

The stories we tell ourselves:
Local newspaper reporting and support for the radical right

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Abstract

Rising support for the radical right has become a hallmark of the current political landscape. A lot of attention has been devoted to the reasons influencing individual voting decisions, with some progress in understanding within-country variation in the vote. But these studies usually assume that perceptions coincide with objective reality. This article addresses this shortcoming, using quantitative text analysis and spatial econometrics to show that local narratives – sometimes more than contextual statistics – can drive spatial differences in the populist vote. Taking Spain as an example, I train a machine learning algorithm to determine the prevalence of given news topics across the national territory based on how many related articles local newspapers published on Twitter in the year before the last national election. I then use spatial econometric techniques to link these results to local divergences in support for the radical right party VOX. The analysis sheds some light onto the *economic anxiety - cultural backlash - geography of discontent* debate. The empirical evidence supports the notion that narratives about economic anxiety and regional gaps matter, but also shows that narratives about separatism played a key role in the rise of the radical right in Spain.

Keywords: radical right support, local newspapers, machine learning algorithm, Twitter, Spain

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1 Introduction

The vote in favor of radical right parties (RRPs) has soared throughout Western democracies since the early 2000s, in what has been dubbed the ‘fourth-wave’ of the far right (Golder 2016; 2019). This resurgence has provoked both alarm and interest among some segments of the political establishment, civil society and academia. For, even with limited support in the polls, radical right outfits have proven capable of successfully introducing arguments into the political mainstream, getting parties elsewhere in the spectrum to back their policies (Inglehart and Norris, 2016).

The rise of RRP has rekindled the debate around the reasons driving voting decisions (Mudde, 2019). Aiming to contribute to the discussion, this project focuses on one of its geographical dimensions: how, if at all, do local narratives relate to radical right voting patterns? In other words, can one gauge pro-RRP sentiment from the topics a community talks about? To answer this narrower question, I posit that local newspapers tend to reflect local divergences in narratives in the articles they publish. This may occur because journalists themselves wish to influence the narrative or because they target articles to their local audience in order to maximize profit. In both scenarios, the topics of the articles published across different geographical locations tell us something about how the inhabitants of those places see the world and can therefore provide some insight into why they vote the way they do.

This paper is thus based on the simple idea that the more news articles written on a specific topic in a given location, the more prevalent the issue in local voters’ minds. I apply this notion to the Spanish context, where the radical right has recently gained traction. To gather narratives across the Spanish territory, I apply machine learning techniques and build a new dataset with information mined from Twitter on which news topics were more prevalent in each Spanish municipality during the year before the last national election. This new dataset, matched with municipal electoral results, allows for an understanding of whether economic, regional or cultural arguments were more prevalent in areas with high shares of support for the radical right.

This article contributes to earlier research in the fields of quantitative political analysis and political geography. More specifically, it relates to one of the long-standing debates in the political literature: whether RRP political clout stems from deteriorating economic conditions or from a discontent about the cultural changes brought about by globalization (Inglehart and Norris, 2016). While the traditional works on this subject tend to take a rather ‘global’ perspective, focusing on individual voter characteristics and putting aside within-country variation in RRP vote, more recent research by economic geographers highlights the spatial unevenness of radical right vote (Ferrante and Pontarollo, 2020; Rodríguez-Pose et al., 2020; Essletzbichler et al., 2021). This unevenness has led to the emergence of a third side in the debate: the rise of the radical right is thought to bring to the fore previously unheard grievances about widening spatial inequalities

and may speak to the importance of a so-called '*geography of discontent*' (Cramer, 2016; Rodríguez-Pose, 2018; McCann, 2019) (see Section 2 for some background information on these concepts). Finally, the analysis of narratives offers the opportunity to test an additional hypothesis specific to the Spanish context: that the radical right has benefitted from resentments linked to the increasing prominence of regional political movements in favor of independence from the Spanish state (Turnbull-Dugarte, 2019; Heyne and Manucci, 2021).

Given the data available, disentangling these arguments is not easy. One key issue with both global and regional models is that they use either personal characteristics or actual data on relevant issues – such as unemployment or immigration – as proxies for perceptions. Despite this, research in psychology suggests that people rely on heuristics or mental shortcuts rather than 'hard data' when making choices (Lau and Redlawsk, 2001). This would seem to indicate that narratives – the stories we tell ourselves and each other about how the world works – may go well beyond statistics in shaping individual (voting) decisions (Shiller, 2017). In this respect, the techniques used in this paper constitute a useful alternative to track political preferences at the local level.

The results suggest that grievances triggered by *separatism* and *economic anxiety* played the largest role in VOX's political rise. The results also show partial confirmation of the *geography of discontent* hypothesis: perceptions of large regional disparities were positively correlated with the radical right vote. Curiously, however, a higher share of news articles dealing with grievances over lack of resources/local investment tended to lower – rather than raise – radical right support. The mainstream right benefited from such sentiments instead. In contrast, support in favor of the *cultural backlash* hypothesis was far more limited, being largely washed out when controlling for local age profiles.

The rest of the article proceeds as follows. Section 2 provides a summary on two different strands of the literature: the first is an account of the *economic anxiety-cultural backlash* debate and the *global and local* reasons behind the success of the radical right more broadly; the second focuses on the importance of (social) media – and Twitter in particular –, both in the process of building narratives and in informing individual voting decisions. Section 3 includes a short description of the radical right in Spain. I subsequently discuss the chosen empirical strategy (section 4), compare perceptions with the socioeconomic statistics most often used in the literature (section 5), and present the results (section 6). Section 7 concludes.

2 Theoretical background

2.1 The reasons behind the success of the radical right

The impressive political gains made by RRPs since the 1980s have led to a large body of comparative literature that aims to explain why radical right ideologies fail in some places but take root in others. Researchers broadly agree that, especially in its initial stages, support for the radical right depends on a party being able to mobilize existing grievances or resentments (Betz, 2002). In this regard, the most recent research emphasizes the importance of globalization and the socioeconomic cleavages it has created in society. There is a lively debate, however, regarding how these issues catalyze into actual votes in favor of RRPs.

This discussion is often referred to as the *economic anxiety-cultural backlash debate*: either individual decisions to vote for the radical right owe to anxieties over the economic difficulties brought about by globalization (the *economic argument*) or to a rejection of the cultural changes that come with a more interconnected world (the so-called *cultural backlash argument*) (Inglehart and Norris, 2016; Mudde, 2019).

Until recently, this debate took a spatially blind – or rather global – viewpoint. There were many individual-level studies and cross-country comparisons, but rarely did any of them acknowledge the spatial unevenness of RRP vote within countries (Golder, 2016). This has changed in recent years. A growing body of research focuses on the *geography of discontent* – a term used to describe local feelings of resentment brought about by the territorial polarization of resources, itself an upshot of the power of agglomeration economies (Essletzbichler et al., 2018; Rodríguez-Pose, 2018, 2020; Broz et al., 2021).

As we will see, these global and local points of view are not necessarily contradictory. Evidence from other contexts suggests it is in fact possible that all these theories play a role in the rise of the radical right in Spain. This paper therefore focuses on understanding whether: a) local narratives exist across Spanish municipalities that align with each of these theories; and b) whether these narratives are able to explain the recent success of the RRP VOX (see section 3 for some background information on the radical right in Spain).

The following sub-sections provide a brief account of each of these theories. This framework is then used to link the theories with specific narratives (i.e. the topics of local newspaper articles) on the ground:

2.1.1 The economic argument

Advocates of the *economic argument* emphasize globalization’s role in spawning grievances related to individual economic conditions. They focus on the consequences of the rise of the knowledge economy, automation and outsourcing, the dwindling importance of unions, the rising power of multinational firms, and the imple-

mentation of neoliberal austerity policies, among other effects of globalization (see, for instance, Colantone and Stanig 2018 or Milner 2021). All these factors are linked to worsening labor conditions and increasing economic inequalities, which have created winners and losers in society. In Southern Europe in particular, both declining trust in government and the rise of RRP have been connected to the devastating impact the Great Recession had in those countries (Foster and Frieden, 2017; Rossi, 2018).

Despite this, attempts to link support for the radical right with contextual-level unemployment – used as a proxy for the economic anxiety argument – have found inconclusive results (see Sipma and Lubbers 2018 for a meta-analysis of the literature). Furthermore, there is currently no leading explanation as to why the association is so different across studies. One should therefore consider the option that narratives – how people talk about precariousness, poverty, and unemployment – may not coincide with what we observe in unemployment statistics. If this is so, are then narratives about the economic argument able to explain the rise in radical right support? To answer these questions, we can state as a hypothesis of interest that:

Hypothesis 1 *Radical right support is associated with local concerns about unemployment and poverty.*

2.1.2 The cultural backlash argument

The *cultural backlash* camp puts forward a different take on progress and globalization. According to this theory, voters do not support RRP because they worry about their economic future; rather, they rebel against a shift in societal values away from traditional ways of life and towards more individual freedom, multiculturalism, respect for diversity, and gender and racial equality (Arzheimer, 2018).

But the specific mechanisms behind this cultural backlash are still up for debate. Inglehart and Norris (2016) link these worldviews to individual authoritarian tendencies. In contrast, Schäfer (2021) compellingly shows that authoritarian values do not appear to drive populist support; it is rather attitudes towards immigration, political trust, and beliefs that the government will respond to voters' demands that matter instead.

In part because of data availability, much of the literature has focused on attitudes towards migrants. Yet, the link between immigration and support for the radical right has proven hard to trace. At the individual level, multiple studies show that radical right backers hold more anti-immigrant views than other voters (e.g. Rydgren 2008). But, at the aggregate level, the size of the immigrant community has just as often been found to have an effect on RRP support (e.g. Tabellini 2020) as no effect (e.g. Lucassen and Lubbers 2012). In this regard, research has shown that widespread beliefs about an issue – say, that there are too many migrants in a community, as in Stockemer (2016) or Alesina et al. (2018) – may exert more influence on RRP vote than the existence of the issue itself.

But the cultural backlash hypothesis goes well beyond perceptions about immigration. Views on LGBTQ+ issues are also seen as important indicators in this regard (see both Inglehart and Norris 2016 and Schäfer 2021). Feelings of social integration (or a lack thereof) are also deemed relevant (Gidron and Hall, 2019). In this sense, Bolet (2021) argues in favor of the importance of the ‘degradation of local socio-cultural hubs’. She provides evidence of a link between the loss of community centers where people socialize – pubs, in her paper – on RRP support. She connects this effect to a sense of social isolation and a loss of cultural identity. Clearly, this approach requires some contextual adaptation: pubs do not quite play the same role in Spain as they do in the UK, but one could think of a similar dynamic taking place with churches, for instance.

