

Immigration Shocks and Politicians' Rhetoric: Evidence from The Venezuelan Migration Crisis

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How does an immigration shock affect politicians' discourses? This study examines the sudden influx of Venezuelan migrants into Latin American countries. We argue that such events alter politicians' agendas, creating opportunities to frame new issues from their perspectives. Analyzing over 3 million tweets by parliament members from 2013 to 2021 in Chile and Peru, we employ computational text-analysis methods, from simple dictionaries to complex techniques like unsupervised topic analysis and OpenAI, along with an instrumental variable strategy. Our results suggest that after the immigration shock, politicians emphasized the immigration issue without any party family monopolizing it. We find little evidence that regional exposure explains the issue's salience, suggesting a disconnection from local experiences. Our findings reveal a novel channel for increased salience: right-wing politicians criticized the Venezuelan regime and socialism instead of increasing anti-immigration sentiment, while left-wing politicians promoted pro-immigration attitudes consistent with contact theory. This work enhances our understanding of the politicization of immigration in South-South contexts in the digital age.

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INTRODUCTION

How does an immigration shock affect politicians' discourses? Immigration has long been recognized for its significant political effects, often triggering hostility and backlash among native populations, influencing political preferences, and affecting electoral outcomes. However, less is known about attitude shifts beyond the native population (Alesina and Tabellini 2024). For example, the potential for immigrant flows to increase political divisions among elites has not been thoroughly explored. The existing evidence focuses primarily on developed nations (e.g., Gessler and Hunger 2022; Hutter and Kriesi 2022; Van Spanje 2010; Grande, Schwarzbözl, and Fatke 2019), leaving a gap in our understanding of how low- and middle-income nations, which host over 80% of the world's refugees (Davis et al. 2024; UNHCR 2020), are affected.¹ South-South migrants leave their home countries due to political and economic turmoil but also often share similar demographic characteristics with locals. Our research aims to fill this gap.

In this article, we explore how an immigration shock shapes political agendas, particularly in the context of a crisis that forces the introduction of a new discussion item in the political agendas in the Global South. Does the salience of immigration increase across all party families? What stances do politicians take? Do politicians from regions more exposed to the immigration shock respond differently? We argue that such crisis events fundamentally alter political agendas by introducing a new issue that no party previously monopolized and that, given its significance, cannot be ignored. In the short term, we state that the shock presents political opportunities for parties to differentiate themselves and frame the new issue to their advantage.

Specifically, we expect that after the immigration shock, politicians exposed to the shock will likely adopt more pro-immigration humanitarian stances. This is because cultural anxiety is less likely to be triggered in contexts of low cultural distance (Tabellini 2020; Rozo and Vargas 2021). Furthermore, with low cultural distance, the conditions for contact theory to prevail are more likely, reducing anxiety and fostering empathy between

¹ See Figure A.1 in the Appendix for the evolution of the number of people displaced in non-OECD countries, which has largely surpassed those in OECD countries.

natives and migrants (Allport, Clark, and Pettigrew 1954; Pettigrew and Tropp 2008). Furthermore, given the liberal immigration rules in the Global South, migrants are soon-to-be voters in the hosting country (Blair, Grossman, and Weinstein 2022; Hammoud-Gallego and Freier 2023). We expect these humanitarian and pro-immigration rights stances to be more likely driven by left-wing politicians. On the other hand, we propose another channel through which politicians, regardless of their regional exposure, may frame the immigration issue by spreading misinformation and demonizing the government of the migrants' country of origin if it is ideologically opposed. For example, if a left-wing government causes a political crisis in the sending country, right-wing politicians may frame the issue as anti-socialism, warning of a similar threat to the host country. In South-South migration contexts, these warnings may sound credible and resonate with the electorate. This strategy allows right-wing politicians to attack the left while appealing to exiles and refugees frustrated with their home regime, who will soon become voters.

We test this theory using the cases of the Venezuelan exodus, which has led to over 6.1 million immigrants entering Latin American countries. To do this, we develop a novel dataset of online political discourses from members of the Chilean and Peruvian parliaments, two of the largest recipient nations. The dataset encompasses over 3 million tweets from 2013 to 2021. Twitter data enables the examination of how immigration is integrated into daily political discourse due to its temporally granular measures (Esberg and Siegel 2023; González-Rostani, Incio, and Lezama 2024b). This approach complements previous studies that often rely on static data from electoral manifestos or campaign strategies (e.g., Green-Pedersen and Otjes 2019; Ruedin and Morales 2019; Van Spanje 2010).

Employing computational text-analysis methods, from simple dictionaries to advanced techniques like unsupervised topic analysis and OpenAI, along with an instrumental variable strategy, we demonstrate that politicians' discourse on immigration became highly salient after the immigration shock, with parties using different frames. All party families² increased the salience of the immigration issue, with no significant

²We refer to party families as the grouping of parties according to their ideological position. We classify them into left, center, and right (see Figure for more details).

differences observed among them. These results diverge from patterns seen in OECD-hosting countries, where right-wing parties typically own and lead the immigration issue (e.g., Gessler and Hunger 2022; Hutter and Kriesi 2022; Grande, Schwarzbözl, and Fatke 2019). Furthermore, we find little evidence that regional exposure explains the issue's salience, suggesting a disconnect from local experiences. This finding aligns with recent studies documenting null or positive effects of natives' exposure to immigrants in the Global South (Lebow et al. 2024; Lebow, Moreno Medina, and Coral 2020; Alrababa'h et al. 2021).

Our analysis reveals that immigration is a highly divisive issue shaped by ideological orientations. We demonstrate that pro-immigration discussions were higher in exposed regions, primarily driven by left-wing politicians, while anti-immigration rhetoric does not depend on the immigrant population size. Right-wing politicians often frame the issue by referencing the political regime in Venezuela, such as socialism, whereas left-wing politicians avoid this frame. These results suggest that the immigration crisis was strategically used by politicians to boost their electoral advantage, but these frames are context-dependent (Chong and Druckman 2007; Zaller 1992) and do not follow the expected anti-immigration salience of right-wing parties we see in developed countries (Gessler and Hunger 2022; Hutter and Kriesi 2022; Abou-Chadi and Krause 2020). Our findings align with evidence showing increased right-wing support in areas with a history of left-wing insurgency exposed to the immigration shock (Rozo and Vargas 2021). Additionally, they are consistent with Holland, Peters, and Zhou's 2024 findings that Colombian voters often misidentify Venezuelan migrants as leftists due to political fear of similar changes in the host country.

By empirically demonstrating how immigration shocks influence elites in the Global South, our study is among the first to highlight the supply-side political dynamics of one of the largest post-WWII migratory crises. Previous scholars have focused on relatively minor migration crises involving high-income countries. We contribute to an emerging group of scholars studying migration in the Global South (Blair, Grossman, and Weinstein 2022; Alrababa'h et al. 2021; Zhou and Shaver 2021), particularly recent

work on forced migration from Venezuela. Previous research has mainly examined direct effects on economic outcomes (Caruso, Canon, and Mueller 2021; Lebow 2022; Rozo and Vargas 2021; Argote and Daly 2024; Martínez and Martínez Heredia 2023; Forero-Vargas and Iturra 2022; Undurraga and Gonzalez-Navarro 2023) and crime perception (Ajzenman, Dominguez, and Undurraga 2023; Severino and Visconti 2024). A newer strand of research focuses on voters' attitudes, such as increased nationalism (Visconti and Vega-Mendez 2023), anti-immigration sentiment (Argote and Perelló 2024; Zhou, Peters, and Rojas 2022), misperception of migrants' political views (Holland, Peters, and Zhou 2024), and support for right-wing parties (Rozo and Vargas 2021). Our focus on political elites' strategies sheds new light on the supply-side response to these crises. Additionally, our analysis of Chile and Peru allows us to compare and contrast political responses across two of the largest recipient nations.

In our empirical approach, we utilize novel techniques, such as OpenAI's API, to classify political statements as pro, neutral, or anti-immigration. This builds on previous work demonstrating the utility of OpenAI for topic classification (Gilardi, Alizadeh, and Kubli 2023; Laurer et al. 2024; González-Rostani, Incio, and Lezama 2024b). Specifically, we use the tool to determine political positioning, going beyond topic identification, and traditional sentiment analysis that only categorizes tweets as positive or negative without capturing stances. Our research template is not language-dependent, enhancing opportunities to analyze political speech in languages other than English (Licht 2023; González-Rostani, Incio, and Lezama 2024b; Courtney et al. 2020; De Vries, Schoonvelde, and Schumacher 2018). This flexibility could be particularly beneficial for comparative studies.

