41] This effect is likely to be stronger in the case of stateless nations, where national identity is often undersupplied by the central government. When citizens of a non-state nation perceive identity as a "merit good," civil society and local governments may devote additional effort to its protection, efforts that would be unnecessary if it were adequately provided by the state.[42]

The provision of national public goods has a significant impact on loyalty and, consequently, on the likelihood of exit. Individuals who perceive a threat to their personal identity may experience reduced utility, prompting collective action or other forms of preference expression.[43] In constituencies where national identity is strongly

promoted, barriers to exit (loyalty) tend to be high for those whose identity aligns with the dominant collective identity, and low for those whose identity does not. As a result, individuals whose identity diverges from the prevailing public identity good are more likely to express their preferences through mechanisms such as exit.

The second mechanism that activates preference revelation through foot voting is political polarization, defined as the degree of ideological division among individuals or groups.[44] The polarization of preexisting identities is a common consequence of political conflict.[45] This is especially evident in territorial disputes, where political change often leads to the polarization of parties, votes, or both.[46] Political elites have strong incentives to generate ethnic outbidding dynamics as part of their mobilization strategy in the territorial dimension of politics.[47] To maximize electoral support within an ethnically homogeneous constituency, they may appeal to ethnic identity and adopt more extreme positions than their intra-ethnic competitors.[48] At times, these outbidding dynamics can pressure moderate voters to take sides, as Guntermann and Blais[49] observed in the Catalan case through a survey conducted during the December 2017 elections. As preferences become more polarized, citizens are increasingly likely to express them either through ballot voting or foot voting.

## *Self-determination and foot-voting*

There is a close relationship between foot voting and self-determination. The notion of political freedom, central to self-determination, is inherently linked to individual preference revelation, which in democratic systems is usually expressed at the polls but can also manifest through foot voting. The latter is typically examined from the perspective of migration. Migration can be understood as a form of foot voting vis-à-vis the country of origin. That is, as an exercise of individual freedom that diminishes the collective capacity for self-determination in the country left behind by individually withdrawing from it.[50] However, the relationship can also be viewed in reverse, with collective self-determination constraining individual agency. For example, when those who do not share certain cultural or ethnic characteristics are excluded from the political community.

Migration policies exemplify this dynamic, as they constitute collective decisions defining who potentially belongs to a given polity.[51] At a more theoretical level, we have to acknowledge that state sovereignty is inherently exclusionary, as it entails *per se* the power to decide over others and their lives. Schmitt[52] theorized this as an absolute and final decision on the exception, aimed at preserving state authority. In a more postmodern sense, Agamben[53] describes sovereignty not only as the exceptional power to decide on people and borders but also on their lives and the ultimate meaning of their biological existence and reproduction. The most brutal expression of this power, in demographic terms, has been the large-scale population displacements accompanying the formation of most modern states in Europe and elsewhere. During the twentieth century alone, tens of millions of people were displaced from their homelands, many never to return. For instance, in central and eastern Europe, where historians estimate more than 80 million such displacements occurred.[54]

Self-determination conflicts are no exception to these dynamics. In contexts of civil war and ethnic violence, there is widespread evidence of population displacements and

migrations associated with the transfer of sovereignty and the use of violence by both states and insurgent groups. Secessionism through *de facto* statehood frequently entails demographic change through displacement and population movements along ethnic lines. For example, in their study of the South Caucasian *de facto* states (Abkhazia, South Ossetia, and Nagorno-Karabakh) Blakkisrud and Kolstø[55] document extensive patterns of migration, displacement, and ethnic cleansing accompanying state emergence and both secessionist and counter-secessionist actions. Similarly, the ongoing war in Ukraine, triggered by the Russian invasion, has produced massive population displacement, particularly in Crimea and the self-proclaimed Donetsk and Luhansk republics, later annexed by Russia.[56]

The nature of democratic self-determination conflicts differs markedly from cases involving ethnic violence or civil war, particularly in how foot voting is conceptualized. From a normative perspective, democratic secession represents the inverse of foot voting: rather than individuals withdrawing from the state, secessionists seek to detach part of its territory. As discussed in the introduction, such conflicts may not involve forced population displacements but can nonetheless prompt significant foot voting toward other territories within the parent state by citizens opposed to secession or its related cultural and social policies, as occurred in Quebec. Beyond the Quebec case, however, evidence of such phenomena remains limited and has not been observed in regions such as Scotland, Flanders, or Wales.

In contexts where violence has played a role in territorial disputes, records of displaced persons exist even when these cases are not typically classified as ethnic or civil wars and occur within liberal-democratic parent states such as Northern Ireland, the Basque Country, or Corsica. Nevertheless, these demographic changes are generally interpreted not as instances of foot voting but as varying degrees of "forced displacement." In any case, the distinction between displacement and foot voting in self-determination conflicts can be blurred, a question to which we return later in the discussion of our findings.

## Background on conflict and social polarization in Catalonia

The territorial dimension has structured Catalan and Spanish politics for decades.[57] In Catalonia, the identity cleavage is manifested in two closely interrelated traits: the sense of belonging to either the Catalan or the Spanish nation, and preferences regarding Catalonia's territorial status within Spain. A majority of individuals self-report some degree of dual identity.[58] Currently, among the 17 per cent of the population who identify as only Catalan, more than 90 per cent support secession. Among the 22 per cent who feel more Catalan than Spanish, around 65 per cent support secession. Serrano[59] shows that individuals who identify solely as Catalan are over four times more likely to support independence compared with those who feel only Spanish.

National identity, in both Catalonia and Spain, is primarily determined by linguistic identification. Spanish national identity is associated with Castilian (the only official language recognized by the Constitution) and one of the main symbols of territorial unity. Catalan national identity, in turn, is associated with the Catalan language, its principal ethnic marker.[60] Spain is a nationally heterogeneous and relatively fractionalized country.[61] Spanish institutions are dominated by the large Spanish national

majority, which constitutes around 75 per cent of the population, coexisting with other territorially concentrated national minorities, including Catalans. Catalan society has also been shaped by several waves of Spanish-speaking migration from other ACs in Spain.[62] Currently, around 25 per cent of Catalonia's population was born in another AC.[63]

Ethnonational divisions have deepened over the past two decades between Catalan minority nationalism and Spanish majority nationalism.[64] The origins of the current conflict can be traced back to 2006, when a new Catalan Statute of Autonomy was approved in a referendum. The new charter clarified regional competences and defined Catalonia as a nation. In 2010, the Constitutional Court declared many key articles of the Statute unconstitutional. Large sectors of the Catalan population questioned the legitimacy of this decision, which fueled support for secession and led the Catalan government to organize an independence referendum in 2017.[65] The Spanish government blocked the vote using police force, suspended regional autonomy, and imprisoned several Catalan politicians and civil society leaders.[66]

The political dispute between Spanish institutions and the Catalan government has polarized Spanish society over the national question.[67] This polarization can be partly attributed to ethnic competition between Spanish and Catalan parties. In Catalonia, both sides have employed outbidding strategies to secure electoral support.[68]

The exploitation of political differences has intensified ideological polarization along national lines, particularly between 2015 and 2020. In Spain, this polarization has been pronounced along both the left–right and territorial axes.[69] In Catalonia, ideological divisions have crystallized between pro- and anti-secessionist supporters.[70] Rodon[71] found higher levels of partisan affective polarization in Catalonia than in the rest of Spain based on individual-level data. However, according to his findings, only territorial, not partisan, polarization affects vote choice: it fosters pro-secession voting in Catalonia, while in the rest of Spain, territorial polarization predicts right-wing voting.[72]

In a two-wave survey conducted in Catalonia, Balcells and Kuo[73] identified significant levels of social polarization following the unilateral independence referendum in 2017. They found that territorial preferences and language groups were the main predictors of social polarization, although stereotyping dynamics were stronger among territorial groups than among linguistic ones.[74]

Overall, evidence suggests that, despite the largely nonviolent nature of the Catalan conflict, territorial tensions have generated a notable degree of polarization within Catalan society and have produced political disputes over ethnonational identity goods, particularly between the Catalan and Spanish languages, the main ethnic markers in this AC. Nevertheless, there is little evidence of demographic change linked to the territorial conflict, although a number of primarily economic relocations have been recorded.