One fact that should have already become clear is that the *cultural backlash* hypothesis deals with a multi-faceted phenomenon. And, as Schäfer points out: ‘It is [not] obvious (...) that citizens who oppose (some form of) migration also reject same-sex marriage, female emancipation or religious pluralism’ (Schäfer, 2021, p. 16). This is despite the fact that we may want to associate all of these views to social conservatism more broadly. Consequently, a hypothesis aligned with the *cultural backlash* theory would be:

Hypothesis 2 *Radical right support is associated with local narratives focused on different types of social conservatism (e.g. centered on the topics of religion and immigration, or featuring negative reporting on feminism/LGBTQ+ issues).*

2.1.3 The geography of discontent argument

As I mentioned above, many studies define the *economic anxiety-cultural backlash debate* from a global perspective. Nevertheless, recent political events have put local and regional issues at the forefront of the discussion (Golder, 2016). There are, after all, large gaps between local areas in the shares of populist RRP vote (see Ferrante and Pontarollo 2020 for an account of differences across European regions). Essletzbichler and co-authors report, for instance, that “[t]he populist vote shares ranged from (...) 21.3 to 75.6% in British Local Authorities and from 4.1 to 95.3% in US counties.” (Essletzbichler et al., 2018, p. 80). In this regard, there is a new conventional wisdom, in large part influenced by the media’s portrayal of the political landscape in the United States and the United Kingdom, which describes RRP vote – and the populist vote, more broadly – as a mostly rural phenomenon (Mitsch et al., 2021). But, while the gaps in voting patterns between urban and rural communities do exist, the geographies of electoral outcomes are somewhat more complicated than this rather simplistic view would lead us to think (Becker et al., 2017; Essletzbichler et al., 2018; Rossi, 2018).

Recent research introduces some caveats into the urban-rural dichotomy. It rather points to the link between globalization and the discontent emanating from lagging regions, who see themselves as the victims

of an economic model that has wittingly left them behind. Works on the *geography of discontent* highlight that the real or perceived economic decline outlined by the proponents of the economic argument need not be recent, or even present in voters' own lives. There is evidence that voters who live in previously well-to-do but now declining places are more likely to vote for populist parties (Rodríguez-Pose, 2020). People in those areas may not necessarily be worried about current economic hardships; instead, they resent rising territorial inequalities and a political system that agglomerates all jobs and economic opportunities in cities, leaving their native localities to deal with long-term economic and industrial decline (McCann, 2019; Broz et al., 2021). Inhabitants in those locations are thought to resort to the ballot box after years of discontent with an economic system they see as leaving their hometowns with no resources, and therefore offering no opportunities for their neighbors and younger generations (Guilluy, 2010; Lee et al., 2018; Rodríguez-Pose, 2018; Ferreira, 2019; Rodríguez-Pose et al., 2020). While this change in political preferences may seem recent, it is the result of a slow-growing but deeply entrenched resentment to urban elites and the regional inequalities they are perceived to support (Cramer, 2016).

Based on this strand of the literature, we can state as a new hypothesis of interest that:

Hypothesis 3 *Radical right support owes to grievances over regional economic disparities or to a perception that the local area does not receive enough investment/resources.*

The focus on regional disparities takes a distinctly important role in the case of Spain. Center-periphery issues have historically constituted an important cleavage in Spanish politics (Pardos-Prado and Sagarzazu, 2019). And, while some of these concerns align with the *geography of discontent* hypothesis outlined above, the 2019 elections took place at a point of particularly increased tensions around the topic of devolution of powers to the autonomous regions (Rama et al., 2021). In particular, the Catalan referendum – which took place on October 1st 2017 followed by a unilateral declaration of independence shortly thereafter – exacerbated political positions on the issue of devolution. VOX was able to capitalize on this phenomenon by advocating for a tough stance on separatists (Turnbull-Dugarte, 2019; Rama et al., 2021; Heyne and Manucci, 2021). In this regard, Turnbull-Dugarte (2019) makes a strong case for the importance of the Catalan issue on the radical right's success in subsequent regional elections. Rama et al. (2021) further suggest that this effect also translated into increased support for VOX in the November 2019 national elections. Based on this literature, an additional hypothesis of interest is:

Hypothesis 4 *Radical right support owes to grievances over separatist movements*¹.

¹Both in Catalonia, the Basque Country, and Navarre.

2.1.4 Why focus on narratives?

The vast majority of the studies cited throughout this section aim to establish the validity of each argument using data on actual migration and economic conditions. While this may provide us with useful knowledge, one should keep in mind that voters' perceptions are key to determining voting decisions. If what in fact guides people's voting preferences is the prevalent narrative in their region, locality or social group, it is no wonder that evidence, in particular for the economic argument, remains elusive. Several studies in the fields of psychology and political science support this idea. People are known to behave as cognitive misers, relying on heuristics or shortcuts rather than on statistics when making decisions (Lau and Redlawsk, 2001). In addition, if they stumble upon information that clashes with their world views, voters have been shown to apply motivated reasoning – an emotionally-biased mental process that reduces cognitive dissonance by rejecting the validity of new contradictory data (Lodge and Taber, 2013). These results suggest that narratives play a role beyond socioeconomic statistics in informing voters' preferences. Consequently, understanding the rise in RRP support may require a substantive shift in focus towards the analysis of texts and other forms of communication used to build and spread narratives.

2.2 (Social) media, local narratives and the radical right

Media reporting is seen as one of the main channels through which citizens form their own perceptions about which social and economic matters are important (Lodge and Taber, 2013). While each individual will have their own experiences regarding economic and political issues, like unemployment or immigration, the media is thought to be able to influence these views through two mechanisms: agenda-setting and priming. Agenda-setting theories claim that the media, in selecting to report about certain subjects but not others, increases the salience of those topics relative to all other potential politically relevant themes. This shortlist of issues is then used by individual voters as a measuring stick with which to evaluate the performance of different political parties – in what is known as priming (Ellinas, 2018). As a result, it is possible to establish a causal link between media reporting and RRP support (see Devine and Murphy 2020 or Foos and Bischof 2022 for examples in the UK).

But, while much of the literature focuses on how the news media sways public perception, there is evidence that the relationship may also run in the opposite direction. The advent of the internet has led to increasing competition in media markets, reducing individual organizations' market power. The decline of paper media and the increasing privatization of media outlets in many countries have pitted news information sources against each other in a race for advertisement revenue. These changes in the market for news have

turned newspaper informational asymmetry on its head: news control used to be exclusively in the hands of journalists. Now there is evidence that audiences may also have a say (Gentzkow and Shapiro, 2010; Ellinas, 2018).

Social media plays a key role in this process. Platforms like Facebook and Twitter have been rising in importance as places where people are made aware of and consume news content (Center, 2014, 2019a). Already back in 2014, 28% of Spanish adults used social media as a source for news. This percentage was as high as 35% among 18-24 year olds (Nielsen and Schröder, 2014). These numbers are on the rise and they reflect one of the most notable changes in the operation of the news media industry: journalists' increasing reliance on social media sites to share and promote news articles (Ju et al., 2014). This reliance has been shown to play a particularly important role for small, local newspapers (Center, 2019b). The pattern in part owes to the fact that social media makes it practical and inexpensive for newsrooms to track and cater to readers' preferences. There are several accounts of news agencies' obsession with clicks (i.e. online article visits) and how these affect the subsequent selection of news stories (e.g. Welbers et al. 2016). This would explain, for example, why newspaper coverage seems to tail, rather than precede, public perception of different economic issues (Hopkins et al., 2017).

Some authors alert that a potential shortfall of these dynamics is that it is increasingly possible "to get the news we want and ignore the rest" (Boczkowski and Mitchelstein, 2013, p. 3). Many social media users rely on family, friends and acquaintances' recommendations to provide them with the news they care about. Some do not even appear to feel the need to click through to the news article itself; the short blurb posted on Facebook or Twitter does the job well enough (Center, 2014).

Despite these shortcomings, conversations taking place on social media shape local narratives in fundamental ways. By engaging with the news content promoted through a newspaper's Twitter feed, individuals feel connected to the world around them and develop ideas about how it functions. Social networks also allow readers to become part of the conversation, both by commenting and sharing news content (Center, 2019b; Casadei and Lee, 2020). These dynamics imply that newspapers' Twitter feeds can also be seen as a constant reflection of the equilibrium between news supply and demand in a given area. In other words, they constitute a reflection of the most prevalent worldviews in a given location. Based on this notion, this article focuses on the use newspapers make of Twitter to understand the prevailing narratives across different localities in Spain.

3 The radical right in Spain: A brief background

Political support for the radical right in Spain is fairly recent – something that sets the country apart from most of its European neighbors. In fact, Spain features only one such outfit. Founded in 2013, VOX is the second far-right party to have gained access to Congress since the end of the Franco dictatorship in 1975. Despite crashing in its first electoral campaigns in 2015 and 2016, VOX obtained 15% of the vote in the November 2019 national election. This success was largely unexpected, and only heralded by its performance in the Andalusian and Valencian regional elections in 2018 and 2019, where VOX obtained 11% and 18% of the vote, respectively.

Akin to other European nations, Spanish vote in favor of RRP is highly uneven across the territory (see Figure 1). The vote for VOX in different municipalities ranged from nil to almost 60% in some constituencies. Some of these differences are regional in nature – there are much lower levels of support in Galicia, the Basque Country, Navarre, Catalonia, and the Canary Islands. These patterns are likely to have historical origins and/or owe to supply-side arguments regarding the make-up of the political landscape prior to VOX’s foundation.

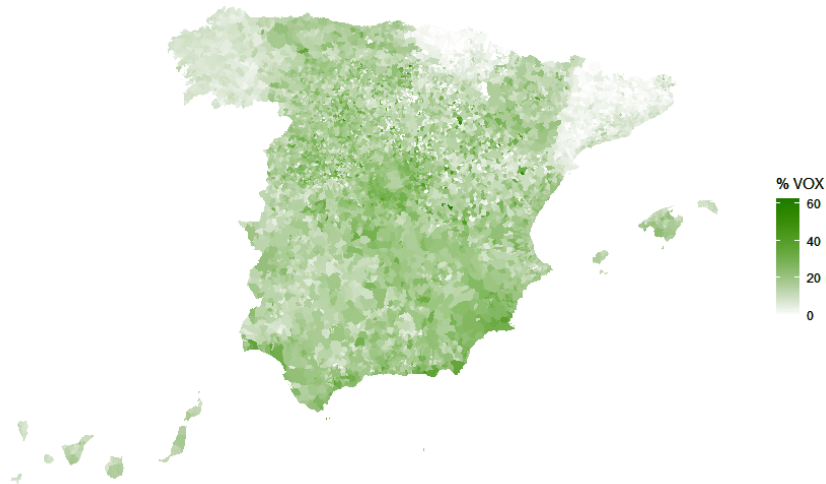


Figure 1: Share of the vote in favor of VOX during the November 2019 Spanish parliamentary election. Plotted from the data published by the Spanish Interior Ministry.