Taken together, our findings underscore the significant polarizing role that elites play following an immigration shock. Understanding the frames used by elites is crucial, as voter attitudes toward immigration are influenced by the salience of specific frames (Schleiter, Tavits, and Ward 2022; Getmansky, Sinmazdemir, and Zeitsoff 2018; Brader, Valentino, and Suhay 2008; Pérez 2015; Kustov, Laaker, and Reller 2021). For example, our results on the usage of pro-immigration frames suggest that politicians can foster

greater tolerance toward migrants (Schleiter, Tavits, and Ward 2022). Conversely, the anti-left and anti-socialism frames employed by right-wing politicians may intensify political polarization and prejudices against migrants (Holland, Peters, and Zhou 2024). Additionally, there is a potential for a right-wing populist backlash in the region post-shock (Rozo and Vargas 2021), with migrants likely reinforcing the conservative shift (Holland, Peters, and Zhou 2024).

THE EFFECT OF IMMIGRATION SHOCK ON POLITICAL DISCOURSE

An immigration crisis as a political opportunity

External shocks offer unique opportunities for changes in political arenas and structures (Baumgartner et al. 2009; Collier and Collier 2002; Thelen 2004). Crises can affect government duration (Lupia and Strøm 1995), ministry stability (Martínez-Gallardo et al. 2022), public policy changes (Williams 2009), and public opinion (Aldrich et al. 2006). In this work, we argue that sudden immigration crises will increase the issue's salience among politicians. Furthermore, unlike previous studies on the European Parliament that examined changes in priorities due to political (Blumenau and Lauderdale 2018) and economic crises (Greene and Cross 2017) (intensive margins), we focus on immigration crises in contexts with minimal prior debate and low immigration levels, such as in Latin America (Hammoud-Gallego and Freier 2023). These crises expand the political agenda (extensive margins), compelling all political actors to increase the issue's salience from zero mentions to the need to discuss it. Politicians will seek to avoid being left behind and respond to public concerns, aligning with the "riding the wave" theory (Klüver and Sagarzazu 2016; Ansolabehere and Iyengar 1994) and addressing what they perceive as pressing issues for the public (Abou-Chadi and Wagner 2020; Green-Pedersen 2019). Thus, we expect the salience of immigration to increase among political leaders after a sudden immigration influx.

However, will all party families increase the salience? We argue that crisis events, like the Venezuelan immigration shock, present unique political opportunities that are likely to increase the salience of the issue across all party families, not just the right.

Previous research often links party responsiveness to ideological profiles, with right-wing parties typically dominating immigration issues in developed countries due to their strategic framing of immigration alongside crime, terrorism, and the erosion of traditional values (e.g., Gessler and Hunger 2022; Hutter and Kriesi 2022; Mudde 2013; Grande, Schwarzbözl, and Fatke 2019; Abou-Chadi and Krause 2020). However, this pattern may not hold in the context of South-South migration for several reasons.

First, South-South migration, such as the Venezuelan displacement crisis, involves migrants who are demographically similar to natives in terms of language, religion, ethnicity, and skill levels (e.g., Holland and Peters 2020; Argote and Perelló 2024; Lebow et al. 2024). This reduces the cultural and socio-economic divides that often amplify right-wing dominance on immigration issues. Secondly, unlike developed countries where immigration has been a longstanding issue, the Venezuelan crisis represents a change in the extensive margin, introducing a new and urgent topic to the political agenda. In such scenarios, no single party has pre-established ownership of the issue, and the sudden relevance makes it likely too costly for any party to ignore (Meguid 2005; Klüver and Sagarzazu 2016). Therefore, we expect the salience of immigration to increase across all political parties as each seeks to capitalize on the new political opportunity and respond to public concerns. In other words, in the short term, we expect that no party family will monopolize the issue.

Finally, exposure to immigration shocks varies across regions. Literature on immigration shocks shows that exposed citizens often become concerned about economic competition, strain on public resources, crime, and increased nationalism (e.g., Alesina, Murard, and Rapoport 2021; Tabellini 2020; Ajzenman, Dominguez, and Undurraga 2023; Ajzenman, Aksoy, and Guriev 2022; Severino and Visconti 2024; Visconti and Vega-Mendez 2023; Argote and Perelló 2024). Research on the Venezuelan crisis has shown that exposed regions experience lower informal sector income (Lebow 2022), higher unemployment rates (Rozo and Vargas 2021), and increased poverty (Caruso, Canon, and Mueller 2021). One possible expectation is that legislators from exposed regions will increase the salience of immigration issues to address local concerns and

build constituent and donor ties (e.g., Fenno 1978; Kaslovsky 2022). Alternatively, there may be no within-country differences in salience, suggesting a national-level phenomenon unrelated to local experiences. This aligns with findings by Lebow et al. (2024) and Lebow, Moreno Medina, and Coral (2020), which show no increased anti-immigration sentiment or decreased trust among exposed voters in Colombia following the Venezuelan shock, despite national trends indicating otherwise. If this alternative holds, it suggests that national debates may be divorced from local experiences (Alesina, Murard, and Rapoport 2021; Ajzenman, Dominguez, and Undurraga 2023; Lebow et al. 2024). In this work, we will focus on unpacking national and regional-level salience to understand the mechanisms behind it.

Partisan differences in framing

While we expect salience to increase across all party families, the immigration shock also presents a political opportunity for parties to shape this issue with their perspectives. In other words, we expect differentiation among party families. Next, we discuss our expectations, arguing that universal political frames for migration do not exist. Framings are context-dependent (Chong and Druckman 2007; Zaller 1992), and in the case of South-South migration, different mechanisms may drive political incentives, as also argued by Woldemikael (2022) and Rozo and Vargas (2021). We anticipate two central frames in politicians' online discourse after the immigration shock in the short term. First, we expect that politicians representing exposed areas, especially those from the left, will frame the issue as a humanitarian crisis based on regional brotherhood, rather than promoting hostility toward immigrants. Second, we expect right-wing politicians everywhere (not just in exposed areas) to focus on anti-socialism and anti-left regime issues to leverage the crisis in domestic politics and compete with leftist counterparts, while leftists will avoid that frame.

Pro or Anti-Immigration Stances Among Exposed Legislators?

What stances will legislators exposed to immigration shocks promote? One possibility is that politicians will align with local citizens' concerns, advocating for restrictive immi-

gration policies. While immigration attitudes in developed countries are often not linked to personal economic circumstances (Hainmueller and Hopkins 2015), South-South migration contexts may cause greater public service strains (Argote and Daly 2024). For example, there can be pressures on public education (Martínez and Martínez Heredia 2023) and public health systems (Rebolledo-Ponietsky, Munayco, and Mezones-Holguín 2019). Additionally, similarities in skills and demographics in these heavily informal markets can exacerbate lower incomes (Lebow 2022), unemployment (Rozo and Vargas 2021), and poverty (Caruso, Canon, and Mueller 2021). Thus, politicians may frame the immigration issue by promoting more restrictions on migrants when representing constituencies from exposed areas.

However, the lesser cultural distance in South-South migration may reduce the likelihood of anti-immigration sentiment. While cultural anxiety drives hostility toward immigrants in developed countries (Brader, Valentino, and Suhay 2008; Dustmann, Glitz, and Frattini 2008; Bansak, Hainmueller, and Hangartner 2016; Inglehart and Norris 2016; Hainmueller and Hopkins 2015), it may not be a significant factor in regions with less cultural disparity (Tabellini 2020; Rozo and Vargas 2021).