Moreover, the data displayed in Figure 1 show that expectations regarding the Catalan independence process leading to statehood remained consistently low across all linguistic groups between 2015 and 2023. Belief in the eventual achievement of independence declined sharply after 2015 and failed to recover in subsequent years, suggesting a widespread loss of confidence in the feasibility of attaining statehood. This pattern was evident even among Catalan-speaking respondents, who had initially expressed higher levels of optimism. By 2023, fewer than one in ten respondents,

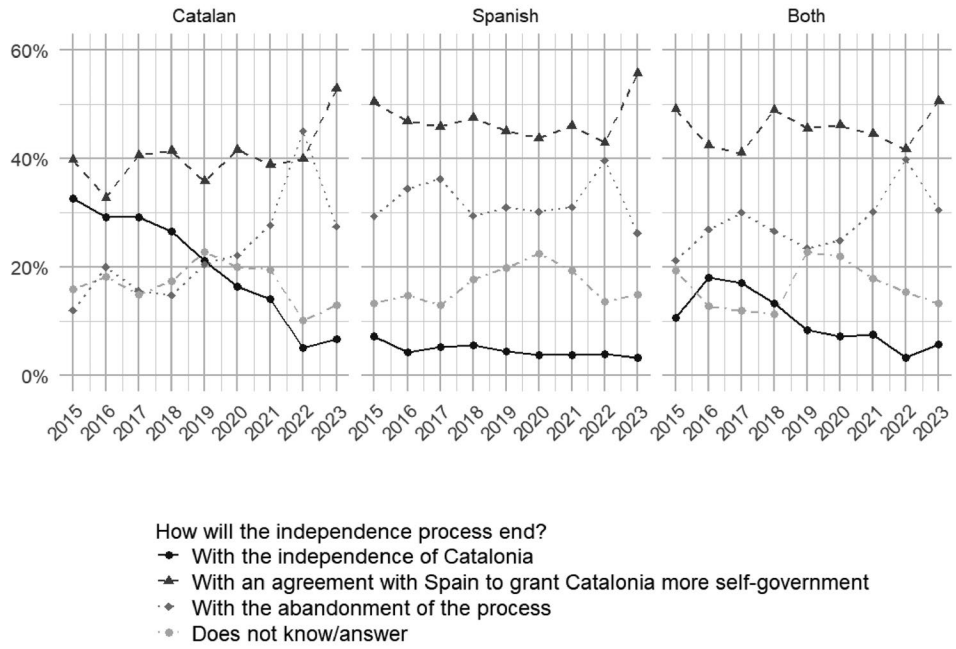


**Figure 1.** Credibility of the independence process by self-reported language spoken at home (2015–2023).

regardless of linguistic background, expected the process to culminate in independence. These findings indicate a general skepticism about the prospects of the independence movement, despite ongoing political discourse and symbolic mobilization surrounding the issue.

## Theoretical approach and hypotheses

We situate our research at the intersection of studies on foot voting and the dynamics of ethnic and territorial polarization. The foot-voting framework provides a valuable lens through which to understand migration as a behavioral form of preference revelation, wherein individuals "vote with their feet" in response to dissatisfaction with their political or territorial context.[75] While most of this literature examines mobility from economic or public goods perspectives, we extend its scope to the domain of identity and territorial conflict. Our analysis formulates original hypotheses derived from existing theoretical traditions but contextualized within the Catalan case. To our knowledge, phenomena such as the Quebec exodus, discussed in the introduction, have not previously been explicitly framed within this literature. By broadening the concept of public goods to include identity as a collective good, we offer a more comprehensive understanding of how ethnic and political factors can shape exit behavior.

We build on Hirschman's exit–voice–loyalty framework to theorize how political dissatisfaction translates into migratory decisions. In this model, exit represents a behavioral response to discontent, whereby individuals withdraw from a political community rather than attempting to reform it through voice. In highly polarized territorial

contexts, such as Catalonia during the 2017 independence referendum, migration can thus be interpreted as a strategy to distance oneself from an increasingly divisive political environment. While earlier versions of this work considered both channels, our analysis focuses exclusively on exit as the dependent variable, in order to clarify how contextual factors such as political polarization, the provision of ethnic public goods, and loyalty barriers influence individuals' decisions to leave or remain.

Our theoretical argument posits that the likelihood of exit depends on the interaction between structural constraints and identity-based motivations. Structurally, migration is conditioned by economic opportunity and the costs of internal mobility. Perceptually, it is influenced by the degree of political polarization, individuals' alignment with the dominant public identity good, and the extent of their loyalty ties to the region. When individuals perceive an increasing mismatch between their personal identity and the collective identity promoted by local institutions, the utility of remaining declines, raising the appeal of exit. Conversely, strong loyalty (rooted in affective or economic ties) heightens the costs of migration.

Applying this logic to the Catalan case, we derive a series of hypotheses (H1–H5) examining how structural, political, and identity-related factors jointly explain migration flows during and after the referendum period.

The first hypothesis concerns the possibility of significant foot voting from Catalonia to the rest of Spain during the years surrounding the referendum. We expect that no substantial demographic changes occurred in Catalonia, in contrast to those observed in Quebec. The economic situation in Catalonia remained stable over the decade; in terms of expectations, only a small fraction of the population (below 5 per cent) believed independence to be imminent within three to ten years. In terms of ethnic policy, no major institutional transformations occurred comparable to Quebec's Quiet Revolution in the 1970s. The official status of Catalan (alongside Spanish) was established in the 1980s, as were the education system and most linguistic policies. Moreover, despite the reinterpretation of the Statute of Autonomy by the Constitutional Court in 2010 and its temporary suspension in 2017,[76] Catalonia's autonomy status has not been replaced by a new constitutional settlement.

Internal mobility costs in Spain are generally higher than in countries such as Canada due to structural factors. In Canada, internal migration is relatively fluid, facilitated by a common language (except in Quebec), decentralized labor markets, and strong interprovincial mobility policies.[77] By contrast, Spain faces significant barriers to internal migration, including linguistic diversity, strong regional identities, and rigid labor market structures, particularly within the public sector.[78] Housing market inefficiencies, such as high transaction costs and segmentation in the rental market, further inhibit geographic mobility. These factors suggest that the economic and social costs of relocation within Spain are considerably higher than in Canada, potentially dampening migration responses to regional political tensions such as those observed in Catalonia. Accordingly, our first hypothesis regarding foot voting is conservative.