But, once those differences are accounted for, there still remains striking local variation. In particular,

VOX was the most voted party in 283 of Spain’s 8131 municipalities (3.5% of the total). Rather than clustered together, these municipalities are scattered across the national territory. Most intriguingly, they do not necessarily align with broader administrative boundaries, indicating that historical patterns are unlikely to explain the variation.

In terms of ideology, VOX is commonly classified as a radical right-wing populist party (Rooduijn et al., 2019). This description owes to an agenda blending neoliberal economic ideology with elements of nativism and an authoritarian push for the recentralization of Spain’s de facto federal state (Heyne and Manucci, 2021). These elements are plainly visible in VOX’s foundational manifesto, where there are multiple references to the nation state and institutional reform. Economic growth and traditional values are also mentioned, lending credence to all camps in the *economic-regional-cultural backlash debate* (VOX, 2016; Rama et al., 2021).

4 Measuring narratives

4.1 Data

This article makes use of a newly built dataset, which includes all original information published by Spanish newspapers on Twitter during the year 2018. I used a scraper to automatically visit Twitter’s search page, search for a given newspaper’s daily tweets within a specific time frame, and download each tweet, as well as relevant linked metadata. I undertook this process with handles corresponding to all Spanish newspapers currently in circulation – 121 in total (see external appendix for more information on the list of newspapers, their location and geographical coverage) – and then gathered all information into a single dataset. This led to a total of over 2 million tweets.

Tweets in the dataset cover the whole period between January 1st and December 31st, 2018. This time frame was chosen to balance the representativeness of all topics usually covered by newspapers. The selection of a whole natural year prevents an excessive prevalence of certain topics due to the time of year (e.g. tweets on religion are particularly common during Easter, as are tweets about road traffic in the summer months). Since the number of tweets was too large for the computational capacity available, the analysis in this paper was undertaken on a 10% random sample of the initial dataset.

The new Twitter dataset is complemented by municipal-level information on the results of the November 2019 parliamentary elections and various sociodemographic characteristics. In particular, this second dataset includes key information on election turnout as well as population levels, the share of migrants and unemployment.

4.2 Natural language processing

Data sourced from newspapers and social media is highly unstructured. Fortunately, advances in quantitative text analysis now offer the possibility to identify themes in written output. While these techniques do require an important initial effort, once the algorithm functions they can be applied to large swathes of data. In this paper, I make use of one such method to identify the main topics in tweets by different Spanish newspapers: a Naive Bayes classifier.

Naive Bayes classifiers, as many other such algorithms, make use of the ‘bag-of-words’ representation. The bag-of-words method begins by creating a single vector of word counts (w_j) for each document (d_i) in the dataset. The algorithm therefore operates on a very large matrix, which shows how many times each tweet (d_i , as rows) includes words from a pre-existing vocabulary set V (i.e. columns, or the list of all words in all tweets). Word order is not taken into account, and as a result grammar and syntax are deemed unimportant. While this method may seem rough, it works remarkably well in this paper’s area of interest: topic analysis (Manning et al., 2008).

The Naive Bayes classifier is based on the well-known Bayes theorem:

$$\operatorname{argmax}_{k \in \mathcal{K}} P(k|d) = \operatorname{argmax}_{k \in \mathcal{K}} \frac{P(d|k) P(k)}{P(d)}$$

The basic idea is that the algorithm leverages prior classification of a training set of tweets. Let’s take an example from the data to illustrate this. One (translated) tweet in the dataset reads:

‘CITY The parish of Saint Mary organizes the most naval Easter mass’²

This tweet would clearly fall under the religion category. However, for the algorithm to reach this conclusion it first needs to use the prior manual classification to calculate the most probable topic based on two main indicators: a) $P(k)$, or the prior probability that this tweet, regardless of its content, belongs to topic k – in this case, this is equivalent to the share of all manually labeled tweets that are classified as ‘religion’; and b) $P(d|k)$, or the likelihood of finding this particular word combination (in any order), assuming that the right topic were indeed religion – i.e. the probability of finding the word ‘parish’ given that the tweet is about religion, times the probability that the tweet says ‘Saint’ given that it refers to religion, etc.

Naive Bayes thus assumes conditional independence. This is, the probability of word w_j given a particular topic k ($P(w_j|k)$) is taken to be independent of topic k — hence the name ‘naive’. While this is certainly a

²In Spanish: ‘CIUDAD La parroquia de Santa Maria organiza la comunión pascual mas marinera’

strong assumption, its application often outperforms other more complicated algorithms. Precisely because the model relies on very few parameters, the variance in its estimates tends to be low. This can often compensate for the bias in the results (Hand and Yu, 2001). In addition, bias may not matter as much in cases such as this one, where the aim is simple classification according to topic and where topics have been selected to fit the classification method. More details on the functioning and training of Naive Bayes classifiers are available in Jurafsky and Martin (2020).

To train the algorithm, I first randomly ordered all tweets selected from analysis. I then manually classified the first 18,000 tweets into different topics. I set no limits in terms of topic numbers; rather, I focused on making the topics relevant to the Spanish political landscape and to the theories outlined in the literature section. This of course required trying to group tweets into groups that would be sufficiently large and distinct for the algorithm to function. The result was a classification into 28 topics (see Annex A). One of those covers the *economic argument* ('unemployment & poverty'), three correspond to the *cultural backlash* side of the debate ('feminism & LGBTQ+ issues', 'immigration', and 'religion'), another two topics deal with the *geography of discontent*: 'regional gaps' and 'lack of resources'. The former includes tweets on depopulation and/or divergences in the political and economic development of the different regions; the latter deals with any complaints of insufficient resources or local investment. Finally, a single topic covers the '*separatism*' hypothesis.

Once the topic classification was completed, I applied the algorithm to the test set. The result was a classification with 71.3% overall accuracy for the topics of interest, which could be extended to the rest of the tweets in the dataset ³. In any case, the results in the paper remain robust when calculating topic shares only based on the 18,000 manually labeled tweets.

4.3 Classifying and aggregating topics by location

The Naive Bayes classifier constitutes a useful tool to determine the topic of each tweet/article. However, the analysis in this paper requires a measure of topic prevalence by location. To obtain this variable it is first necessary to match newspapers to the municipalities where they are read (see Figure 2 for a summary of the geographical distribution of the main topics relevant to the debate).

Spanish newspapers can be classified into four categories depending on their geographical coverage: national, regional, provincial, or local – this last category refers to a number of smaller papers that do not

³The accuracy calculations come from a confusion matrix based on the 18,000 manually labeled tweets: the first 2,000 tweets were used as a training set and the remaining 16,000 as a test set. Mean accuracy – defined as the sum of true positives and true negatives for each topic divided by the total number of positives and negatives – was much lower for the overall classification, remaining at a mere 53%. The algorithm often confuses topics within the international and national politics categories, for instance. This is nonetheless unimportant for the purposes of this paper.

cover a whole province or may even cut across two different provinces. I used information in newspaper websites to determine in which municipalities each newspaper is sold. In the case of local papers where this information was not readily available, I assume that the newspaper is sold in a 20km radius from the center of the municipality where it is based. For example, the southernmost municipality in mainland Spain is called La Línea de la Concepción, located in the province of Cádiz, in Andalusia. Neighbors in this area receive five national newspapers (ABC, El Mundo, El País, La Razón, and La Vanguardia), a regional outlet (El Correo de Andalucía), three provincial journals (Diario de Cádiz, La Voz de Cádiz, and Viva Cádiz) and two local papers (Diario Área, based in La Línea de la Concepción, and EuropaSur, based in Algeciras – a nearby municipality).

Once newspapers are matched to each municipality, it is possible to calculate the share of articles that cover a specific topic by location.⁴ Of course, different newspapers may focus on the same issue and sometimes even publish the exact same article. I do not eliminate these duplicates. The assumption here is that articles on the same piece of news indicate that the topic is more salient among the local population.

I do however account for the differences in newspaper readership between areas. Local information on newspaper readership is unavailable, but data does exist at the regional level. I make use of the ‘General Study on Media’ (‘Estudio General de Medios’ or EGM, AIMC 2016) to generate weights that I apply to each of the local topic shares. I generate a different weight for each national newspaper, as this allows to distinguish between their very marked differences in ideology. There is also a separate weight for regional and local news outlets in each region, and an extra regional weight for papers classified as urban. The final output from this process consists in a series of variables corresponding to the shares of news articles in the area that fall within topic k . For instance, in La Línea de la Concepción 4.2% of all newspaper tweets in 2018 dealt with immigration.

⁴A single tweet can be equalled to a newspaper article. This is because newspapers do in fact only tweet about their own articles. Each tweet almost always includes the article’s title, sometimes followed by a subtitle.