An alternative possibility is that politicians exposed to immigration shocks will promote empathy and migrants' rights, referred to as pro-immigration framing. The diminished cultural distance may facilitate conditions favorable to contact theory, such as cooperative interaction and perceived equal status between groups (Allport, Clark, and Pettigrew 1954). Shared language and cultural similarities increase the likelihood of intergroup contact, which can reduce anxiety and enhance perspective-taking (Pettigrew and Tropp 2008). Recent studies provide evidence supporting this theory. Lebow et al. (2024) show that proximity to Venezuelan migrants does not drive anti-immigrant attitudes. Additionally, Lebow, Moreno Medina, and Coral (2021) find that such proximity can promote trust. Similarly, Zhou, Peters, and Rojas (2022) find that, despite documented xenophobia after COVID-19 in the developed world, Colombia, affected by the Venezuelan shock, exhibited increased empathy. Familial ties, personal contact (Argote and Daly 2024), and repeated meaningful interactions (Lebow et al. 2024) between natives and

migrants mitigate xenophobic attitudes. Even in other South-South contexts, such as Jordan, natives more exposed to Syrian refugees' challenging living conditions present more positive attitudes toward them (Alrababa'h et al. 2021). Thus, there are good reasons to expect politicians in exposed areas to embrace pro-immigration framing, and we argue that these positive frames will likely be stronger among leftists.

Strategic politicians: Opposition to Venezuelan regimen vs. Anti-immigration

Beyond regional exposure, we now shift our attention to the national strategic behavior we expect from parties. Previous research suggests that voters may shift their support to the right following an immigration shock. This phenomenon has been extensively documented in developed countries (e.g., Kaufmann 2017; Halla, Wagner, and Zweimüller 2017; Edo et al. 2019; Dustmann, Glitz, and Frattini 2008; Dinas et al. 2019) and more recently in the context of South-South migration crises (Rozo and Vargas 2021). This is typically attributed to rising xenophobia, although the link between exposure to immigration and xenophobia is relatively weak in the Venezuelan case (Lebow et al. 2024). Instead, we propose a novel explanation: the strategic use of misinformation and fear by right-wing parties to exploit the immigration shock. These legislators are likely to benefit from framing the forced migration crisis as a consequence of radical left governments' failures, suggesting that the host country could follow a similar path to that of Venezuela if people voted for leftist parties.

Unlike scholars focusing on rich countries who argue that the right will promote xenophobia after an immigration shock (e.g., Gessler and Hunger 2022; Hutter and Kriesi 2022), we contend that in regions facing political crises from similarly economically developed countries, right-wing candidates will criticize the leftist governments of migrants' countries rather than the migrants themselves. This strategy relies on perceived similarity and familiarity between the countries. For example, an immigration shock from Venezuela poses a more credible threat to Latin American voters than to Spaniard voters due to the closer ties between their countries. Our argument aligns with Holland, Peters, and Zhou (2024), which shows that voters often overestimate the number of leftist immigrants and worry about their electoral impact. Additionally, Rozo

and Vargas (2021) found that Colombian municipalities exposed to left-wing insurgent violence are more likely to support right-wing politicians after the immigration shock.

Another reason for right-wing politicians to target the Venezuelan regime rather than immigrants is that migrants are future voters. In regions like Latin America and the broader Global South, liberal migration policies grant broad rights to migrants, including the right to vote after a few years of residency (Blair, Grossman, and Weinstein 2022; Freier and Arcarazo 2015; Hammoud-Gallego and Freier 2023). Many Venezuelan migrants likely oppose leftist governments, providing right-wing parties an opportunity to ally with these migrants, who may eventually become a supportive voter base.³ Therefore, we expect right-wing politicians to focus on anti-socialism and anti-Venezuela rhetoric rather than anti-immigration. This strategic framing allows right-wing parties to critique their leftist counterparts without resorting to xenophobia, appealing to the millions of migrants who will soon become part of the electorate. Conversely, we expect left-wing legislators to avoid framing immigration issues in relation to Venezuela's political regime.

BACKGROUND ON THE VENEZUELAN EXODUS

We test our theory by analyzing Venezuelan migration triggered by the severe economic and political crisis following President Hugo Chavez's death in 2013. His successor, Nicolas Maduro, faced opposition and claims of electoral irregularities. The decline in oil prices led to reduced government revenue, shortages, high inflation, and an economic contraction of two-thirds of their GDP between 2013 and 2019 (Knight and Tribin 2020), sparking protests and the exodus of around 7.7 million Venezuelans (R4V 2024).

This case offers a unique opportunity to study the political effects due to the sudden influx of immigrants into Spanish-speaking Latin American countries unaccustomed to high immigration levels, triggered by factors exogenous to the recipient countries. The influx began in 2015 and accelerated after the Venezuelan-Colombian border reopened in August 2016 (BBC 2016) and the Trump administration imposed sanctions in August 2017, restricting Venezuela's access to the U.S. financial system (see Figure 1). As of

³Holland, Peters, and Zhou (2024) document that only 12% of Venezuelan migrants identify as leftists.

March 2023, Colombia and Peru hosted about 2.5 million and 1.5 million Venezuelans, respectively, representing roughly 4.9% and 4.5% of their populations (see [Figure 2](#)). In comparison, the United States had fewer than 600,000 Venezuelans in 2021 (R4V based on ACS). To contextualize, the influx was 19.25 and 1.20 times the 2010 foreign-born population in Peru and Chile, respectively. This influx has significantly impacted citizens and public policies ([Appendix A.1](#) and [A.2](#) expand on this).

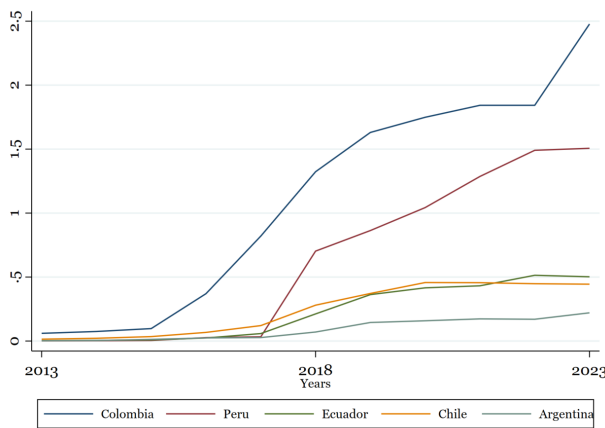


Figure 1: Evolution of the Number of Immigrants in the Top 5 Spanish-Speaking Countries
Note: Millions of Venezuelan population reported by country.
Source: Authors' own elaboration based on R4V's data.

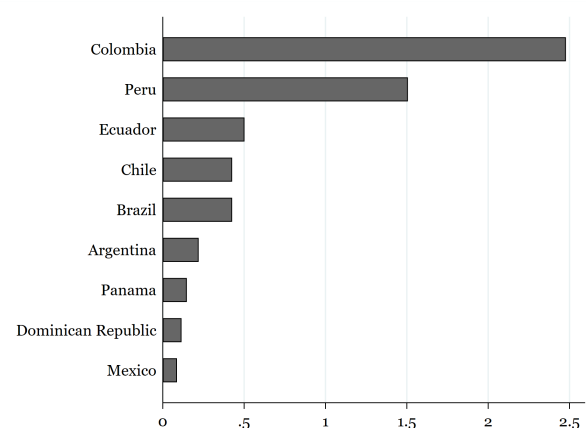


Figure 2: Latin American Countries with the Highest Number of Venezuelan Immigrants
Note: Millions of Venezuelan population reported by country.
Source: Authors' own elaboration based on R4V (2024).

DATA AND METHODS

To understand the complex dynamics of immigration, we use original, temporally disaggregated data. Traditional sources like elite surveys and expert datasets capture the nuanced attitudes and responses of political actors poorly. These surveys provide infrequent snapshots and only recently, post-2018, included questions on immigration González-Rostani, Incio, and Lezama 2024a. To overcome these limitations, we collected over 3 million tweets posted by politicians. We first analyze the immigration crisis's effect on politicians' salience of the issue. We then estimate the impact on different framing topics—socialism, pro or anti-immigration—using OLS analysis and instrumenting the immigration shock.

The Cases

We focus our analysis on Peru and Chile, two primary destinations for Venezuelan immigrants (see [Figure 2](#)).⁴ We examine the migration shock's impact on parliamentary elites, tracking their actions before and after the crisis. In Chile, we analyze legislators from the 2014 and 2018 Congresses, while in Peru, we focus on legislators elected in 2016, 2020, and 2021.⁵

We excluded Colombia and Ecuador from our cases for several reasons. Colombia shares the largest border with Venezuela and has a long history of immigration between the two countries. Since 1970, Colombians have fled to Venezuela to escape political violence, making them the largest immigrant group in Venezuela ([Lebow et al. 2024](#); [Caruso, Canon, and Mueller 2021](#)). This extensive migration, coupled with Colombia's internal migration due to decades of civil war ([Lebow 2022](#)), makes it challenging to isolate the impact of the current wave of immigration.