*$H_1$: We expect similar emigration patterns in Catalonia compared with other Spanish CCAA in the year of the referendum and the subsequent years.*

Second, during the referendum period, citizens opposed to Catalan independence may have felt increasingly alienated from the public identity goods provided at the

local and regional levels, prompting opposition through preference revelation. Thus, if exit occurs, it is more likely among unionist and equidistant voters.

*$H_2$: We expect to observe an increase in foot voting in census sections where support for unionist and equidistant parties is high.*

Third, exit and voice may be mediated by the degree of political polarization within a jurisdiction. Polarization both widens and clarifies the preference spectrum on each side of a political conflict.[79] Since polarization acts as a trigger, more polarized environments are likely to increase the likelihood of exit.

*$H_3$: We expect an increase in foot voting in census sections with high levels of political polarization in the year of the referendum and the following years.*

Fourth, according to Hirschman,[80] the interaction between voice and exit is mediated by loyalty, understood as barriers to exit. Individuals face multiple constraints that affect their ability to move, and loyalty can therefore be operationalized in various ways. We distinguish two broad forms of loyalty: economic and identitarian. Economic barriers to migration can be conceptualized as the opportunity cost of leaving. Unemployed citizens may face lower opportunity costs, since relocation is often driven by job-seeking considerations, whereas higher-income groups typically display greater labor mobility.

*$H_4$: Migration is more likely to occur in jurisdictions with both high income levels and high unemployment rates.*

Finally, ethnonational identity markers may also act as barriers to exit, since a sense of belonging to the community can discourage relocation.[81] Loyalty is likely to be lower in constituencies where individuals feel more Spanish than Catalan, lack proficiency in the Catalan language, or were born in another AC.

*$H_5$: Emigration from Catalonia during the referendum years is more likely to occur in jurisdictions whose citizens were born in other parts of Spain and do not speak Catalan.*

## Dataset and empirical design

To address the research questions, we rely on two complementary datasets. The first comprises emigration data for Spain at the municipal level, covering the period 2012–2020. These data enable a comparison of migration patterns in Catalan municipalities with those in the rest of Spain. The second dataset focuses specifically on Catalonia, containing emigration data at the census-section level from 2015 to 2021 for 805 Catalan municipalities. This represents a panel dataset of 2,708 census sections observed over eight years.[82] Because this dataset spans three electoral cycles, it includes voting data from the Catalan parliamentary elections of 2015, 2017, and 2021. This allows us to estimate, for several years, the share of supporters of pro-independence and unionist parties in each census section and to infer the ideological orientation of the electorate along both the left–right and territorial dimensions. The dataset also incorporates key sociodemographic variables, including the percentage of Catalan speakers, income per capita, and the proportion of the population of working age.

**Table 1.** Descriptive statistics.

| Statistic | N | Mean | St. Dev. | Min | Pctl(25) | Pctl(75) | Max |
|---|---|---|---|---|---|---|---|
| Abstention 2017 (%) | 21,424 | 17.217 | 5.643 | 3.896 | 13.580 | 19.665 | 47.579 |
| Indep. vote 2017 (%) | 21,424 | 45.859 | 17.464 | 3.873 | 33.658 | 59.533 | 88.957 |
| Unionist vote 2017 (%) | 21,424 | 30.036 | 13.184 | 1.639 | 19.937 | 39.115 | 71.659 |
| Equidistant vote 2017 (%) | 21,424 | 5.436 | 2.780 | 0.000 | 3.065 | 7.653 | 14.746 |
| Total emigration | 21,744 | 59.224 | 52.224 | 0 | 32 | 75 | 1,235 |
| Total immigration | 21,736 | 79.201 | 82.430 | 0.000 | 39.000 | 100.000 | 2,637.000 |
| Relative emigration | 21,032 | 4.286 | 3.021 | 0.000 | 2.498 | 4.959 | 80.590 |
| Relative immigration | 21,032 | 5.599 | 4.481 | 0.000 | 3.654 | 6.569 | 151.465 |
| Territorial polarization | 21,424 | 4.063 | 0.161 | 3.595 | 3.943 | 4.196 | 4.438 |
| Left-Right polarization | 21,424 | 1.875 | 0.168 | 1.220 | 1.767 | 1.994 | 2.370 |
| Left-Right | 21,424 | 0.398 | 0.018 | 0.334 | 0.387 | 0.407 | 0.484 |
| Catalan national identity | 21,424 | 0.633 | 0.075 | 0.419 | 0.582 | 0.693 | 0.791 |
| Speaks Catalan (%) | 20,776 | 78.298 | 13.003 | 25.397 | 71.171 | 88.144 | 100.000 |
| Origin other AC (%) | 21,528 | 13.886 | 6.515 | 0.000 | 9.339 | 17.758 | 49.187 |
| Income per capita | 21,368 | 13,744.260 | 3,421.015 | 5,786.000 | 11,615.000 | 14,843.000 | 30,210.000 |
| Primary studies | 21,368 | 16.737 | 4.924 | 5.700 | 13.200 | 20.500 | 31.700 |
| Age 25–65 (%) | 21,528 | 60.435 | 4.497 | 40.816 | 57.595 | 62.785 | 87.297 |
| Unemployment (%) | 20,744 | 31.061 | 7.999 | 6.583 | 25.416 | 36.234 | 66.667 |
| Low skilled labor (%) | 21,368 | 11.589 | 5.421 | 1.300 | 7.300 | 14.800 | 30.600 |
| IBI tax | 21,704 | 0.629 | 0.172 | 0.080 | 0.530 | 0.750 | 1.160 |
| Population | 21,712 | 589,835.900 | 780,752.500 | 26.000 | 3,207.000 | 1,664,182.000 | 1,664,182.000 |
| Population density | 21,712 | 6,653.766 | 7,509.611 | 0.700 | 107.800 | 16,420.100 | 16,420.100 |
| BMA dummy | 21,712 | 0.438 | 0.496 | 0.000 | 0.000 | 1.000 | 1.000 |
| Barcelona dummy | 21,744 | 0.345 | 0.475 | 0 | 0 | 1 | 1 |

Table 1 presents the univariate statistics for the variables included in the census-section dataset.

In our research design, the voice dimension corresponds to the *vote* variable, operationalized as the percentage of votes cast for non-independentist political parties in the elections to the Parliament of Catalonia between the periods 2015–2017 and 2017–2021, at the census-section level. The selection of this period responds to the need to capture the electorate's preferences as accurately as possible. Although the Catalan *Procés* is commonly considered to have begun in 2012,[83] party positions on the independence question were not clearly defined until 2015. Prior to that year, Catalonia's two largest parties (*Convergència i Unió* and the Socialist Party of Catalonia) had electorates divided on the issue of independence. This changed in 2015, when the territorial conflict became the main political cleavage, and parties' positions on national identity became more ideologically aligned.[84]

Regarding the *exit* dimension, we examine migration flows from Catalonia to the rest of Spain. We use census data on changes of residence between 2015 and 2020, aggregated at the census-section level.[85] Following Hirschman's[86] framework and the literature discussed above, we define *exit* (migration) as our dependent variable, representing a potential foot-voting strategy among individuals opposed to independence. Using municipal register data at both municipal and census-section levels, we operationalize potential foot voting as migration to other municipalities within Catalonia, to other regions of Spain, or abroad.