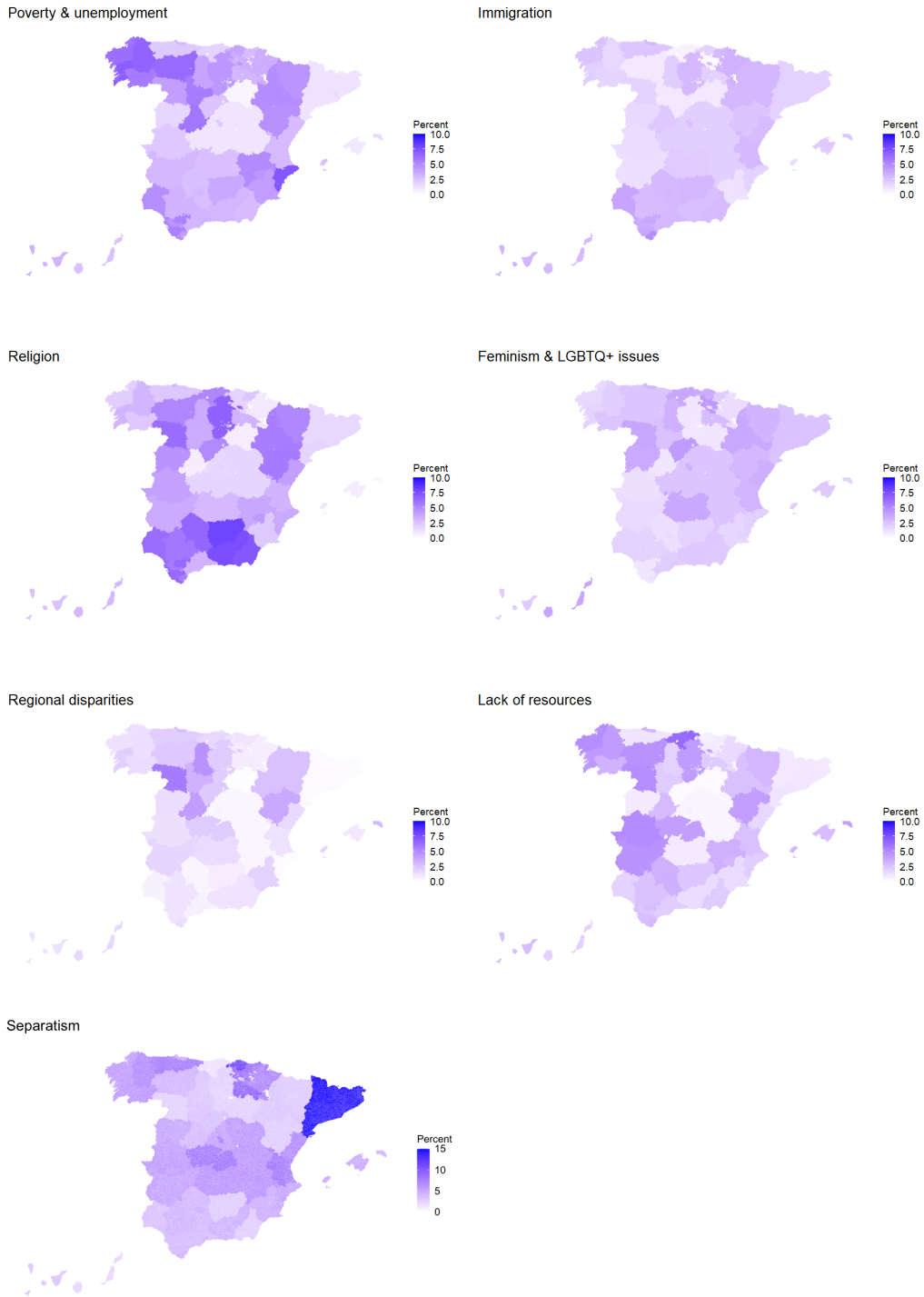


Figure 2: Geographical distribution of the main topics relevant to the rise of the radical right in Spain (as shares of local news tweets that correspond to each topic).

5 Perceptions vs. reality

In Theoretical background section, I made the case for the reconsideration of each side of the *economic anxiety - cultural backlash - geography of discontent* debate from the perspective of local narratives. In this section, I highlight how this approach may paint a different picture from the one conveyed by the sole analysis of socioeconomic statistics.

I proceed to outline each of the sides of the debate in turn, trying to compare perceptions with reality, and highlighting differences between both. The next section tackles all three competing claims at once.

5.1 The economic argument

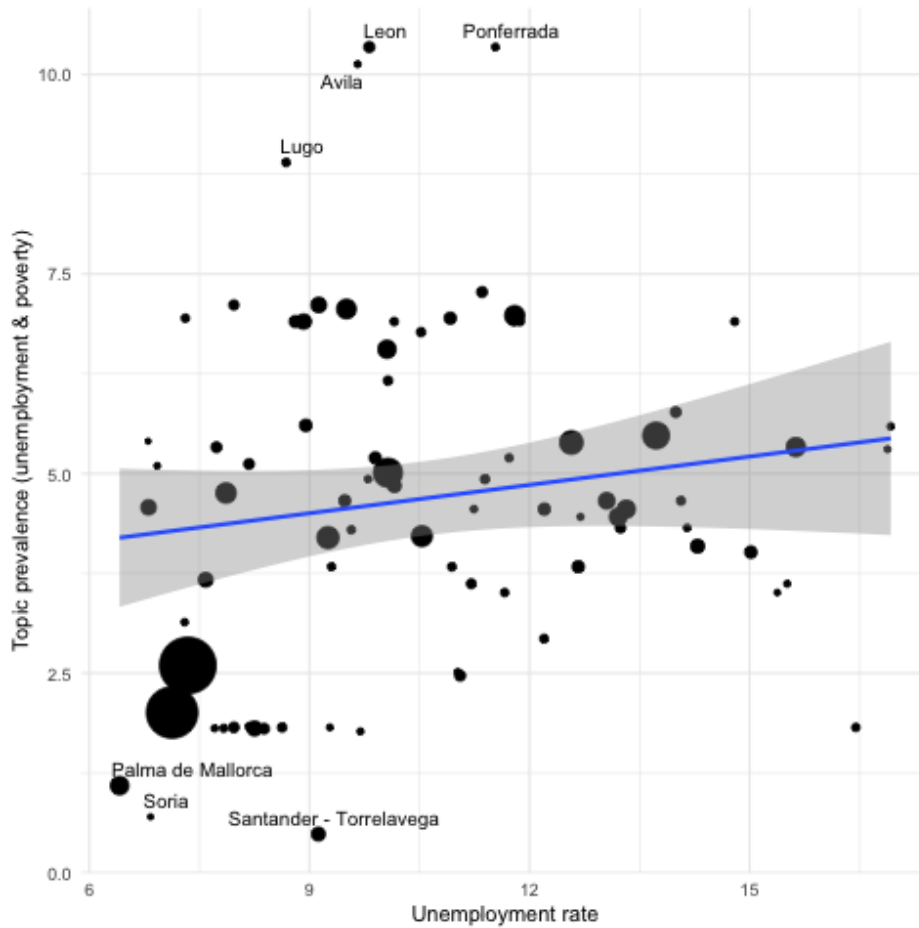


Figure 3: Correlation between the unemployment rate across different Spanish urban areas and the corresponding share of unemployment coverage by local newspapers. Point scale indicates population size.

Contextual-level unemployment is the most common proxy for the *economic anxiety argument* in the quantitative political literature (see Sipma and Lubbers 2018 for a meta-analysis on the topic). I am interested in how actual levels of local unemployment relate to how often newspapers read in each urban area mention unemployment. Figure 3 undertakes this comparison ⁵. There is no statistically significant relationship between the portrayal of the situation by newspapers and reality. Notice as well that this result comes along with a substantial degree of unexplained heterogeneity (see the difference between Lugo and Santander, for example). These gaps between perception and reality could explain some of the diverging results found in the literature. They also lend credence to importance of focusing on narratives.

5.2 The cultural backlash argument

The *cultural backlash argument* is centered around evolving social values towards more tolerance of individual freedoms as well as gender and racial equality. Admittedly, a large number of social issues fit within this category. Despite this, the literature usually focuses exclusively on immigration, in large part because data on the number of foreigners by location is readily available.

Figure 4 shows the prevalence of the ‘*immigration*’ topic in relation to the actual share of foreign-born individuals across all Spanish urban areas. At the municipal level, there is a significant relationship between both variables, albeit a very weak one (Pearson’s r coefficient equals 0.06). Places like Algeciras and Cádiz may see a lot of migrants cross the border from Morocco, but newcomers tend not to stay in those urban areas. They head towards places where they may find better economic prospects. Somewhat ironically, journalists in those new locations do not give as much coverage to the issue.

Once again, perceptions matter. More news about migrants on dinghies striving to cross the Gibraltar strait may appeal to people in places marked by less cultural openness, regardless of how many migrants actually live in the urban area. It might also simply be a reality that is more salient to people living in the locations where those migrants first arrive (see Bahía de Algeciras and Bahía de Cádiz in Figure 4 – these are the urban areas nearest to migrants’ entry points from Morocco). This highlights the difficulty in distinguishing between xenophobic ideology – as RRP voters have often been labeled – and the general salience of the immigration topic, perhaps due to local circumstances. In this paper, in line with the association the literature makes between socially conservative values and radical right support, I assume that ideology is the more relevant factor.

⁵The plots in subsections 5.1 and 5.2 show aggregated data at the urban area level. This approach is taken for the sake of graph readability and to favor interpretation. Unless otherwise specified in the text, the relationships shown do not change in any way when the same analysis is undertaken at the municipal level.

In the manual classification I used to build the algorithm, I use a joint ‘*unemployment & poverty*’ category. I bundled these two somewhat distinct topics together because individual newspaper tweets usually allude to them both.

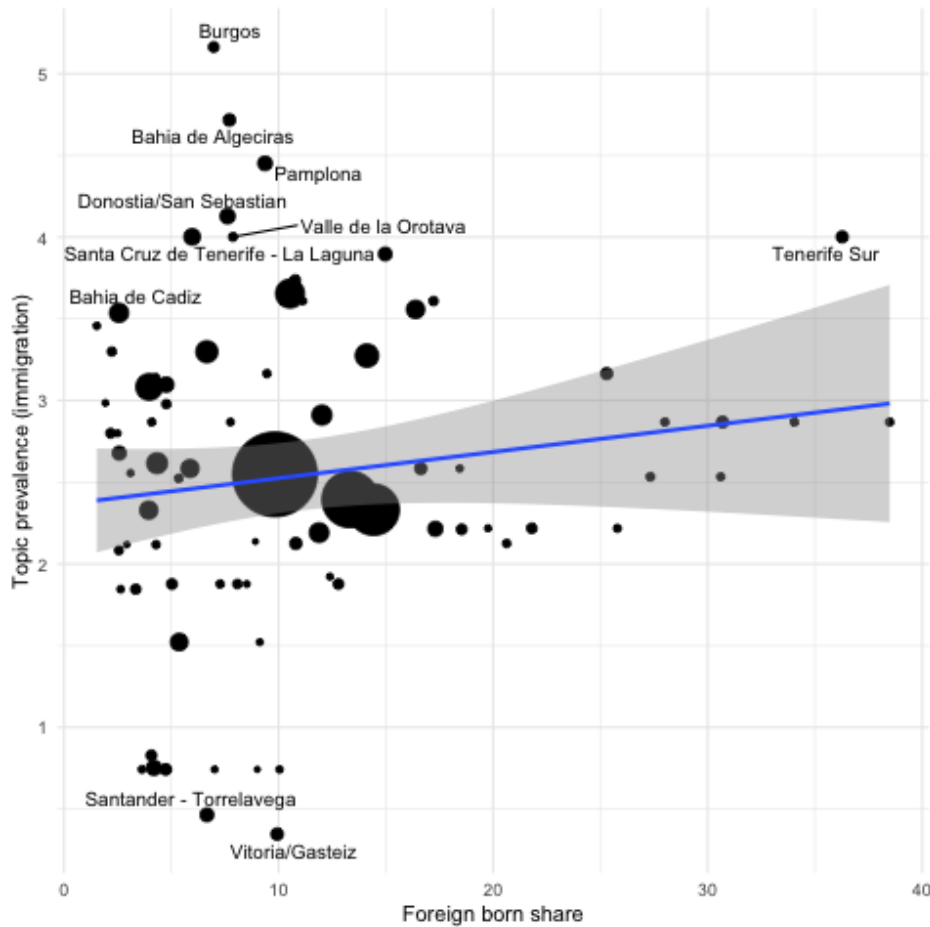


Figure 4: Correlation between the actual share of foreigners by urban area and the corresponding share of coverage on immigration issues by local newspapers. Point scale indicates population size.