Furthermore, during the peak years of 2017 and 2018, Ecuador and Colombia served as transit countries for Venezuelan immigrants whose final destination was Peru or Chile (e.g., [Woldemikael 2022](#)). According to the Ecuadorian government, 80% of Venezuelan immigrants entering Ecuador were headed to Peru ([Cuartero 2018](#)). For example, in 2018, the Ecuadorian government provided free transportation for Venezuelan immigrants traveling from the north to the south border after Peru began requiring passports, which many could not obtain ([Caceres 2018](#)). Since we are interested in the impact of immigrant settlement on politics, Peru and Chile serve as ideal cases. The impact of migration on transit countries is likely different from that on destination countries (e.g., [Woldemikael 2022](#); [Ajzenman, Aksoy, and Guriev 2022](#)).

⁴Note that Chile has also received Haitian immigration.

⁵The Chilean Congress elected in 2014 ended in 2018, and the 2018 Congress ended in 2022. In Peru, the 2016 Congress, intended to serve until 2021, was dissolved in 2017 due to a political crisis. A new Congress was elected in 2020 to complete the term until 2021.

Data

Politicians statements

To explore the relationship between immigration exposure and politicians' discourse on Twitter, we identified legislators' accounts from 2013 to 2021, covering the period before, during, and after the Venezuelan exodus. We used the Twitter API to collect all tweets from 223 Chilean and 295 Peruvian legislators (see Table 1).⁶ Our whole dataset, representing 94% of Peruvian and 88% of Chilean legislators, includes retweets, quotes, replies, posting date and time, and user handles.

	Chile	Peru	Total
Left	724,177	318,775	1,042,952
Center	233,413	619,309	852,722
Right	570,772	543,587	1,114,359
Total	1,528,362	1,481,671	3,010,033

TABLE 1: Number of Tweets per Country and Party Family

Source: Authors' own elaboration based on data retrieved from Twitter

For most of our analysis, we will focus on tweets from the period 2018-2020 to capture the legislative response to the significant inflow of Venezuelan migrants during 2017-2018. We further restrict the dataset to tweets made by legislators from the Chilean 2018 Congress and the Peruvian 2016 Congress. This subset includes 457,294 tweets from 133 Chilean legislators (out of 155) and 319,998 tweets from 110 Peruvian legislators (out of 130), totaling 777,292 tweets overall.

Twitter's real-time nature provides up-to-date insights into political leaders' opinions and immediate responses to immigration, which expert or legislators' surveys often miss. Unlike complex and infrequent party manifestos (Dolezal et al. 2012), Twitter offers daily insights into politicians' strategies, aligning with the dynamic approach to party politics implemented by Gessler and Hunger (2022) and Hopmann et al. (2012). Moreover, analyzing individual legislators on Twitter reveals complex dynamics within political parties, beyond portraying them as monolithic entities (Meyer and Wagner 2021).

⁶Data collection occurred between November and December 2023, just before Twitter's new policy restricted academic API access.

Previous works show that Twitter data can measure politicians' attitudes, highlight issues, and mobilize the public (e.g., Waisbord and Amado 2017; Barberá et al. 2019; Munger et al. 2019; González-Rostani, Incio, and Lezama 2024b).

Exposure to Immigrants

Venezuelan Displacement

To estimate the exposure to immigration flux, we rely on Census data and employ a shift-share instrument strategy, drawing on methodologies similar to those used by Ajzenman, Dominguez, and Undurraga (2023), Roza and Vargas (2021), and Lebow et al. (2024). Our analysis uses Census data from 2007 and 2017 for Peru, and from 2002 and 2017 for Chile.

First, we calculate the share of immigrants per electoral district based on the 2017 Census for both Chile and Peru. To estimate the share of immigrants per electoral district in 2007, we use the 2007 Census for Peru and the 2002 Census for Chile, supplemented with individual-level data from visas and permanent residence permits to update population estimates up to 2007. In the case of Chile, limiting the data to authorized immigration is justified by its geographical isolation due to the Andes (Ajzenman, Dominguez, and Undurraga 2023).

These data sources allow us to compute immigrant shares for 2007 and the stock of recently arrived immigrants in 2017 at the electoral district level. Figure 3a illustrates the share of the population in different regions of Chile and Peru that arrived from a foreign country between 2012 and 2017.

Additionally, we incorporate data on bilateral flows of international migrants from 45 countries, as recorded by the UN Population Division, to construct variables related to immigrant inflows for the period 2010-2017.

Party system

We examine responses to the immigration crisis among party families using CHES:LA data. Legislators were classified as belonging to a leftist party if the party's ideological score was below 4, and as belonging to a rightist party if the score was above 7. Those

with scores between 4 and 7 were classified as centrist. Parties not included in CHES:LA were excluded from the analysis.⁷

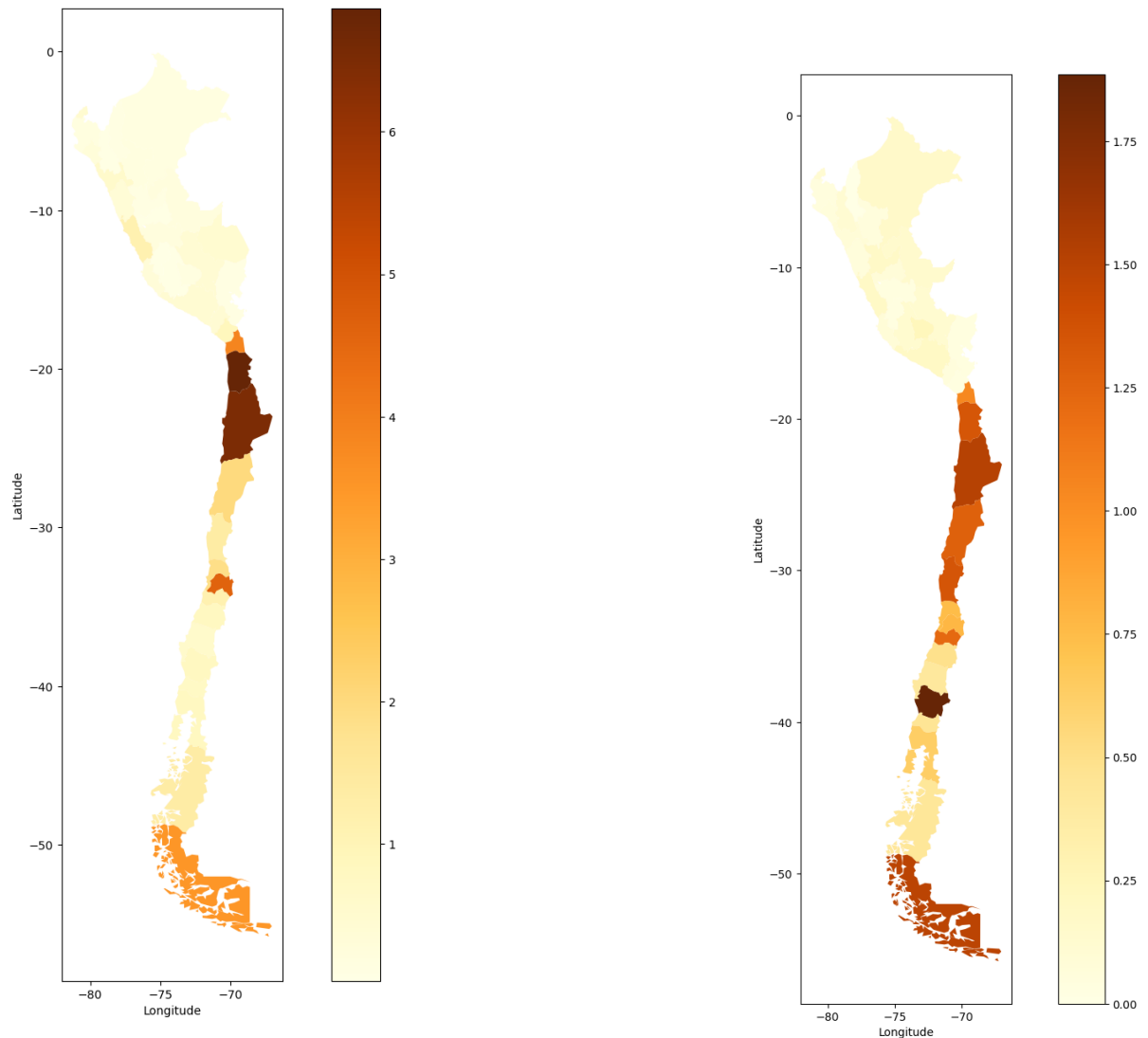


Figure 3: Comparison of New Immigrants and Immigration-Related Tweets

Measurements: Legislators' Rhetoric

Our outcome variables capture politicians' immigration discourse through text-based analysis of Twitter statements. We define a number of different outcomes, classified into the following groups below.