The *polarization* variables capture the degree of ideological differentiation among political parties. Political polarization is calculated using Dalton's Polarization Index.[87] The positioning of each party on the national identity axis (Spanish–Catalan) and the territorial organization axis (independence–centralism) are highly correlated;

hence, we use national identity as the reference. The index is derived from survey data and weighted by the number of votes each party received in its respective jurisdiction.

Several control variables are included in the analysis. First, we account for the proportion of abstention, as preferences can also be expressed through nonparticipation. Among demographic factors, we include total population (log-transformed) and a dummy variable for the city of Barcelona, to capture the potential agglomeration effects associated with large urban centers.

## Evidence on foot voting and polarization

The following figures illustrate the territorial patterns of emigration within Spain. In all graphs, Catalonia is depicted in black, the Spanish average excluding Catalonia with a dashed line, and the remaining ACs in light grey. The line plots in Figure 2 show the average emigration rate, measured as the proportion of a municipality's population moving to another municipality in the same province, to another province within the same AC, to another Spanish AC, or abroad during the period 2012–2020. We take the emigration percentage in each AC in 2017 as the baseline (0) to facilitate comparison of relative changes before and after the year of the Catalan referendum.

The data show that Catalonia did not experience greater migration to other ACs after the 2017 referendum compared with other Spanish regions during the same period. Overall, migration patterns appear broadly similar to those observed in other territories that did not experience territorial tensions. However, two slightly divergent trends suggest some specific Catalan features. First, migration to another province

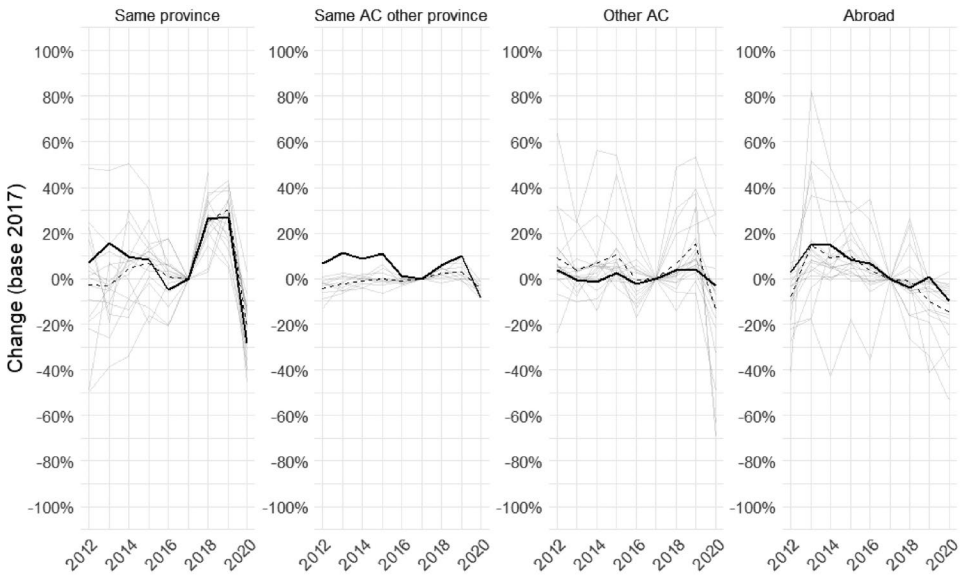


**Figure 2.** Emigration patterns in Spain and Catalonia (municipality level).

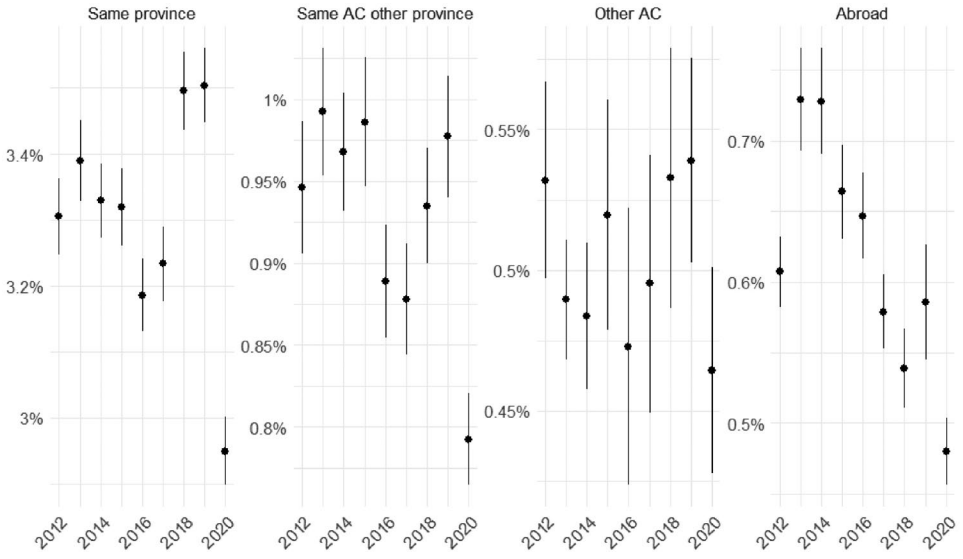


**Figure 3.** Emigrations per year and destination in Catalonia (census-section level).

within the same AC displays a somewhat different pattern, though we do not yet have a clear explanation for this variation. Second, emigration from Catalonia to foreign countries appears marginally higher than in other ACs, a difference that warrants further investigation.

When comparing emigration patterns by year using census-section level data (mean values), we observe some variation across destinations (see Figure 3). While the overall patterns resemble those for movements to the rest of Spain, there is a modest increase in migrations to other parts of Catalonia and to the rest of Spain after 2017. Nevertheless, these descriptive differences are limited in scale, and a more rigorous multivariate analysis is required to assess whether they reflect a genuine foot-voting pattern linked to political or territorial motivations.

When disaggregating the data by municipality size, the patterns appear more pronounced in Barcelona and other large municipalities. After 2017, there was a noticeable increase in emigration from Barcelona to other Catalan municipalities and to the rest of Spain (see Figure 4). The question remains, however: were these patterns driven by political motivations? Can these data provide evidence of foot-voting behavior related to Catalonia's political context?

To further analyze migration patterns and address these questions, we perform a multivariate analysis. The following tables present the results of multiple regression models by year (2015–2020) for migrations to the rest of Catalonia (Table 2) and to the rest of Spain (Table 3). We use migration rates at the census-section level as the dependent variable. Consequently, a positive association between an independent variable and the dependent variable indicates that the factor correlates with exit trends in that census section.