A further advantage of analyzing narratives lies in the increased scope for nuance. All competing arguments, and in particular those related to the *geography of discontent* and *cultural grievances*, encompass a series of narratives. Immigration may indeed shape people’s views on globalization and modernization, but it is only a single aspect within what is in reality a large range of socioeconomic and cultural issues. Several others are highlighted in the literature: religion, support for liberal values (in issues such as gay marriage or abortion rights), etc.

Using quantitative text analysis to classify narratives one can allow for the existence of different types of socially conservative places. Table 1 suggests that there may indeed exist different types of social conservatism. One may think, for instance, that if more religious places are more socially conservative, they are

bound to hold more anti-immigrant values. I do not find this to be the case across Spanish urban areas.

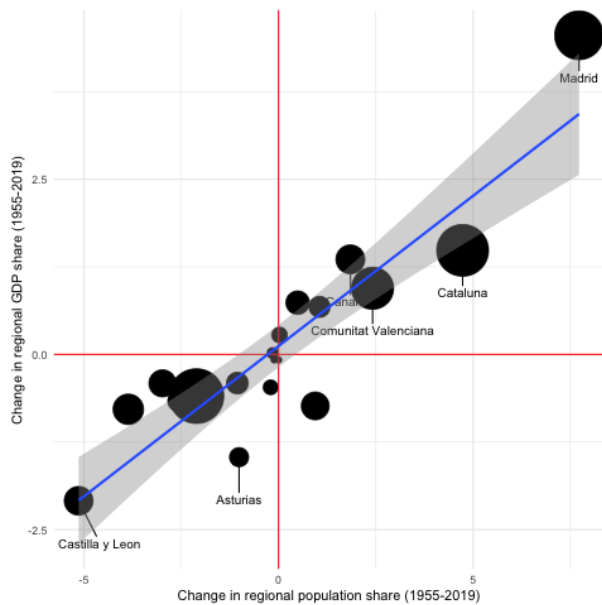
Table 1: Top and bottom 5 urban areas by density of the ‘*religion*’ topic. Each of the columns refers to the topic prevalence across the urban area.

| Region | Religion | Immigration |
|-----------------|----------|-------------|
| Burgos | 11.4% | 4.3% |
| Segovia | 9.1% | 0.7% |
| Jaén | 7.7% | 2.4% |
| Salamanca | 7.4% | 0.8% |
| Huelva | 7.4% | 0.8% |
| Ferrol | 0.9% | 2.9% |
| Soria | 0.8% | 0.8% |
| Ávila | 0.8% | 0.8% |
| Logroño | 0.6% | 3.5% |
| Vitoria/Gasteiz | 0.3% | 0.3% |

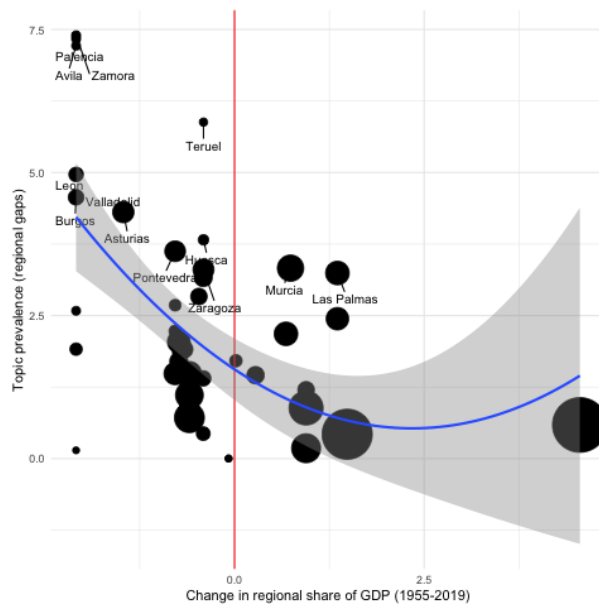
5.3 The geography of discontent

The *geography of discontent argument* focuses on the disenchantment caused by perceptions of long-term economic decline in some localities, while those opportunities concentrate in other regions – and usually in urban areas. These graphs compare perceptions about ‘*regional gaps*’ with actual rates of depopulation and divergences in the economic development of the different regions.

Empirical evidence clearly indicates that, over the last six decades, Spaniards have moved to the country’s more economically dynamic regions (see Figure 5a). Some of the changes in population and GDP growth relative to other regions are staggering. These patterns are reflected in journalistic complaints regarding regional disparities, broadly understood. Figure 5b shows the correlation between newspaper coverage of regional divergences and long-term GDP growth. Regions with positive levels of development since 1955 are not necessarily exempt from perceptions that their region is at a disadvantage with respect to other areas in the country – this is certainly the case in Murcia and the Canary Islands (Las Palmas). But, in general, it is places that lagged behind in Spain’s remarkable developmental push that concentrate perceptions of regional divergences (Avila, Palencia, and Zamora are cases in point). I find similar results when drawing the comparison with respect to long-term population decline (see external appendix).



(a) Relationship between long-term population growth and changes in the regional GDP shares (1955-2019). Point scale indicates population size.



(b) Relationship between newspaper coverage on regional gaps and changes in the regional share of national GDP between 1955 and 2019. Point scale indicates population size.

6 What narratives suggest about the rise of the radical right

The previous section provided an overview of how narratives linked to the three main theories aiming to explain rising support for the radical right play out in Spain. The findings highlight that the prevalence of different topics in news reporting across the country often does not match the reality of each place. Only regarding regional discrepancies (relevant for the *geography of discontent* argument) does news reporting align in a meaningful way with socioeconomic statistics.

6.1 Baseline estimations

Given the interest in perceptions and how they compare to what socioeconomic statistics say about each municipality, I now test all four hypotheses at once. I start with a simple OLS cross-sectional model that includes newspaper coverage on relevant topics and standard controls as regressors. I then proceed to make comparisons with socio-economic statistics. This baseline model can be written as:

$$y_m = \alpha + X\beta + \epsilon =$$

$$\alpha + \gamma \text{unemp}_m + \kappa SC'_m + \delta RD'_m + \sigma \text{sep}_m + \beta X'_m (+\zeta Z'_m) + \epsilon_m,$$

where m refers to each Spanish municipality. The dependent variable is the share of the vote in favor of the RRP VOX. I expand on the selection of topics and other controls below:

1. unemp_m refers to the *unemployment & poverty* topic share. It is therefore associated with the *economic anxiety* camp in the literature.
2. SC'_m is a vector of topic densities linked to the *cultural backlash* side of the debate. As such, it aims to capture social conservatism. It contains the topic shares for *immigration, religion, and feminism & LGBTQ+ issues*.
3. RD'_m is a vector of topic densities associated with the *geography of discontent* hypothesis. Focusing on perceptions of disparities between regions, it includes the *regional gaps* and *lack of resources* topic shares.
4. sep_m refers to the share of articles in a municipality that speak of *separatist issues*.
5. X'_m is a vector of key demographic and political controls. These include:
 - Population density (as a logarithm): This variable aims to account for the expected rurality of the radical right vote. Nevertheless, note that earlier studies on Spain find that urban/rural status does not play a role in RRP support (Turnbull-Dugarte et al., 2020).
 - The share of the population under 35 years of age who are eligible to vote and the share of the population older than 65: These controls capture age patterns within each municipality. According to Rama et al. (2021), vote for VOX should be younger than that of other parties, even though the average voter is aged 35-55.
 - Turnout: Usually associated in the literature with the idea of protest vote (assuming a negative relationship with radical right support).
 - Vote for the mainstream right (the People's Party, or PP) in the 2016 national election: This variable tries to capture the degree to which a particular municipality leans towards a right-wing ideology.

- Regional controls: This set of dummies aims to account for long-standing institutional and cultural differences across Spanish regions.
6. Z'_m stands for a vector of socio-demographic controls associated with the ‘reality’ of each of the sides of the debate. More specifically it includes:
- Unemployment rate: Associated with the *economic anxiety* argument. Higher rates of unemployment should, in principle, favor the radical right (see Algan et al. 2017).
 - Share of foreigners: Acting as a proxy for the *cultural backlash* hypothesis. Arguably, municipalities with more foreigners should see more radical right support.
 - Change in regional GDP share between 1955 and 2019: This control – unfortunately only available at the provincial level – shows the evolution in the weight that a given region plays within the overall Spanish economy. The idea is that provinces that lost economic importance since 1955 should be more prone to vote for VOX.

Table 2 includes the results for the baseline OLS specifications. I introduce relevant regressors in a step-wise fashion to be able to compare model performance. Column (1) begins with the simplest approach: it sets up a model that aims to predict the vote for VOX based on the different (relevant) narratives as well as some basic demographic and voting statistics. Reading the table from left to right adds layers of complexity ⁶. Column (2) includes key demographics as well as the main proxies available to account for the ‘reality’ of the key sides of the debate. Column (3) is the preferred specification, combining the previous two approaches. Columns (4) and (5) are robustness checks: they try to account for the ideology inherent to each municipality by adding a control for earlier vote in favor of the mainstream right.

Let’s start with the discussion of some key socio-demographic controls. A first striking element, in contrast with evidence from other European countries (e.g. Stockemer 2016), is that the coefficient of the natural logarithm of population density is positive ⁷. This result holds across all specifications. Indeed, the rise of the radical right in Spain is not limited to rural areas. In fact, VOX obtained an average vote of 14.8% across all Spanish cities with more than 250,000 inhabitants, a percentage that is not statistically different from the national average of 15%.

⁶All variables in Table 2 – other than population density – should be read as percentages, with 1% being included in the data as 1 rather than as 0.01. Therefore, the first coefficient in Column (1), for example, should be read as: a 1-percentage-point (p.p.) increase in the share of local articles about unemployment and poverty is associated with a rise in support for VOX of 0.14 p.p.

For an intuitive sense of coefficient size, refer to Annex A, which includes the 28 different topics across which the algorithm classified tweets and their average prevalence across the whole of Spain.

⁷A specification that includes instead controls for the logarithm of population along with a rural/urban dummy leads to insignificant results in the latter, as in Turnbull-Dugarte et al. (2020).