⁷See appendix B for the list of parties included in the analysis.

Salience: Identifying Immigration Statements

Our first outcome variable, the salience of immigration, is measured by the frequency of tweets about immigration relative to total statements (the steps we follow are detailed in Appendix C.1 and Figure C.3). We identify immigration-related tweets using an adapted dictionary approach. We start by compiling a list of keywords such as “immigrant,” “migrant,” “refugee,” and “asylum seeker” (see Appendix C.3). These keywords filter tweets containing at least one specified term. Next, we expand our dataset using natural language processing techniques, training a Naive Bayes Classification Model to identify similar tweets. We hand-code all tweets related to immigration in one country to ensure accuracy, and based on these annotations, we update the dictionary (with one, two, and three words), removing irrelevant tweets (e.g., “migration birds”). Finally, two independent coders evaluate a sample of 500 tweets per country, achieving an accuracy exceeding 0.85.

Applying these steps, we identified 2,086 immigration-related tweets in Peru and 6,123 in Chile. Figure 3b shows the share of posts by legislators from different regions in Chile and Peru. In Chile, there is a concentration of tweets about immigration in the north, while in Peru, the highest concentration is in Lima. Immigration discussion was more salient in Chile than in Peru.

Pro and Anti-Immigration Positions

Once we identify immigration statements, we analyze their content using OpenAI’s API (Chat-GPT 3.5).⁸ This approach quantitatively assesses each statement, capturing nuances like irony, negation, and specific language use that dictionaries or sentiment analysis miss. Recent studies show that ChatGPT can match or outperform hand coding, being more accurate than crowd-workers or RAs in annotation and topical classification tasks (Gilardi, Alizadeh, and Kubli 2023; Kocoń et al. 2023). Additionally, ChatGPT-3 is highly efficient in identifying latent topics, such as hate speech (Ji et al. 2023), populism (Bellodi et al. 2023), and policies (González-Rostani, Incio, and Lezama 2024b).

⁸Further details in Appendix C.2.

Each tweet about immigration was scored from “Highly Pro-Immigration” (2) to “Highly Anti-Immigration” (-2), with a neutral category (0).⁹ For our analysis, we simplified the classification into pro-immigration, neutral, and anti-immigration. Out of 8,851 tweets, 6,131 were pro-immigration, 2,586 were anti-immigration, and 1,349 were neutral.¹⁰

Ideological Framing

To assess whether political leaders adjust their language and ideological framing, we estimate an ideological score for each tweet using Wordscores (Laver, Benoit, and Garry 2003). This measure indicates the similarity of a tweet to the corpus of tweets from left-wing or right-wing parties. We calculate the yearly frequencies of words in all tweets from the right and left (excluding immigration statements), then compute the right-wing score for each word and the overall scores for the right and left corpora.¹¹ A score of -1 indicates an average left-wing tweet, while a score of 1 indicates an average right-wing tweet. Detailed calculations are provided in Appendix C.2. This method follows the approach used by Le Pennec (2021).

Additionally, we examine four frames when discussing immigration: Venezuela, socialism, crime, and employment, based on public opinion and policy discussions (e.g., work permits for Venezuelans and criminal record requirements). We identify tweets related to these topics using keyword dictionaries.¹²

Topics

To identify topics, we use unsupervised machine learning methods to uncover the underlying semantic structures and latent themes in immigration discourse. We use NMF, a matrix decomposition technique that highlights significant words in a corpus, reducing text data complexity. We enhance this approach with TF-IDF weighting. We set the number of clusters to four and analyze tweet clusters within ideological families

⁹Scores of 2 and 1 refer to tweets advocating for immigration, from strong endorsements to subtle support. “Neutral” (0) includes tweets discussing immigration without a clear stance. Scores of -1 and -2 cover tweets opposing immigration, from mild concerns to strong opposition.

¹⁰We validated this method with RAs who classified 1,376 tweets. Comparing these with OpenAI, we found a 84% agreement.

¹¹This maintains the distance between reference texts (Martin and Vanberg 2008).

¹²Refer to Appendix C.3 for dictionary details. Table C.5 presents the percentage of tweets for each frame.

on immigration, as well as the structured topics of crime, employment, and Venezuela.¹³ For a summary of the measures discussed in this section, see Table 2. As a robustness, we also use BERTopic.

TABLE 2: Descriptive Statistics for Tweets (2018-2020)

Country	Tweets	Imm.	Immigration Tweets (% of Imm.)			
			(% of Tweets)	Pro-Imm.	Anti-Imm.	Venezuela Socialism
Chile	457294	0.47		74.93	12.72	13.41 1.90
Peru	319998	0.21		63.07	21.17	46.86 4.23
Total	777292	0.37		72.15	14.73	21.40 2.45

Measurement: Regional Exposure to the Immigration Shock

To estimate the effect of new immigrants' arrival on different dependent variables, we focus on the share of immigrants who arrived in the last five years (2012-2017) in each electoral district of the member of Congress p : ($\Delta imm_p = \frac{NewImmigrants_p}{Population_p}$). However, since immigration allocation is not random—for instance, immigrants may relocate to specific electoral districts that are more welcoming of immigrants or economically prosperous, thereby influencing politicians' behavior—we construct a shift-share instrument to address this issue.

$$\widehat{\Delta imm_{p,12-17}} = \sum_n \theta_{p,07}^n \times \Delta \log(imm)_{12-17}^n \quad (1)$$

where $\theta_{p,07}^n$ represents the share of immigrants from the country of origin n over the total number of immigrants residing in the political district p in 2007. The term $\Delta \log(imm)_{12-17}^n$ represents the log changes in the stock of immigrants in each district between 2007 and 2017. Using UN data, the flow was computed for a few top sources (Argentina, Bolivia, Brazil, China, Colombia, Ecuador, Haiti/Japan, Peru, Spain, the United States, and Venezuela) to other LAC countries (excluding Chile and Peru). The rationale for our instrument is that new migrants tend to settle in areas with larger ethnic communities.

¹³For more on NMF, see O'Callaghan et al. (2015), and Greene and Cross (2017) for its use in political speech analysis.

The key assumption is that the preexisting size of these ethnic communities is unrelated to any changes in political conditions occurring when the new migrants arrive.

Empirical Strategy

To analyze elite responses to the immigration shock, we first examine whether the salience of the issue has increased over the period of analysis using the entire sample of tweets. The main dependent variable for these analyses is the share of immigration-related statements over all tweets between 2013 to 2021.

Next, we focus specifically on immigration-related statements using their tweets from 2018, 2019 and 2020 (after the shock) as dependent variables aggregated at the legislator level. This helps to analyze the effect of the immigration shock on politicians' speech once they were elected. Here, most of our dependent variables refer to the share of each framing (e.g., sentiments, topics) over all the immigration statements. Since immigration is both a national and regional issue, we explore overall effects over time (national exposure to immigration) and assess the impact of the immigration shock by examining regional variations in exposure (representation effect or real exposure).

Finally, to further explore the role of ideology, we analyze the evolution of ideological scores over time (2013-2021) for both immigration and non-immigration statements. We also conduct an unsupervised topic analysis on all immigration statements during this period.