The comparison of the models shown in Tables 2 and 3 provides valuable insights into the variables explaining migration patterns in Catalonia during the period of territorial tensions surrounding the 2017 referendum. Regarding migrations to other

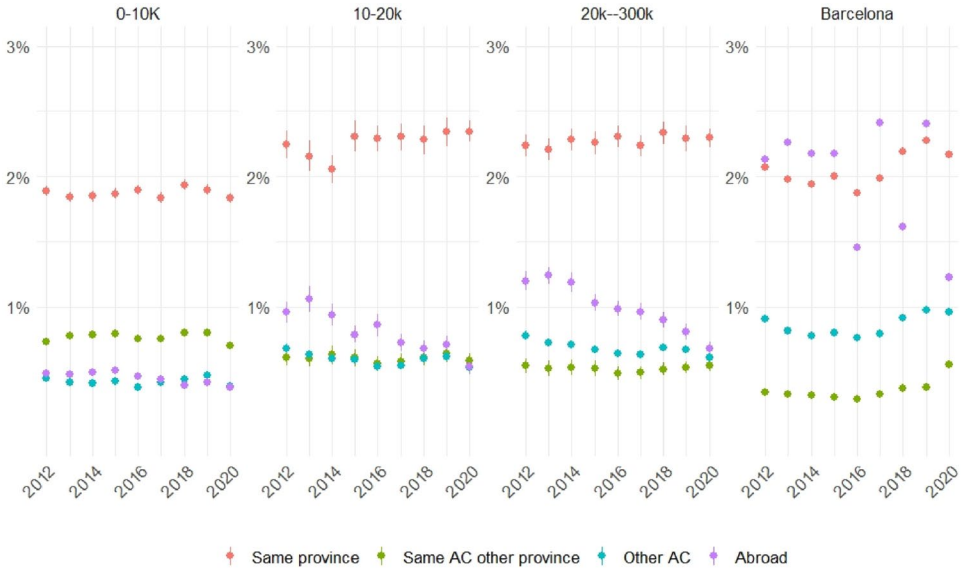


**Figure 4.** Emigrations per year, destination, and municipality size (census-section level).

**Table 2.** Multiple regression models on migrations to the rest of Catalonia.

| Variable | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| Abstention 2015 (%) | 0.13*** | 0.12*** | 0.12*** | | | |
| | (0.02) | (0.02) | (0.02) | | | |
| Unionist vote 2015 (%) | −0.08 * | −0.04 | −0.05 | | | |
| | (0.03) | (0.03) | (0.03) | | | |
| Equidistant vote 2015 (%) | −0.00 | −0.05 ** | −0.06 | | | |
| | (0.02) | (0.02) | ** | | | |
| | | | (0.02) | | | |
| Abstention 2017 (%) | | | | 0.10*** | 0.10*** | 0.09*** |
| | | | | (0.02) | (0.02) | (0.02) |
| Unionist vote 2017 (%) | | | | −0.09 * | −0.05 | −0.01 |
| | | | | (0.04) | (0.04) | (0.04) |
| Equidistant vote 2017 (%) | | | | −0.00 | 0.02 | 0.01 |
| | | | | (0.03) | (0.03) | (0.03) |
| Territorial polarization | −0.04 | −0.08 ** | −0.07 ** | −0.07 | 0.00 | −0.02 |
| | (0.03) | (0.03) | (0.03) | (0.04) | (0.05) | (0.04) |
| Left-Right polarization | −0.01 | −0.03 | −0.03 | −0.01 | −0.01 | −0.03 |
| | (0.02) | (0.02) | (0.02) | (0.03) | (0.03) | (0.03) |
| Speaks Catalan (%) | −0.06*** | −0.05 ** | −0.05 ** | −0.06*** | −0.04 ** | −0.03 |
| | (0.02) | (0.01) | (0.01) | (0.01) | (0.02) | (0.01) |
| Origin other AC (%) | 0.07*** | 0.07*** | 0.09*** | 0.08*** | 0.09*** | 0.05 ** |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| Income per capita | 0.00 | −0.01 | −0.03 | 0.01 | 0.01 | 0.05 * |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| Primary studies | −0.09*** | −0.10*** | −0.14*** | −0.10*** | −0.08*** | −0.07*** |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| Working age 25–65 (%) | 0.08*** | 0.05*** | 0.06*** | 0.04 ** | 0.08*** | 0.06*** |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Unemployment (%) | 0.01 | −0.02 | −0.03 ** | −0.04*** | −0.04*** | −0.02 |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| IBI tax | 0.01 | 0.02 * | 0.01 | 0.01 | 0.01 | 0.01 |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Population 2020 | −0.46*** | −0.46*** | −0.44*** | −0.44*** | −0.43*** | −0.36*** |
| | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) |
| Barcelona dummy | 0.08 | 0.11 * | 0.12 * | 0.14 ** | 0.12 * | 0.09 |
| | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) |
| N | 2555 | 2556 | 2556 | 2558 | 2557 | 2562 |
| $R^2$ | 0.36 | 0.37 | 0.34 | 0.32 | 0.31 | 0.14 |

All continuous predictors are mean-centered and scaled by 1 standard deviation.
***$p < 0.001$; **$p < 0.01$; *$p < 0.05$.

**Table 3.** Multiple regression models on migrations to the rest of Spain.

| Variable | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| Abstention 2015 (%) | 0.11*** | 0.09*** | 0.11*** | | | |
| | (0.01) | (0.01) | (0.01) | | | |
| Unionist vote 2015 (%) | −0.04 | −0.05 | −0.00 | | | |
| | (0.03) | (0.02) | (0.02) | | | |
| Equidistant vote 2015 (%) | 0.01 | 0.02 | 0.03 * | | | |
| | (0.02) | (0.02) | (0.01) | | | |
| Abstention 2017 (%) | | | | 0.10*** | 0.11*** | 0.10*** |
| | | | | (0.01) | (0.01) | (0.01) |
| Unionist vote 2017 (%) | | | | 0.02 | 0.01 | 0.02 |
| | | | | (0.03) | (0.03) | (0.03) |
| Equidistant vote 2017 (%) | | | | 0.06 * | 0.10*** | 0.06 * |
| | | | | (0.03) | (0.03) | (0.03) |
| Territorial polarization | 0.11*** | 0.10*** | 0.13*** | 0.15*** | 0.18*** | 0.14*** |
| | (0.02) | (0.02) | (0.02) | (0.04) | (0.04) | (0.04) |
| Left-Right polarization | 0.06 ** | 0.07*** | −0.00 | 0.02 | 0.02 | 0.02 |
| | (0.02) | (0.02) | (0.02) | (0.03) | (0.02) | (0.02) |
| Speaks Catalan (%) | −0.00 | −0.01 | −0.02 | −0.01 | −0.03 * | −0.01 |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Origin other AC (%) | 0.06*** | 0.05*** | 0.08*** | 0.06*** | 0.05*** | 0.07*** |
| | (0.02) | (0.02) | (0.01) | (0.02) | (0.02) | (0.02) |
| Income per capita | 0.05 ** | 0.05 ** | 0.07*** | 0.08*** | 0.10*** | 0.09*** |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| Primary studies | −0.00 | −0.01 | −0.01 | −0.01 | −0.02 | −0.01 |
| | (0.02) | (0.01) | (0.01) | (0.02) | (0.02) | (0.02) |
| Working age 25–65 (%) | 0.11*** | 0.12*** | 0.13*** | 0.14*** | 0.14*** | 0.13*** |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Unemployment (%) | 0.06*** | 0.06*** | 0.06*** | 0.06*** | 0.06*** | 0.04*** |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| IBI tax | −0.01 | −0.00 | −0.00 | −0.00 | −0.00 | −0.00 |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Population 2020 | −0.04 | −0.02 | −0.07*** | −0.02 | −0.07*** | −0.07*** |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| Barcelona dummy | 0.11 * | 0.04 | 0.17*** | 0.17*** | 0.13 ** | 0.23*** |
| | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) |
| N | 2344 | 2337 | 2348 | 2359 | 2369 | 2341 |
| $R^2$ | 0.20 | 0.21 | 0.22 | 0.22 | 0.25 | 0.27 |

All continuous predictors are mean-centered and scaled by 1 standard deviation.
***$p < 0.001$; **$p < 0.01$; *$p < 0.05$.