Table 2: Baseline OLS regressions

| | <i>Dependent variable:</i> | | | | |
|--------------------------------|----------------------------|----------------------|----------------------|----------------------|----------------------|
| | VOX vote share | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| Unemp. & poverty | 0.144** (0.073) | | 0.124* (0.073) | 0.250*** (0.067) | 0.224*** (0.067) |
| Religion | 0.068 (0.092) | | 0.041 (0.091) | 0.020 (0.084) | 0.016 (0.084) |
| Immigration | -0.525*** (0.194) | | -0.336* (0.194) | -0.254 (0.178) | -0.166 (0.178) |
| Feminism & LGBTQ+ | 0.076 (0.194) | | 0.170 (0.193) | 0.461*** (0.178) | 0.477*** (0.178) |
| Regional gaps | 0.408*** (0.131) | | 0.398*** (0.130) | -0.022 (0.121) | -0.019 (0.120) |
| Lack of resources | -0.416*** (0.115) | | -0.312*** (0.115) | -0.097 (0.106) | -0.066 (0.106) |
| Separatism | 0.437*** (0.116) | | 0.586*** (0.117) | 0.515*** (0.106) | 0.571*** (0.107) |
| Pop. density (log) | 0.308*** (0.054) | 0.284*** (0.054) | 0.258*** (0.055) | 0.357*** (0.049) | 0.312*** (0.051) |
| Voting-age pop. under 35 | 0.063*** (0.021) | 0.056*** (0.021) | 0.039* (0.021) | 0.037* (0.020) | 0.021 (0.020) |
| Pop. over 65 | -0.134*** (0.011) | -0.125*** (0.011) | -0.133*** (0.011) | -0.233*** (0.010) | -0.232*** (0.010) |
| Turnout | -0.081*** (0.010) | -0.067*** (0.010) | -0.073*** (0.010) | -0.096*** (0.009) | -0.089*** (0.009) |
| Unemp. share | | -0.004 (0.016) | -0.023 (0.016) | | 0.017 (0.015) |
| Foreign share | | 0.093*** (0.010) | 0.098*** (0.011) | | 0.053*** (0.010) |
| Δ GDP share (1955-2019) | | 0.317*** (0.119) | 0.291** (0.125) | | 0.179 (0.115) |
| PP vote share (2016) | | | | 0.232*** (0.006) | 0.229*** (0.006) |
| Regional controls | Yes | Yes | Yes | Yes | Yes |
| Observations | 8,129 | 8,129 | 8,129 | 8,129 | 8,129 |
| R ² | 0.496 | 0.495 | 0.501 | 0.577 | 0.578 |
| Adjusted R ² | 0.494 | 0.494 | 0.499 | 0.575 | 0.577 |

Note:

*p<0.1; **p<0.05; ***p<0.01

In contrast, the age coefficients do align with earlier literature. Rama et al. (2021) points out that, while not the most popular party among the youngest voters, a sizeable proportion of this demographic chose to vote for the radical right. Consistently with this finding, Table 2 shows that municipalities with younger (eligible-to-vote) populations were more likely to display stronger levels of support for VOX. The opposite was true of older municipalities – with an effect that is both quite strong and significant across all specifications.

One may see the support for VOX as a form of protest vote. The negative turnout coefficient would seem to support this view. Negative turnout coefficients have been cited in the literature as an argument in favor of the idea that citizens vote for the radical right in protest against mainstream parties rather than because they stand behind radical right values (Smets and van Ham, 2013).

Column (1) then includes estimations for the key parameters of interest: the coefficients for each of the narratives. Overall, I find clear evidence in favor of both the *economic anxiety* and *separatism* camps. The results also show partial confirmation of the *geography of discontent* hypothesis. Support in favor of *cultural backlash* is more limited, being largely washed out when controlling for local age profiles. The next paragraphs provide more detail on each of these results.

As expected, *perceived economic deprivation* fosters radical right support. The coefficient for the share of local articles dealing with unemployment and poverty remains positive and significant across all specifications. Furthermore, the narrative appears to have an effect beyond the reality of local unemployment. Adding controls for the actual unemployment rate – see Column (3), for instance – does not provide significant results, while the narrative coefficient remains significant throughout.

The role of *cultural backlash* is less clear. As is perhaps to be expected, the inclusion of controls for local demographics does away with most of the cultural effects. As a result, all specifications show that local narratives about religion do not appear to play a role in RRP support. In the case of immigration, the effect drops in significance as one adds controls; it also features the opposite sign than was initially theorized. This is surprising, given the key role that immigration plays in VOX’s rhetoric (Rama et al., 2021). However, it should be noted that the actual share of migrants in a location does appear to foster support for the radical right – see Column (3). The pattern found in immigration is therefore the opposite of the one found for economic anxiety: in this case reality seems to trump the effect of the narrative.

For its part, feminism & LGBTQ+ issues only appear relevant to the vote in favor of VOX when controlling for local right-wing ideology. And, in that case, the topic was associated with higher, rather than lower, levels of support for the radical right. This result, while initially surprising, can easily be explained by a shortcoming of the current methodology. The algorithm correctly classifies tweets by topic; it, however,

does not capture the sentiment conveyed in the tweet. In the case of the feminism & LGBTQ+ category, a sizeable proportion of the articles either use polarizing language or completely deride rather than support liberal values⁸. This suggests that the feminism & LGBTQ+ category topic should instead be interpreted as a measure of social conservatism.

The results also provide some evidence in favor of the *geography of discontent* hypothesis. A higher share of articles about the prevalence of regional gaps was indeed associated to better voting outcomes for the RRP VOX. In contrast, municipalities with more articles dedicated to a lack of resources invested in an area were less likely to support the radical right. Much of the benefit from these feelings seems to have accrued to the mainstream right rather than to VOX. These results are robust to the inclusion of a control to proxy for the real long-run (1955-2019) performance of different provinces. In contrast, controlling for the local vote for the mainstream right in 2016 does away with these effects, a fact that suggests that the People's Party was capitalizing on these issues before the advent of VOX.

Finally, we come to the importance of narratives about *separatism* in driving VOX's support, a hypothesis first proposed in Turnbull-Dugarte (2019). The evidence in this case is unequivocal: the local share of articles on separatist issues is strongly linked to support for the radical right in Spain. This finding is robust to any changes in the econometric specification – see Columns (1) and (3)-(5). The placebo tests included in Annex C reinforce this same idea: talk of separatist issues benefitted the radical right exclusively, with Podemos, PSOE and PP all featuring effects in the opposite direction.

The reader may be also be wondering about the model performance of narratives compared to more traditional socio-economic controls. A quick comparison of the R^2 between columns (1) and (2) would initially suggest there is not much of an advantage in using narratives. In reality, the similarity of goodness-of-fit measures in this case owes exclusively to the inclusion of regional controls. Of course, regional controls are necessary in these setting to account for the very important and long-standing institutional, historical, and cultural differences between all Spanish regions. However, models clean of any other controls show an adjusted R^2 of 0.26 for the narratives compared to 0.11 for the 'hard statistics'. This indicates two things: 1) the narratives are very regionalized in nature, to the point that almost all of the effect can be absorbed by the regional dummies; however, 2) tracking narratives can help to explain elements that are very important

⁸See, for example, the following negative tweet: 'Mendez de Vigo about the 8M [demonstrations] Some preach and the rest of us actually provide'. There are also plenty of examples of polarizing articles: 'Opinion mlopezcastro1 writes about the sexist poem dedicated to Irene Montero [prominent politician affiliated to the radical-left party Podemos]'.

The challenge in generating a classification that reliably identifies both topic and sentiment is complicated by the choice of Spain as a country of study. The development of sentiment classification algorithms is largely focused on English, with very limited options in Spanish. In addition, out of the alternatives available, many rely on literal translation from English (Osorio Angel et al., 2021). This makes implementation more difficult – especially on on cultural topics, where journalists often employ irony as a mode of communication. For this reason, improvements on the algorithm are left to future work.

in driving the vote but that would otherwise just be ascribed to inherent regional differences. In other words, a text analysis approach provides insight into the ‘why’ behind regional differences in the vote.

6.2 A spatial approach

The simpler OLS model does not take spatial spillovers into consideration. It would only be natural to think that narratives spread more easily between contiguous municipalities. If this is true, then the necessary assumption that neighboring observations are independent from each other is violated. To overcome this problem, I make use of spatial econometric techniques. Following LeSage (2014), I consider a nested spatial (Manski) model with the following structure:

$$y = \rho W_y + X\beta + WX\theta + u$$

$$u = \lambda Wu + \epsilon,$$

where the dependent variable and $X\beta$ matrix are the same as in the OLS version above ⁹. In all cases, W is a queen matrix of spatial weights, where the mean number of neighbors equals 6. The model allows for local spillovers to neighboring municipalities through a matrix of spatially lagged topic densities (WX , which for simplicity is constructed using average values). WY represents the average vote share in favor of VOX across a given municipality’s neighbors. Notice that this allows for global effects, since a change in the vote for VOX in a given municipality would generate a feedback loop that could potentially affect all municipalities, establishing a new equilibrium in the long run. Finally, Wu stands for spatially lagged residuals. ρ , θ , and λ are, along with β , coefficients to be estimated.

Elhorst (2014) explains in detail how different types of spatial econometric models are nested within the Manski model. Given the difficulty in estimating all parameters at once, he also proposes some tests – to use alongside theoretical understanding of the subject – to work out which of the nested models is best suited to a given research question. In this sense, there is a key difference between local and global models: the distinction owing to whether endogenous interaction and feedback effects between spatial units are present (LeSage, 2014). Given the nature of political choices, I lean towards a local model. This is because one can easily think of voting outcomes and narratives affecting nearby municipalities, but it seems unlikely that changes in voting shares in a single municipality could spread through a feedback loop across the whole country. This insight then points towards using the Spatial Durbin Error model (SDEM) as a starting point (where $\rho = 0$ in the system of equations outlined above). Alternative options include the Spatial Error Model (SEM, where $\rho = 0$ and $\theta = 0$), the Spatially Lagged X model (SLX, where $\rho = 0$ and $\lambda = 0$ instead),

⁹In fact, OLS is the simplest version nested within the Manski model.

and OLS (where all ρ , θ , and λ are set to 0), all of which are special cases of SDEM.