National Exposure: Across Time and Party Family Variation

Our first analysis focuses on national exposure, using each statement as the unit of analysis. The main objective is to examine the increase in immigration-related statements (or specific framings) over time and to determine if there are heterogeneous responses based on party affiliation. Our basic model incorporates fixed effects by legislators and controls for tweet length. For the analysis of salience we look at all the period (2013-2021)

Next, we focus on the post-shock effect (statements from 2018-2020) and estimate the following equation by politicians. The control variables (vector X_{pt}) include party

dummies, politician gender, the number of representatives in the electoral district, and the total number of tweets from each politician to give more weight to active users:

$$Y_p = \alpha + \beta Left_p + \gamma X_p \quad (2)$$

The Role of Representation: Across Regions and Party Family Variation

Next, we analyze elites' representation by exploiting regional variation to determine if elite behavior is explained by regional exposure to immigration shocks, with political statements post-shock. Regions exposed to substantial immigrant influxes, such as frontier and capital cities, may exhibit a greater inclination to engage in immigration discourse. Since the allocation of immigrants is nonrandom, we further test the role of exposure to immigration on representation using a shift-share instrument for the period post-immigration shock (2018-2020) with the following model:

$$Y_{p,18-20} = \beta_0 + \beta_1 \Delta imm_{p,12-17} + \gamma X_{pt} + \varepsilon_{pt} \quad (3)$$

where p refers to the politician's district, $\Delta imm_p = \frac{NewImmigrants_p}{Population_p}$ represents the share of new immigrants in the past five years, estimated using the shift-share instrument described in our measurement subsection below. Control variables are the same as in model 2.

RESULTS

This section demonstrates that the Venezuelan exodus significantly increases Twitter discussions of immigration among political elites in host countries. However, this increase is driven more by national debates than by regional exposure to the immigration shock. Consistent with our theory, since immigration was not an issue on the agenda before the shock, no party family monopolized it; both left and right increased its salience. To further investigate the role of ideology in the coverage of immigration, we show that, across multiple metrics, immigration was a divisive issue, with party families differentiating in how they covered it. Exposure to immigration is associated with a

significant increase in pro-immigration statements among leftist legislators. Meanwhile, right-leaning politicians show no difference in pro- or anti-immigration rhetoric regardless of exposure, but they use anti-socialism frames.

Rising Salience of Immigration

We argue that the sudden influx of Venezuelan immigrants increases the salience of the immigration issue among political elites. As this is a new issue on the agenda, we expect this increase to occur across all party families, meaning no single-party family will dominate the discourse. To demonstrate this, we identified immigration statements using dictionaries and machine learning, calculating their share among all tweets. [Figure 4](#) shows that references to the immigration issue significantly increased with the immigration shock. All parties reacted to the crisis. Before the first wave of immigration in 2016, political leaders largely overlooked the issue, with probabilities close to 0 in 2013. However, after the first wave, the topic gained traction, peaking in 2018. For instance, in that year, Chilean center parties dedicated approximately 1.5% of their tweets to the topic. Although some of these changes appear small, it is important to consider that between 50% and 70% of politicians' statements on Twitter typically refer to non-policy issues, as documented in previous studies (González-Rostani, Incio, and Lezama [2024b](#); Hemphill, Russell, and Schöpke-Gonzalez [2021](#); Barberá et al. [2019](#)). Therefore, the effects are sizable. Chilean legislators averaged 5.1 tweets per day on immigration, while their Peruvian counterparts averaged 1.5 tweets per day. To put these results into context, the salience of immigration represented 10% of the peak salience of COVID-19, underscoring its significant impact on the political agenda.

In comparing these countries, we observe that in Chile, the increase in salience is steeper than among Peruvian parliamentarians. In both cases, there are no significant differences across party families in the short term. This is also documented in [Table 3](#) column 1, which shows that the Left dummy is not statistically significant, indicating similar levels of salience between party families. Our results in [Figure 4](#) also provide descriptive evidence of specific patterns that may have emerged in short periods. For instance, in Chile, the center (Christian Democrats) significantly surpassed their counter-

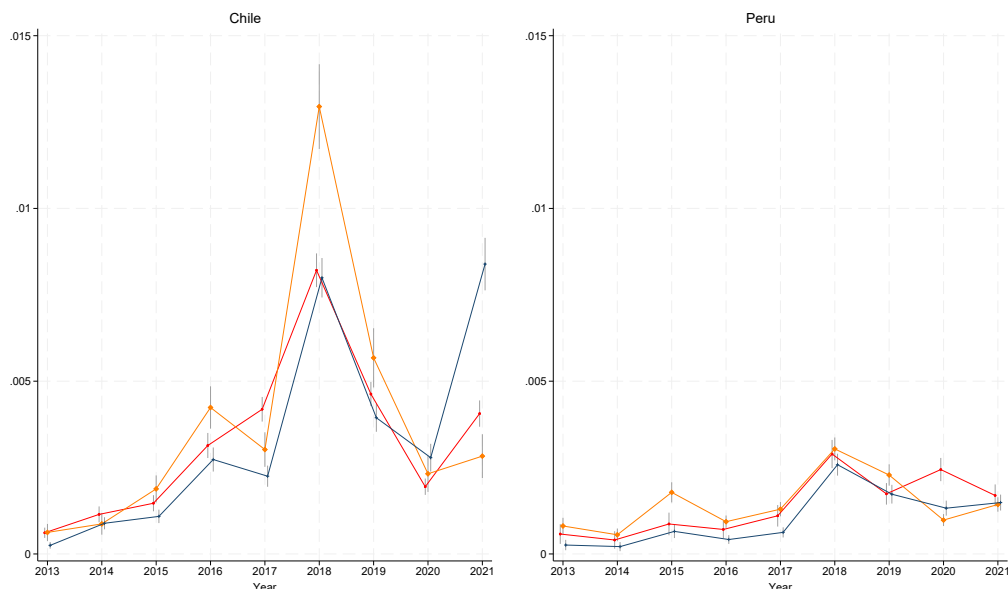


Figure 4: Immigration salience per year in Chile and Peru

Note: the DV is the salience of immigration operationalized as the ratio of statements about immigration to the total number of public statements made. To compute these means, a control using the length of the tweet was used. Robust standard errors were computed, Left, Center and Right are defined as discussed in Figure . Source: Authors' own elaboration based on data retrieved from Twitter

parts starting in 2016-2018. Additionally, in 2021, coinciding with the electoral campaign period, shows that after all party families lowered the salience of the issue, the topic resurfaced predominantly within the right-party family.

We have shown that increased salience does not align with party-family ideology. An alternative explanation could be that regions with significant immigrant influxes, such as frontier and capital cities, are more inclined to engage in immigration discourse. These areas experience more direct consequences, like demographic shifts, economic changes, and increased cultural diversity (Ajzenman, Dominguez, and Undurraga 2023; Caruso, Canon, and Mueller 2021; Roza and Vargas 2021). Our theory suggests that if legislators are voicing their constituents' concerns, they would likely view immigration as salient. Conversely, if there is no such association, the salience may be driven by national debate rather than local experiences. To analyze this, we use our IV approach presented above.

Table 3 demonstrates that regional exposure to the immigration shock does not explain the salience of immigration, whether in relative or absolute terms (see columns 2 and 3, respectively). Moreover, we also fail to reject the null hypothesis of no relationship

when we interact party-family ideology and exposure (column 4). These results suggest that the increased salience among legislators is not necessarily due to the immediate consequences of the immigration influx or representation within their electoral districts. Instead, it implies that other factors, such as the interplay among political parties, might be driving their priorities.

VARIABLES	(1) Immigration Tweets (%)	(2) Immigration Tweets (%)	(3) Total Immigration Tweets (sum)	(4) Immigration Tweets (%)
Left	0.058 (0.091)			0.100 (0.141)
Share Imm		0.052 (0.033)	-84.024 (130.034)	
Right*Share Imm				0.036 (0.026)
Left*Share Imm				0.001 (0.036)
Observations	243	242	242	243
R-squared	0.296	0.213	0.183	0.109
Controls	Yes	Yes	Yes	Yes
F-stat		20.93	21.14	21.87
Model	OLS	IV	IV	IV

Robust standard errors in parentheses

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

TABLE 3: Effects of exposure to immigration on legislators' salience of immigration.

Notes: The table displays the results of OLS and IV estimates on tweets from members of Congress in 2018, 2019 and 2020 (with individual members as the unit of analysis). The definition of each variable is provided in Figure . The dependent variables are the share of tweets related to immigration in columns 1, 2, and 4, and the total number of tweets in column 3. All regressions control for the politician's gender, the number of representatives in their electoral district, and their total number of tweets. The F-stat indicates the F statistic of the first stage.