Catalan municipalities, we find a positive statistical association with abstention, origin in other ACs, and the working-age population (20–25). By contrast, migration is negatively associated with speaking Catalan, population size, and voting for equidistant parties. No significant correlation is observed between migration and high shares of unionist voting or income levels. Three variables show slight variation during the referendum years: the relationships between equidistant vote and territorial polarization with migration become negative in 2016 and 2017, while the correlation between unemployment and migration becomes significant and negative during 2017–2019. However, as Figure 5 illustrates, these variations are not statistically significant across years.

As for migrations from Catalonia to the rest of Spain, the results indicate positive associations with higher abstention, greater territorial polarization, elevated unemployment levels, relatively wealthier constituencies, the working-age population (25–65), and a larger share of residents born in other Spanish ACs. During the referendum years, the relationship between equidistant voting and migration turns positive, and territorial polarization becomes a stronger predictor of migration. Emigration is also

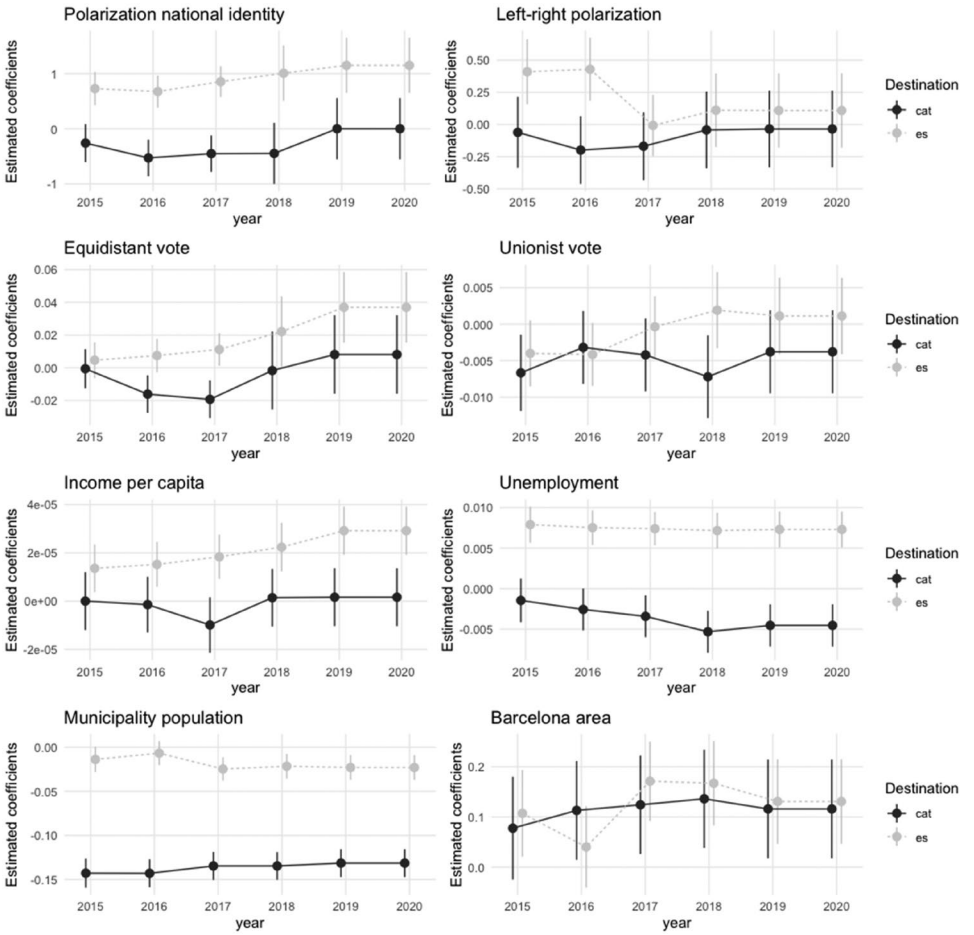


**Figure 5.** Predicted emigration values.

**Table 4.** Summary of hypothesis and results.

| Hypothesis | Expectations | Empirical results | Support |
|---|---|---|---|
| **H1**: Similar emigration patterns in Catalonia compared to other Spanish CCAA during and after the referendum. | No significant demographic or migratory deviation from Spanish regional trends; limited political foot voting expected due to high mobility costs and structural barriers. | Descriptive and multivariate analyses show no significant increase in migration from Catalonia to other Spanish regions after 2017; patterns remain comparable to other CCAA. | Supported |
| **H2**: Higher foot voting in areas with stronger unionist and equidistant vote shares. | Political dissatisfaction among non-secessionist voters should increase exit likelihood. | Unionist vote shares show no significant effect; equidistant vote becomes negative or inconsistent (slightly negative to rest of Catalonia, weakly positive to rest of Spain). | Partial |
| **H3**: Increased foot voting in areas with high political polarization. | Polarization acts as a trigger for exit behavior by heightening perceived conflict. | Positive but weak association between territorial polarization and emigration to the rest of Spain during and after 2017; weaker or negative within Catalonia. | Supported/ Partial |
| **H4**: Migration more likely in jurisdictions with high income and high unemployment. | Economic opportunity and insecurity jointly increase exit likelihood (lower loyalty). | Positive association between emigration to the rest of Spain and both income and unemployment; negative or non-significant within Catalonia. | Supported |
| **H5**: Emigration higher in areas where residents are Spanish-born and do not speak Catalan. | Weaker identitarian loyalty increases exit likelihood. | Positive and significant association between being born in another AC and migration to the rest of Spain; negative association with speaking Catalan. | Supported |

somewhat higher in smaller municipalities and in the Barcelona area. Yet, as Figure 5 also demonstrates, these variations are not statistically significant over time (Table 4).

While our analyses reveal associations between territorial polarization, Spanish-born population share, and migration, alternative explanations likely contribute to the observed patterns. The positive coefficient for unemployment suggests that economic factors, such as labor market opportunities or local economic conditions, may influence migration decisions. Likewise, variations in housing costs, access to services, or broader economic insecurity could partly drive emigration independently of political motivations. These considerations indicate that migration in Catalonia during this period was probably shaped by a combination of political and economic forces, and that the observed patterns cannot be fully attributed to territorial tensions alone.[88]

In summary, the evidence suggests that emigration patterns in Catalonia during and after the 2017 referendum largely mirrored broader Spanish trends, supporting the hypothesis that no major migratory deviation occurred (H1). The expected impact of unionist and equidistant voting is only partially confirmed (H2), as their effects are weak and inconsistent across destinations, slightly negative or marginally positive depending on the case. Political polarization shows only a very modest correlation across years, implying that it exerted, at most, a limited influence on migration patterns (H3). Economic factors such as income and unemployment display clearer associations, suggesting that both opportunity and insecurity shape mobility decisions, particularly toward the rest of Spain (H4). Finally, migration is higher in areas with larger shares of Spanish-born residents and lower among Catalan-speaking populations, supporting the role of identity-related factors in shaping exit behavior (H5). Overall, while economic and demographic variables remain the main drivers of migration, political factors appear to have had only limited and inconsistent effects during the referendum period.