Table 3: Results from the Spatial Error Durbin Model

| | <i>Dependent variable:</i> | | | |
|--------------------------------|----------------------------|---------------------|---------------------|---------------------|
| | <i>VOX vote share</i> | | | |
| | OLS (1) | SLX (2) | SEM (3) | SDEM (4) |
| λ | | | 0.36951*** | 0.35364*** |
| Unemp. & poverty | 0.124* (0.073) | 0.120* (0.218) | 0.125 (0.074) | 0.241 (0.232) |
| Religion | 0.041 (0.091) | 0.028 (0.260) | 0.038 (0.128) | 0.041 (0.287) |
| Immigration | -0.336* (0.194) | 0.978** (0.486) | -0.490* (0.269) | 0.677 (0.577) |
| Feminism & LGBTQ+ | 0.170 (0.193) | 0.517 (0.408) | 0.213 (0.267) | 0.527 (0.568) |
| Regional gaps | 0.398*** (0.130) | -0.874** (0.365) | 0.329* (0.182) | -0.805** (0.407) |
| Lack of resources | -0.312*** (0.115) | 0.240 (0.260) | -0.272* (0.159) | 0.060 (0.346) |
| Separatism | 0.586*** (0.117) | 0.368** (0.154) | 0.500*** (0.160) | -0.136 (0.345) |
| Unemp. share | -0.023 (0.016) | 0.016 (0.020) | -0.031* (0.017) | -0.032* (0.017) |
| Foreign share | 0.098*** (0.011) | 0.082*** (0.015) | 0.082*** (0.012) | 0.078*** (0.012) |
| Δ GDP share (1955-2019) | 0.129*** (0.023) | -0.015 (0.024) | 0.100*** (0.032) | 0.083 (0.070) |
| Socio-demographic controls | Yes | Yes | Yes | Yes |
| Spatial lags | No | Yes | No | Yes |
| Observations | 8,129 | 8,129 | 8,129 | 8,129 |
| (Pseudo) R ² | 0.499 | 0.385 | 0.515 | 0.515 |
| AIC | | | 51,384.4 | 51,465.7 |
| LR test (p-value) | | | < 0.001 | 0.2276 |

Note:

*p<0.1; **p<0.05; ***p<0.01

The main goal in comparing these models is to find a stable econometric specification that can lead

to evidence in favor or against each of the sides of the *economic anxiety - cultural backlash - geography of discontent - separatism* debate. I use maximum likelihood (ML) to run the estimations and follow the model selection process outlined in Elhorst (2014). AIC and Likelihood Ratio tests point in the direction of SEM, although I report all nested local models in Table 3 for completeness.

The general results are very much in line with what has already been outlined in the previous subsection¹⁰. But this paper also aims to uncover any evidence of spatial spillovers in the relationship between narratives and the vote in favor of the radical right. The key parameter of interest here is λ – also referred to as a spatial autocorrelation coefficient. This term features in the preferred specification in column (3), as well as model (4). It captures the effect of any shocks to the residuals of a municipality’s neighbors. Lambda, in other words, stands for any situation where unobserved shocks follow a spatial pattern, or where unobserved determinants of the vote for VOX are spatially autocorrelated. It could be interpreted, for instance, as a spatial pattern of right-wing political ideology. As expected, there is a strong positive spatial dependence in the data. Despite this, the sign and significance of the coefficients does not change with respect to the OLS specification.

7 Conclusion

This paper contributes to the political and regional literature on the reasons behind the rising wave of support for RRP. I provide empirical evidence for the main theoretical explanations on the rise of the radical right in Spain and seek to discern the relative importance of economic and regional arguments compared to a potential cultural backlash against globalization and modernization. I also take into account relevant local political theories, analyzing the role played by local perceptions regarding separatist movements. To do so, I take advantage of a simple idea: that geographical differences in newspaper reporting reflect local narratives, and therefore understanding these can help us determine which issues drive local voting patterns.

The focus on narratives is important. The vast majority of studies in quantitative political geography assume that perceptions closely track socioeconomic statistics. I show some evidence against this piece of conventional wisdom. One of the main contributions of this paper lies in the new use of text data to determine the equilibrium of voter preferences in a given location. To gauge these preferences, I apply a well-known machine learning algorithm to news information mined from Twitter. I then use the aggregated results to calculate the prevalence of news topics by municipality. Based on this new dataset, I first try to

¹⁰Note that the interpretation of the marginal effects in the SLX and SDEM models requires the joining of each of the coefficients and the lags. Table 3 shows the direct marginal effects. A table including the breakdown by direct and indirect effects from those (non-preferred) models is available as an external appendix.

understand whether newspaper coverage of an issue matches reality. I am able to make comparisons with topics related to unemployment, immigration, and long-term population and economic decline. The findings suggest that views on cultural and economic matters poorly reflect socioeconomic statistics. In contrast, perceptions on regional issues are much better aligned with reality.

The mismatch between perceptions and reality suggests that the use of quantitative text analysis constitutes a necessary complement to already existing research. Of course, one key difficulty lies in the fact that the disconnect between reality and what people believe is likely to play out differently across different contexts. It also need not remain constant over time. Ideally, one would want to track narratives over time and space, as this would provide much better insights on which topics drive RRP vote. This article constitutes but a first step in that direction.

This paper also pays special attention to the spatial variation in radical right vote. It follows Essletzbichler et al. (2021) in testing for spatial spillovers where the literature usually focuses on a-spatial analysis. This helps to reduce some relevant concerns about omitted variable bias. In fact, the inclusion of unobserved local spillover effects substantially improves the fit of the model, better accounting for the strong positive spatial dependence between unobservables.

The results of the preferred Spatial Error Model (SEM) shed some light onto the *economic-regional-cultural backlash debate*. I find evidence for three of the four explanations of radical right support: journalistic accounts of unemployment and poverty, regional gaps, and separatist movements were all positively associated with the radical right's electoral success. Nonetheless, there are some caveats. Cultural factors do not appear as influential as economic and regional forces in driving the vote once one controls for local demographics. This is in large part due to the effect of feminism and LGBTQ+ issues, which tilt the balance in favor rather than against the radical right. Upon scrutiny, I find this surprising result owes to the fact that many of the articles that talk about women and LGBTQ+ issues do so in a negative tone. The algorithm is currently unable to distinguish between both groups. In addition, complaints over lack of resources did not fuel the rise of VOX. They favored the mainstream right (Partido Popular) instead.

A final disclaimer. The empirical specification used in this article need not reflect causal effects. Nonetheless, research in the fields of marketing, education and psychology, among others, indicate that people respond very strongly to changing narratives. Yet, unequivocal proof is hard to come by: local narratives and voting patterns are likely to be intertwined in ways we may never be able to account for. Despite this, I hope that earlier references to research on this topic in the fields of human geography, psychology, and political science, as well as the use of a new methodology that uses quantitative text analysis in an attempt to understand local narratives, have served to convince the reader that the approach is an interesting one that warrants

further exploration. Future work should focus on tracking narratives over time and complementing the topic models with sentiment analysis.

A Annex A

Table 4: List of topics used to program the Naive Bayes algorithm

| | Topics | Debate position | Mean topic prevalence |
|----|---------------------------------|-------------------------|-----------------------|
| 1 | Agriculture and farming | NA | 2.4% |
| 2 | Business | NA | 3.7% |
| 3 | Crime & accidents | NA | 7.8% |
| 4 | Culture | NA | 3.9% |
| 5 | Economy | NA | 3.9% |
| 6 | Education | NA | 3.7% |
| 7 | Entertainment | NA | 4.0% |
| 8 | Environment | NA | 2.9% |
| 9 | Feminism and LGBTQ+ | Cultural backlash | 2.9% |
| 10 | Health | NA | 3.6% |
| 11 | Holidays and celebrations | NA | 1.9% |
| 12 | Infrastructure & urban planning | NA | 3.8% |
| 13 | Immigration | Cultural backlash | 3.6% |
| 14 | International | NA | 3.6% |
| 15 | Lack of resources | Geography of discontent | 3.2% |
| 16 | Local business | NA | 1.8% |
| 17 | Local government | NA | 3.3% |
| 18 | National politics | NA | 3.9% |
| 19 | Poverty & unemployment | Economic argument | 3.8% |
| 20 | Regional gaps | Geography of discontent | 2.5% |
| 21 | Regional politics | NA | 3.9% |
| 22 | Religion | Cultural backlash | 3.7% |
| 23 | Separatism | NA | 3.6% |
| 24 | Society & gossip | NA | 3.8% |
| 25 | Sports | NA | 4.0% |
| 26 | Science & technology | NA | 3.5% |
| 27 | Tourism | NA | 3.6% |
| 28 | Weather | NA | 3.7% |

B Annex B

Table 6: Does previous vote for the far right predict topic densities in 2018?

| | <i>Dependent variable:</i> | | | | | |
|-------------------------|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | Unemployment | Feminism | Immigration | Religion | Regional | Lack of |
| | & poverty | | | | gaps | resources |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Pop. density (log) | 0.159*** (0.018) | -0.081*** (0.011) | 0.072*** (0.009) | -0.240*** (0.026) | -0.048*** (0.015) | 0.129*** (0.017) |
| Voters under 35 | 0.012 (0.007) | 0.009** (0.005) | -0.022*** (0.004) | 0.036*** (0.011) | -0.023*** (0.006) | 0.101*** (0.007) |
| Pop. over 65 | 0.017*** (0.004) | 0.005* (0.002) | -0.010*** (0.002) | -0.003 (0.006) | 0.012*** (0.003) | 0.048*** (0.004) |
| Rad. right (2016) | -0.008 (0.041) | -0.015 (0.025) | -0.098*** (0.021) | -0.069 (0.061) | -0.056 (0.035) | -0.236*** (0.039) |
| Observations | 8,129 | 8,129 | 8,129 | 8,129 | 8,129 | 8,129 |
| R ² | 0.070 | 0.035 | 0.039 | 0.086 | 0.215 | 0.089 |
| Adjusted R ² | 0.070 | 0.035 | 0.038 | 0.085 | 0.214 | 0.089 |

Note:

*p<0.1; **p<0.05; ***p<0.01

C Annex C

Table 7: Placebo tests

| | <i>Dependent variable:</i> | | | |
|--------------------------|----------------------------|----------------------|----------------------|----------------------|
| | Podemos (1) | PSOE (2) | PP (3) | VOX (4) |
| Unemp. & poverty | 0.201*** (0.060) | 0.431*** (0.115) | -0.432*** (0.107) | 0.144** (0.073) |
| Religion | -0.173** (0.076) | -0.154 (0.145) | -0.072 (0.135) | 0.068 (0.092) |
| Immigration | 0.452*** (0.160) | 1.058*** (0.306) | 0.017 (0.284) | -0.525*** (0.194) |
| Feminism & LGBTQ+ | 0.258 (0.160) | 2.411*** (0.306) | -0.444 (0.284) | 0.076 (0.194) |
| Regional gaps | -0.664*** (0.108) | -1.654*** (0.207) | 0.919*** (0.192) | 0.408*** (0.131) |
| Lack of resources | 0.303*** (0.095) | 1.081*** (0.182) | -1.055*** (0.169) | -0.416*** (0.115) |
| Separatism | -0.414*** (0.096) | -0.653*** (0.183) | -0.739*** (0.170) | 0.437*** (0.116) |
| Pop. density (log) | 0.513*** (0.045) | 0.474*** (0.085) | -0.024 (0.079) | 0.308*** (0.054) |
| Voting-age pop. under 35 | -0.188*** (0.018) | 0.167*** (0.034) | -0.018 (0.031) | 0.063*** (0.021) |
| Pop. over 65 | -0.199*** (0.009) | 0.097*** (0.017) | 0.389*** (0.016) | -0.134*** (0.011) |
| Turnout | -0.044*** (0.008) | -0.054*** (0.016) | 0.105*** (0.015) | -0.081*** (0.010) |
| Observations | 8,129 | 8,129 | 8,129 | 8,129 |
| R ² | 0.290 | 0.483 | 0.698 | 0.495 |
| Adjusted R ² | 0.288 | 0.482 | 0.697 | 0.493 |