Party and Ideological Influences on Immigration

We have shown that salience has increased, but this does not seem to be explained by regional exposure or party ideology. Does this mean that in South-South migration, the left and the right frame the issue similarly? We expect the immigration shock, which introduced a new issue to the agenda, to provide politicians in host countries with an opportunity to frame the issue according to their own perspectives. For example, we anticipate that the Venezuelan crisis will lead to an increase in harsh criticisms of Maduro's regime, with right-wing politicians emphasizing "socialism failure." Meanwhile, the left

will avoid associations with left-wing movements, focusing instead on humanitarianism or anti-xenophobic campaigns without debating the causes. To investigate this, we built dictionaries related to potential frames such as socialism and Venezuela, classified statements into pro- or anti-immigration using OpenAI, and estimated the ideological score of each statement.

Table 4 shows that, on average, left-wing legislators display 3.3 percentage points (pp) fewer tweets about immigration relative to center and right-wing legislators, particularly avoiding mentions of socialism, communism, or similar terms. They also seem to refer less to the immigration crisis, although this result is uncertain. When examining positions regarding immigration, leftists are 13.6 pp more likely to post pro-immigration tweets and 14.3 pp less likely to post anti-immigration statements, resulting in a net pro-immigration effect of 27.0 pp. Thus, while we reject the null hypothesis that a party family owns the issue, we observe that they address it differently.

VARIABLES	(1) Socialism	(2) Venezuela	(3) Pro-Imm	(4) Anti-Imm	(5) Net
Left	-3.287* (1.700)	-5.071 (4.388)	13.603** (5.304)	-14.286*** (3.919)	27.889*** (8.367)
Observations	189	189	189	189	189
R-squared	0.370	0.440	0.326	0.349	0.342
Controls	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

TABLE 4: Party families and framing of the immigration issue

Note: These are OLS models, estimated from members of the Congress in 2018, 2019 and 2020 who covered the immigration issue (with individual members as the unit of analysis). In all cases, the denominator is the number of statements about immigration. The dependent variable refers to the share of immigration-related statements of the type indicated in each column. "Net" refers to the difference between pro-immigration and anti-immigration statements (a positive number indicates a net positive stance)

One explanation could be that the lower focus on socialism or anti-immigration is because leftists are associated with regions less exposed to immigration. To examine this, we look at the role of regional exposure on these frames. Table 5 demonstrates that legislators more exposed to the immigration shock are no more likely to focus on socialism or Venezuela than those not exposed (columns 1 and 2). These results suggest that any differences in references to socialism when discussing immigration

are more likely due to politicians' strategic behavior rather than exposure to immigrants. However, the results do show that politicians exposed to the immigration shock are more pro-immigration overall, with a net positive effect of about 4.9 percentage points (columns 3 and 5).

VARIABLES	(1) Socialism	(2) Venezuela	(3) Pro-Imm	(4) Anti-Imm	(5) Net
Share Imm	-0.353 (0.283)	0.200 (1.414)	3.847*** (1.400)	-1.038 (1.314)	4.885* (2.576)
Observations	189	189	189	189	189
R-squared	0.240	0.345	0.244	0.203	0.240
Controls	Yes	Yes	Yes	Yes	Yes
F-Stat	64.82	64.82	64.82	64.82	64.82

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

TABLE 5: Effects of exposure to immigration on legislators' framing of the immigration issue.
Notes: The table displays results of IV estimates on the tweets from members of the congress in 2018, 2019 and 2020 who covered the immigration issue (with individual members as the unit of analysis). The definition of each variable is in [Figure 4](#). The dependent variables are the share of tweets related to each category within the tweets about immigration. Thus, the sample consists of only those members of the congress that tweeted about immigration. All regressions include the gender of the politician, the number of representatives in that electoral district, and the total number of tweets from that politician as controls. F-stat indicates the F statistic of the first stage.

Combining the results of [Table 4](#) and [Table 5](#), [Table 6](#) illustrates the interactive effects of immigration exposure across party families. The increased positivity in positions held by legislators in exposed areas is primarily driven by left-wing politicians. Right-wing politicians also show positive coefficients for pro-immigration and net effects, but these are not statistically significant. Notably, we do not observe significant use of anti-immigration rhetoric in any comparison (regional exposure or not). While we have demonstrated this for Chile and Peru, anecdotal evidence suggests similar strategies were employed in other recipient countries, such as in Colombia, where parties signed an agreement against xenophobia (Migra-Venezuela [2019](#)).

Legislators might use ideological cues when discussing immigration beyond previously examined frames. To test this, we measure the ideological scores of statements (both about immigration and non-immigration) as our dependent variables (see [Figure 4](#) for details). [Figure 5](#) shows these scores by year (2015-2021) and party family, com-

VARIABLES	(1) Socialism	(2) Venezuela	(3) Pro-Imm	(4) Anti-Imm	(5) Net
Right*share Imm	-0.197 (0.300)	0.386 (1.429)	1.748 (1.792)	0.367 (1.859)	1.381 (3.521)
Left*share Imm	0.104 (0.240)	-0.044 (1.901)	4.142** (1.819)	-1.139 (0.891)	5.280** (2.508)
Left	-2.950** (1.501)	-7.494 (5.239)	11.624 (7.469)	-11.920** (5.907)	23.544* (12.129)
Observations	189	189	189	189	189
R-squared	0.025	0.245	0.078	0.095	0.100
Controls	Yes	Yes	Yes	Yes	Yes
F-Stat	22.04	22.04	22.04	22.04	22.04

Robust standard errors in parentheses

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

TABLE 6: Effects of exposure to immigration on legislators' framing of the immigration issue across party families.

Notes: The table displays results of IV estimates on the tweets from members of the congress in 2018, 2019 and 2020, who covered the immigration issue (with individual members as the unit of analysis). The dependent variable in columns 1-5 is the share of tweets related to each category within the tweets about immigration. Thus, the sample consists of only those members of congress that tweeted about immigration. All regressions include the gender of the politician, the number of representatives in that electoral district, and the total number of tweets from that politician as controls. F-stat indicates the F statistic of the first stage.

paring immigration (green circles) and non-immigration statements (red diamonds). If immigration tweets lack ideological cues, their scores would be closer to 0. However, if such cues exist, the scores would deviate from 0, reflecting ideological positions (-1 for the left and 1 for the right). Our theory expects these differences, and [Figure 5](#) confirms them, showing different ideological scores across party families. In both countries, right-wing legislators' immigration statements have higher scores than center parties, with an even greater disparity compared to the left.

A descriptive overview of dynamics over time can be seen by examining the gap between the ideological scores of non-immigration issues and those related to immigration. In Chile, this gap is increasing, particularly among left-wing legislators. Over time, left-wing politicians have started using less characteristic leftist language when addressing immigration, indicating a shift toward more moderate language since 2018, while becoming more ideologized on other topics. Right-wing legislators also show a trend of using less characteristic right-wing language, starting in 2016 but stabilizing after the initial immigration shock. In contrast, Peru shows a less pronounced gap