## Discussion

While there is ample evidence of foot voting, displacement, and demographic change linked to territorial conflicts in violent contexts, far fewer studies address the effects of secessionist disputes in liberal democracies. The case of Quebec remains paradigmatic: has the "Quebec exodus" been replicated in other democratic contexts? The evidence presented in this article suggests a negative answer for Catalonia but offers a meaningful contribution to the literature by examining such conflicts through the prism of foot voting.

Our analysis covers approximately 85 per cent of Catalan municipalities and 55 per cent of the region's population, encompassing a diverse range of territories, including the city of Barcelona, provincial capitals, major urban centers, and rural areas. This extensive dataset enables us to capture demographic trends during the period of territorial tensions (2015–2020) surrounding the 2017 referendum. Contrary to initial expectations, our findings support the first hypothesis (H1), which predicted no significant demographic shifts during this politically charged period. The results point to a remarkable degree of demographic stability across the region, even amid intense political conflict. Moreover, the statistical analyses presented earlier reveal little evidence of foot-voting behavior associated with the territorial dispute.

The results observed in our analysis suggest that the dynamics of political tensions and territorial disputes in Catalonia did not translate into meaningful demographic shifts or migration patterns during the studied timeframe according to our calculations. That said, our interpretation should remain cautious for two main reasons. First, the use of observational data at the census-section level inherently limits our capacity to infer causal relationships. Although the regression models control for a range of socio-economic and geographical factors, unobserved heterogeneity may still bias our estimates. Second, the temporal resolution of census data restricts our ability to capture short-term or temporary movements that may have occurred in response to specific political events or moments of heightened tension. Consequently, our findings should be understood as reflecting broader, more stable demographic patterns rather than immediate behavioral reactions. Future research could complement this analysis with higher-frequency administrative or mobility data, as well as qualitative interviews or survey evidence, to uncover the micro-level mechanisms underlying residential decision-making in politically contentious contexts.

In any case, we offer an exploratory interpretation of the absence of a "population exodus" during the period of territorial tensions surrounding the 2017 referendum in Catalonia.

A first possible explanation relates to the lack of credibility of the pro-independence movement compared with historical cases such as Quebec in 1980. As illustrated in Figure 1, expectations that the "independence process" would culminate in a sovereign Catalan state remained low. Spanish-speaking respondents were, by far, the most skeptical, while Catalan speakers gradually became more disillusioned as events unfolded.

In Quebec, the pro-sovereignty campaign rested on a coherent and credible vision of a sovereign future to be negotiated with the Canadian Government through the "sovereignty-association" proposal. This created a stronger sense of urgency and clarity among those contemplating migration, as the project explicitly sought to restructure the balance of power between cultural and linguistic communities to strengthen the political sovereignty of French Quebeckers.[89] The referendum followed a decade of intense nationalist mobilization and an electoral mandate led by the *Parti Québécois* since 1976. Importantly, the 1980 referendum was legally recognized, held under Quebec's Referendum Act, and contested by both the Yes and No campaigns, thereby granting it full democratic legitimacy.

The Catalan independence process was marked by uncertainty, both in terms of its long-term viability and the practical implications of secession.[90] Furthermore, the political conflict in Catalonia did not occur concurrently with the implementation of significant self-rule or linguistic policies, which had previously contributed to emigration patterns in other regions. A complementary potential explanation could be related to the lack of broader policy changes carried out by the pro-sovereignty Catalan governments during that period. The Catalan independence process did not overlap with major changes regarding linguistic and cultural rights and obligations. In Quebec, the parallel development of strong regional autonomy, cultural policies, and the establishment of a distinct national identity (for example, through the Quebec language statutes) provided a clearer context for the potential changes that might follow a successful referendum. On the contrary, Catalonia had already experienced substantial autonomy and linguistic policies for decades, meaning the perceived threats to these

elements were not as sudden or radical, reducing the impetus for migration linked to political changes.

The fact that the Catalan referendum was judicially challenged and the "No" side did not actually campaign against independence, but boycotted it, shows that it was not perceived as a legitimate vote by a large part of the population (turnout was 43.03%, while in 1980, 85.61% of the electorate voted in Quebec). In any case, despite the absence of a No campaign and the repression by Spanish authorities of the vote,[91] voting for an independent Catalonia did not actually mean opting for a direct alteration of linguistic policies, since the leaders of the main pro-independence parties had already stated their willingness to maintain both Spanish and Catalan as official languages.[92]

In a nutshell, the absence of a significant Catalan exodus during the period surrounding the 2017 referendum can be attributed to several key factors, although we should be cautious in this analysis due to the inherent limitations of our statistical study based on observational data. First, the lack of credibility regarding the threat posed by the independence movement, compared to other historical secessionist conflicts like Quebec's, meant that the potential for drastic change was not seen as imminent or certain, and self-government arrangements (i.e., linguistic policies) had been negotiated decades ago. Second, precisely because of this, the Catalan independence movement did not represent a dramatic shift in the region's linguistic or cultural policies, which had already been well established over decades of autonomy. As such, the perceived risks of secessionism to individual rights (especially of Spanish-speakers) were minimal, particularly since the pro-independence leaders consistently expressed a commitment to maintaining both Catalan and Spanish as official languages.

Finally, we could also hypothesize as a potential explanation the lack of a more violent conflict or the use of force by Catalan authorities, explicitly ruled out by President Puigdemont,[93] which further mitigated fears of a dramatic upheaval and contributed to the demographic stability observed during this politically charged period. That is, compared to violent conflicts, the Catalan referendum faced a repressive counter-secessionist policy from the Spanish authorities but did not spark any low-intensity violence or civil war as observed in other cases. Yet, in Quebec there was no violent conflict either; the 1980 referendum was conducted peacefully, with both the Yes and No campaigns participating fully in the electoral process. The absence of violence in Quebec shows that the occurrence of massive foot voting cannot be attributed solely to the presence or absence of conflict.

Besides the credibility threat, the economic explanation gains some weight. In Quebec, the provincial government had long-established capacity to implement sweeping changes, including the Quebec Pension Plan, control over immigration, and comprehensive language policies under Bill 101. The independence project was clearly tied to potential transformations in the economic realm, which created tangible incentives for those perceiving personal or economic risks to consider relocation.

Another critical distinction relates to labor and housing market conditions. Quebec in 1980 offered relatively more flexible opportunities for highly skilled or French-speaking workers to relocate within Canada, and those considering exit could realistically access employment and housing elsewhere with minimal structural barriers. In Catalonia, however, structural rigidities in the Spanish labor market, high transaction costs in

the housing market, and rental segmentation may have constrained mobility, particularly for middle- and lower-income households. Even individuals with political motivations to move faced considerable economic frictions that limited exit options. Taken together, these structural differences (combined with differences in political credibility and policy stakes) help explain why an exodus was observed in Quebec but not in Catalonia, despite both regions experiencing a referendum under democratic and largely nonviolent conditions.