Note:

*p<0.1; **p<0.05; ***p<0.01

References

- AIMC (2016). Estudio general de medios.
- Alesina, A., Miano, A., and Stantcheva, S. (2018). Immigration and redistribution.
- Algan, Y., Guriev, S., Papaioannou, E., and Passari, E. (2017). The european trust crisis and the rise of populism.
- Arzheimer, K. (2018). Explaining electoral support for the radical right. In Rydgren, J., editor, *The Oxford Handbook of the Radical Right*, pages 215–246. Oxford University Press, New York.
- Becker, S. O., Fetzer, T., and Novy, D. (2017). Who voted for brexit? a comprehensive district-level analysis. *Economic Policy*, 32(92):601–650.
- Betz, H.-G. (2002). Conditions favouring the success and failure of radical right-wing populist parties in contemporary democracies. In *Democracies and the Populist Challenge*, pages 197–213. Palgrave Macmillan UK.
- Boczkowski, P. and Mitchelstein, E. (2013). *News Gap: When the Information Preferences of the Media and the Public Diverge*. The MIT Press, Cambridge, MA.
- Bolet, D. (2021). Drinking alone: Local socio-cultural degradation and radical right support—the case of british pub closures:. *Comparative Political Studies*, 54(9):1653–1692.
- Broz, J. L., Frieden, J., and Weymouth, S. (2021). Populism in place: The economic geography of the globalization backlash. *International Organization*, 75(2):464–494.
- Casadei, P. and Lee, N. (2020). Global cities, creative industries and their representation on social media: A micro-data analysis of twitter data on the fashion industry. *Environment and Planning A: Economy and Space*, 52(6):1195–1220.
- Center, P. R. (2014). Social, search and direct: Pathways to digital news. Technical report, Pew Research Center, Washington, D.C.
- Center, P. R. (2019a). Americans are wary of the role social media sites play in delivering the news. Technical report, Pew Research Center, Washington, D.C.
- Center, P. R. (2019b). For local news, americans embrace digital but still want strong community connection. Technical report, Pew Research Center, Washington, D.C.

- Colantone, I. and Stanig, P. (2018). Global competition and brexit. *American Political Science Review*, 112(2):201–218.
- Cramer, K. J. (2016). *The Politics of Resentment : Rural Consciousness in Wisconsin and the Rise of Scott Walker*. Chicago Studies in American Politics.
- Devine, D. and Murphy, J. (2020). Does media coverage drive public support for ukip or does public support for ukip drive media coverage? *British Journal of Political Science*, 50(3):893–910.
- Elhorst, J. P. (2014). *Spatial Econometrics*. SpringerBriefs in Regional Science. Springer Berlin Heidelberg, Berlin, Heidelberg.
- Ellinas, A. A. (2018). Media and the radical right. In Rydgren, J., editor, *The Oxford Handbook of the Radical Right*, pages 390–410. Oxford University Press, New York.
- Essletzbichler, J., Disslbacher, F., and Moser, M. (2018). The victims of neoliberal globalisation and the rise of the populist vote: A comparative analysis of three recent electoral decisions. *Cambridge Journal of Regions, Economy and Society*, 11(1):73–94.
- Essletzbichler, J., Moser, M., Derndorfer, J., and Staufer-Steinnocher, P. (2021). Spatial variation in populist right voting in austria, 2013–2017. *Political Geography*, 90:102461.
- Ferrante, C. and Pontarollo, N. (2020). Regional voting dynamics in europe: The rise of anti-elite and anti-european parties. *Environment and Planning A: Economy and Space*, 52(6):1019–1022.
- Ferreira, C. (2019). Vox como representante de la derecha radical en españa: un estudio sobre su ideología. *Revista Espanola de Ciencia Politica*, 2019(51):73–98.
- Foos, F. and Bischof, D. (2022). Tabloid media campaigns and public opinion: Quasi-experimental evidence on euroscepticism in england. *American Political Science Review*, 116(1):19–37.
- Foster, C. and Frieden, J. (2017). Crisis of trust: Socio-economic determinants of europeans’ confidence in government:. *European Union Politics*, 18(4):511–535.
- Gentzkow, M. and Shapiro, J. M. (2010). What drives media slant? evidence from u.s. daily newspapers. *Econometrica*, 78(1):35–71.
- Gidron, N. and Hall, P. A. (2019). Populism as a problem of social integration:. *Comparative Political Studies*, 53(7):1027–1059.

- Golder, M. (2016). Far right parties in europe. *Annual Review of Political Science*, 19:477–497.
- Guilluy, C. (2010). *Fractures françaises*. Bourin, Paris, 1 edition.
- Hand, D. J. and Yu, K. (2001). Idiot’s bayes?not so stupid after all? *International Statistical Review*, 69(3):385–398.
- Heyne, L. and Manucci, L. (2021). A new iberian exceptionalism? comparing the populist radical right electorate in portugal and spain. *Political Research Exchange*, 3(1).
- Hopkins, D. J., Kim, E., and Kim, S. (2017). Does newspaper coverage influence or reflect public perceptions of the economy? *Research & Politics*, 4(4):205316801773790.
- Inglehart, R. and Norris, P. (2016). Trump, brexit, and the rise of populism: Economic have-nots and cultural backlash.
- Ju, A., Ho, S., Hsiang, J., Chyi, I., Jeong, S. H., and Chyi, H. I. (2014). Will social media save newspapers? examining the effectiveness of facebook and twitter as news platforms. *Journalism Practice*, 8(1):1–17.
- Jurafsky, D. and Martin, J. H. (2020). Naive bayes and sentiment classification. In Jurafsky, D. and Martin, J. H., editors, *Speech and Language Processing An Introduction to Natural Language Processing, Computational Linguistics, and Speech Recognition*. 3 edition.
- Lau, R. R. and Redlawsk, D. P. (2001). Advantages and disadvantages of cognitive heuristics in political decision making. *American Journal of Political Science*, 45(4):951–971.
- Lee, N., Morris, K., and Kemeny, T. (2018). Immobility and the brexit vote. *Cambridge Journal of Regions, Economy and Society*, 11(1):143–163.
- LeSage, J. P. (2014). What regional scientists need to know about spatial econometrics. *The Review of Regional Studies*, 44(1):13–32.
- Lodge, M. and Taber, C. S. (2013). Motivated political reasoning. In *The Rationalizing Voter*, pages 149–169. Cambridge University Press.
- Lucassen, G. and Lubbers, M. (2012). Who fears what? explaining far-right-wing preference in europe by distinguishing perceived cultural and economic ethnic threats. *Comparative Political Studies*, 45(5):547–574.

- Manning, C. D., Raghavan, P., and Schütze, H. (2008). *Introduction to information retrieval*. Cambridge University Press.
- McCann, P. (2019). Perceptions of regional inequality and the geography of discontent: insights from the uk. *Regional Studies*, 54(2):256–267.
- Milner, H. V. (2021). Voting for populism in europe: Globalization, technological change, and the extreme right:. *Comparative Political Studies*, 54(13):2286–2320.
- Mitsch, F., Lee, N., and Ralph Morrow, E. (2021). Faith no more? the divergence of political trust between urban and rural europe. *Political Geography*, 89.
- Mudde, C. (2019). *The far right today*. Cambridge, UK : Polity 2019.
- Nielsen, R. K. and Schrøder, K. C. (2014). The relative importance of social media for accessing, finding, and engaging with news. *Digital Journalism*, 2(4):472–489.
- Osorio Angel, S., Peña Pérez Negrón, A., and Espinoza-Valdez, A. (2021). Systematic literature review of sentiment analysis in the spanish language. *Data Technologies and Applications*, 55(4):461–479.
- Pardos-Prado, S. and Sagarzazu, I. (2019). Economic performance and center-periphery conflicts in party competition:. *Party Politics*, 25(1):50–62.
- Rama, J., Zanotti, L., Turnbull-Dugarte, S. J., and Santana, A. (2021). *VOX: The Rise of the Spanish Populist Radical Right*. Routledge, London, 1 edition.
- Rodríguez-Pose, A. (2018). The revenge of the places that don't matter (and what to do about it). *Cambridge Journal of Regions, Economy and Society*, 11(1):189–209.
- Rodríguez-Pose, A. (2020). The rise of populism and the revenge of the places that don't matter. *LSE Public Policy Review*, 1(1):1–9.
- Rodríguez-Pose, A., Lee, N., and Lipp, C. (2020). Golfing with trump: Social capital, decline, inequality, and the rise of populism in the us.
- Rooduijn, M., Van Kessel, S., Froio, C., Pirro, A., De Lange, S., Halikiopoulou, D., Lewis, P., Mudde, C., and Taggart, P. (2019). The populist: An overview of populist, far right, far left and eurosceptic parties in europe.
- Rossi, U. (2018). The populist eruption and the urban question. *Urban Geography*, 39(9):1425–1430.

- Rydgren, J. (2008). Immigration sceptics, xenophobes or racists? radical right-wing voting in six west european countries. *European Journal of Political Research*, 47(6):737–765.
- Schäfer, A. (2021). Cultural backlash? how (not) to explain the rise of authoritarian populism. *British Journal of Political Science*, pages 1–17.
- Shiller, R. (2017). Narrative economics. *American Economic Review*, 107(4):967–1004.
- Sipma, T. and Lubbers, M. (2018). Contextual-level unemployment and support for radical-right parties: a meta-analysis. *Acta Politica 2018 55:3*, 55(3):351–387.
- Smets, K. and van Ham, C. (2013). The embarrassment of riches? a meta-analysis of individual-level research on voter turnout. *Electoral Studies*, 32(2):344–359.
- Stockemer, D. (2016). Structural data on immigration or immigration perceptions? what accounts for the electoral success of the radical right in europe? *Journal of Common Market Studies*, 54(4):999–1016.
- Tabellini, M. (2020). Gifts of the immigrants, woes of the natives: Lessons from the age of mass migration. *The Review of Economic Studies*, 87(1):454–486.
- Turnbull-Dugarte, S. J. (2019). Explaining the end of spanish exceptionalism and electoral support for vox:. *Research & Politics*, 6(2).
- Turnbull-Dugarte, S. J., Rama, J., and Santana, A. (2020). The baskerville’s dog suddenly started barking: voting for vox in the 2019 spanish general elections. *Political Research Exchange*, 2(1).
- VOX (2016). Manifiesto fundacional vox. Technical report, VOX.
- Welbers, K., van Atteveldt, W., Kleinnijenhuis, J., Ruigrok, N., and Schaper, J. (2016). News selection criteria in the digital age: Professional norms versus online audience metrics. *Journalism: Theory, Practice & Criticism*, 17(8):1037–1053.