## Concluding remarks

Despite intense media coverage, the relocation of several corporate headquarters to other parts of Spain, and the highly reported moves of some citizens in the media, our empirical analysis does not reveal any comparable "exodus" of residents, whether among professionals or the general population, surrounding the 2017 independence referendum. Unlike Quebec in the 1970s and 1980s, where the emergence of the pro-sovereignty movement was accompanied by notable migration flows, particularly among linguistic minorities, Catalonia displayed remarkable demographic stability throughout the period of political turmoil. Nonetheless, we should be careful not to overstate our findings for two main reasons. First, the use of observational data at the census level inherently limits our ability to draw causal inferences. While our regression models account for various socioeconomic and geographic controls, unobserved heterogeneity may still influence our estimates. Second, the temporal resolution of census data restricts our capacity to detect short-term or temporary population movements that could have occurred in reaction to specific political events or moments of heightened tension.

The absence of a significant population outflow from Catalonia during the period surrounding the 2017 referendum can be explained by several interrelated factors. One key element lies in the limited credibility and perceived feasibility of the independence project itself. Unlike the Quebec case in 1980, where the sovereignty movement was grounded in a clear and institutionally recognized political proposal, the Catalan "process" unfolded amid legal uncertainty and contested legitimacy. The judicial challenges to the referendum and the absence of a formal "No" campaign undermined the perception of a legitimate and binding vote. Moreover, many residents (especially Spanish-speakers) did not view independence as an imminent or realistic outcome. This lack of perceived credibility likely reduced incentives to relocate, particularly when combined with the longstanding self-government and linguistic protections already secured under Catalonia's autonomous framework.

Another central factor concerns the policy environment during the independence process. While in Quebec the rise of the pro-sovereignty movement coincided with significant policy transformations during the previous decade (such as the Charter of the French Language) that reshaped linguistic and cultural relations, Catalonia's political conflict occurred within an already consolidated regime of autonomy and bilingualism. The pro-independence leadership explicitly committed to maintaining both Catalan and Spanish as official languages, which helped allay fears of exclusion or cultural displacement. Consequently, the independence movement did not generate the kind of structural policy uncertainty that, in other historical contexts, has driven migration among linguistic or ethnic minorities. This policy continuity likely reinforced the

region's demographic stability, even amid growing political polarization and widespread media coverage of institutional confrontations.

Furthermore, the nature and intensity of the conflict itself played a role in limiting demographic responses. The Catalan referendum episode, while politically turbulent and met with repressive measures from Spanish authorities, remained largely nonviolent. The absence of armed confrontation or widespread unrest sharply contrasts with the dynamics observed in other territorial conflicts, where violence has historically triggered significant population displacements. President Puigdemont's explicit rejection of violent strategies, coupled with the limited physical risks faced by the population, meant that fears of immediate upheaval or personal insecurity were relatively contained. In this sense, the Catalan case illustrates how the character of a secessionist dispute, peaceful yet contentious, can mitigate the demographic consequences typically associated with territorial conflicts.

Taken together, these factors help explain why Catalonia, despite intense political polarization and international attention, did not experience a discernible demographic shift linked to its independence movement. The findings thus contribute to a broader understanding of foot-voting behavior in liberal democracies, suggesting that such reactions depend not only on the existence of political tension but also on the perceived legitimacy, credibility, and policy consequences of secessionist movements. Comparative research across other regions (such as Scotland, Flanders, or the Basque Country), together with more refined qualitative analyses, could further illuminate how variations in institutional autonomy, cultural policy, and conflict intensity shape migration decisions. In doing so, future studies may better capture the conditions under which political disputes translate, or fail to translate, into demographic change.

## Notes

1. See La Presse (18 June 2022), "Un exode de 600 000 Québécois anglophones au fil des ans—est-ce possible?" https://www.lapresse.ca/actualites/2022-06-18/vu-lu-verifie/un-exode-de-600-000-quebecois-anglophones-au-fil-des-ans-est-ce-possible.php (accessed 19 October 2025).
2. Don Cartwright, "Changes in the Patterns of Contact between Anglophones and Francophones in Quebec," *GeoJournal* 8, no. 2: 109–22. According to other sources 131500 Anglophones left Quebec between 1976 and 1981 and 94000 between 1971 and 1976 (Josée Legault and Gary Caldwell, "L'exode de La Communauté Anglo-Québécoise: La Nécessaire Responsabilisation," in *Réplique Aux Détracteurs de La Souveraineté Du Québec*, edited by Alain-G. Gagnon and François Rocher (Montréal: VLB Éditeur), 291–311). Maheu calculated that the migration tax of Anglophone Quebeckers was 17.1% while only 1% of Francophone Quebeckers emigrated between 1976 and 1981 (Robert Maheu, "L'émigration Des Anglophones Québécois," *Cahiers Québécois de Démographie* 12, no. 2 (1983): 271–80).
3. Alain-G. Gagnon, *Quebec, Beyond the Quiet Revolution* (Scarborough, OM: Nelson Canada, 1990); Michael Keating, *Nations against the State: The New Politics of Nationalism in Quebec, Catalonia and Scotland* (Springer, 1996); Alain-G. Gagnon, "Canada: Unity and Diversity," *Parliamentary Affairs* 53, no. 1 (2000): 12–26; Chantal Hébert and Jean Lapierre, *Confessions Post-Référendaires: Les Acteurs Politiques de 1995 et le Scénario D'un Oui* (Editions de l'Homme, 2014).
4. Jean-François Caron and Guy Laforest, "Canada and Multinational Federalism: From the Spirit of 1982 to Stephen Harper's Open Federalism," *Nationalism and Ethnic Politics* 15, no. 1 (2009): 27–55.

5. Jaume López and Marc Sanjaume-Calvet, "The Political Use of De Facto Referendums of Independence: The Case of Catalonia," *Journal of Representative Democracy* 56, no. 4 (2020): 501–19.
6. By the end of October 2017 around 1800 firms had left Catalonia according to some sources, among other Banco Sabadell, La Caixa or Abertis. See: El País (18 Oct 2017), "How and Why Capital Fled Catalonia," https://english.elpais.com/elpais/2017/10/16/inenglish/1508139705_469301.html (accessed 19 October 2025).
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(February 2015). Establishing the ending year is more complicated, since the census of the 2021 elections was established in August 2020. The beginning months of 2020 were affected by the Covid-19 outbreak, which could have potentially affected and reduced the patterns of mobility. For this reason, we have selected 2019 as the ending year.

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## Notes on contributors

***Marc Sanjaume-Calvet*** is an Associate Professor at Universitat Pompeu Fabra. Member of the Social and Political Theory Research Group (SPTG). His research focuses on democracy, pluralism, federalism and self-determination conflicts.

***Jordi Mas*** is a Lecturer in International Politics at the Universitat Oberta de Catalunya (UOC) and Director of the Master's in International Relations. He holds a PhD in Politics from the Autonomous University of Barcelona, and his research centres on on governance, regionalism, political institutions, and social science methodology.