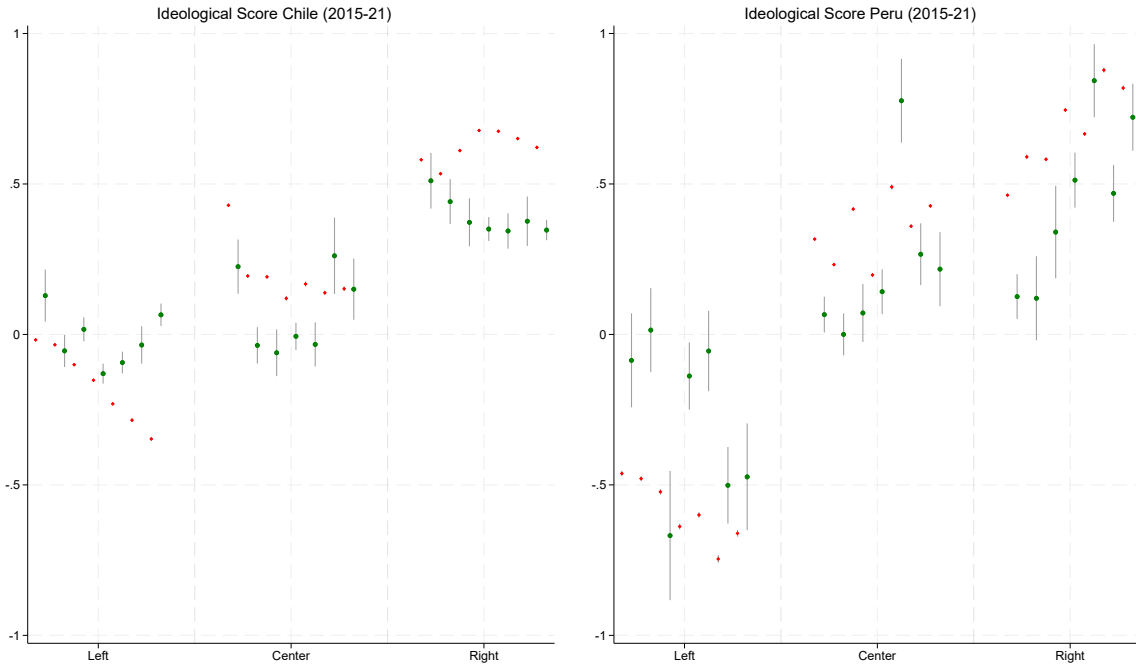


Figure 5: Ideological Score for Immigration and non-immigration issues by party by year

Note: The DV of this analysis is the ideological score (-1 left, 1 right) per year and per ideological party family. The Green estimate represents the ideological score of immigration statements, while the Red estimates represent the ideological score of non-immigration statements. The data points represent the estimations by year, starting in 2015 and finishing in 2021. Estimations are performed controlling by the length of the tweet. Source: Authors' own elaboration based on data retrieved from Twitter.

between the ideological cues of immigration and non-immigration statements. Right- and center-wing politicians in Peru exhibit a significant rightward shift in their language following the migratory shock. This radicalization, marked by growing ideological divergence between left and right politicians, is evident in the widening gap between the scores of right-wing and leftist legislators. Overall, while ideological cues are employed when discussing immigration, as shown by different score levels across party families, Chilean legislators demonstrate moderation over time, whereas Peruvian right-wing and center politicians exhibit increased radicalization in their language.

Content of Elite Political Discourses on Immigration

One pathway through which the immigration crisis increases the salience of the issue among politicians is through the strategic use of misinformation and anti-regime rhetoric about the sending country. As demonstrated earlier, regional exposure does not fully explain the issue's salience; legislators from non-exposed areas are still discussing it. Additionally, we have shown that ideological cues significantly influence this context,

with right-wing parties linking the issue to socialism and left-wing parties expressing pro-immigration views. We now provide evidence for this in multiple ways by analyzing the content across party families without imposing specific structures (e.g., dictionaries).

Table 7 shows the most representative words of the four latent topics generated through NMF, indicating that certain topics are more associated with specific party families.¹⁴ While left-wing legislators highlight rights, their right-wing counterparts emphasize the crisis and politics, particularly in Peru, with a strong focus on the Venezuelan crisis. For example, in Chile, the most frequently discussed topic (Topic 1) centers around immigrants' rights and is predominantly associated with the left, followed by the center and the right. The second-largest topic (Topic 4) includes terms like crisis, politics, government, and specific cities such as Antofagasta (where a significant number of immigrants reside), with right-wing parties leading the discussion. Topics 2 and 3, primarily led by the center, focus on Venezuela, illegal immigration, the possibility of expulsion, and broader international concerns like those related to Trump.

In Peru, the largest topic, comprising over 60% of statements (Topic 1), predominantly revolves around Venezuela, including mentions of Maduro, and is overwhelmingly led by the Peruvian right-wing party family. This topic also illustrates the polarization in Peru, given the greater differences in usage between left and right. The remaining three topics are similar in size. Topic 4, led by the left, emphasizes rights, referring to refugees, children, and the United Nations High Commissioner for Refugees (ACNUR). Topic 3, led by the center and closely followed by the left, addresses xenophobia, racism, and discrimination, with minimal attention from the right. It includes references to Belmont, the former mayor of Lima, known for his xenophobic rhetoric. Topic 2 covers general references to the migration crisis, including mentions of millions and international processes such as Donald Trump and the United States.

In Appendix C.5, we further explore results broken down by different party families and topics. Table C.6 shows the clusters for Chile, where the left primarily focuses on rights and migrants' humanity, while the right emphasizes safety, regulatory policies, and

¹⁴The appendix C.5 presents the analysis with a subset by ideological party family and by the topics of Venezuela, employment, and crime.

Chile				Peru			
Topic 1	Topic 2	Topic 3	Topic 4	Topic 1	Topic 2	Topic 3	Topic 4
personas	pais	chile	antofagasta	maduro	migratoria	machismo	paises
nuestro	contra	piñera	niños	como	sobre	campaña	derecho
este	chilenos	expulsion	senador	esta	millones	todos	alemania
inmigracion	millones	trump	esta	venezuela	miles	discriminacion	como
derechos	refugiados	diputado	gobierno	migrantes	unidos	como	acnur
como	dictadura	para	crisis	pais	estados	para	campo
pais	maduro	sobre	nueva	para	politica	belmont	niños
migracion	venezuela	pais	sobre	peruanos	donald	racismo	migrantes
para	chile	ilegales	politica	peru	trump	contra	para
migrantes	venezolanos	inmigrantes	migratoria	venezolanos	inmigrantes	xenofobia	refugiados
%	48.5	17.7	14.6	60.9	12.8	12.9	13.3
Left (%)	50.0	18.8	12.7	53.6	13.0	15.4	18.0
Center (%)	48.5	20.1	17.9	53.4	16.1	16.7	13.9
Right (%)	46.0	14.9	15.8	78.1	8.3	5.8	7.8
Distance L-R	4.0	3.9	-3.1	-4.8	-24.4	4.6	9.6

TABLE 7: Topic Analysis - NMF 4 clusters regarding Immigration statements

Note: The columns show the most probable words within each topic, and the topic distributions among the party families by country. All the sample of immigration tweet from 2013 to 2021 in Peru and Chile was used.

maintaining order. In Peru, Table C.7 indicates that the left's main topic encompasses women, Peruvians, and Venezuelans, whereas the right focuses on the Venezuelan crisis, portraying immigrants as victims of Maduro's regime. When examining discussions specifically related to Venezuela (refer to Tables C.8, C.9, and C.10), we observe clear differentiation between the left and the right in both countries. In Chile, the left discusses the crisis and humanitarianism, while the right mentions opposition leaders (e.g., Guaido) and asylum requests. In Peru, the right highlights Venezuelans as "brothers" fleeing Maduro's regime, while the left speaks against xenophobia.

Finally, Appendix Figures C.7 and C.8 show BERTtopics confirming divergence in emphasis among party families in Chile and Peru over time. Right-wing legislators focus on the impact of Venezuelan immigrants and regulations (e.g., topic 0), while left-wing and center legislators emphasize social issues, immigrant rights, and women's rights (e.g., topic 5 in Chile and topics 1 and 2 in Peru). These analyses demonstrate that, beyond the increased salience of immigration, politicians use ideological signals and relate the issue to various topics, supporting our expectation that parties differentiate rather than accommodate each other's positions.

CONCLUSION

In this article, we demonstrate that immigration shocks significantly alter political elites' discourses. These unprecedentedly large shocks introduce new issues into the political

agenda and create opportunities for shaping the framing of these issues. Consequently, we argue that immigration shocks should compel politicians to focus more on the immigration issue, allowing for greater party differentiation. We provide empirical evidence supporting our theoretical expectations by examining the Venezuelan exodus to Latin America, specifically analyzing legislators' Twitter histories before and after the crisis in Peru and Chile. Our analysis yields two main findings. First, larger migration inflows are associated with an increase in the salience of the issue across all party families; however, this increased salience is not explained by politicians' regional exposure to the shocks. Second, the framing of Venezuelan forced migration differed across party families. Politicians representing exposed regions, particularly those on the left, were more likely to adopt pro-immigration framing. In contrast, right-wing politicians, regardless of their region's exposure, tended to emphasize fears about the potential consequences of socialist regimes, suggesting these dangers could also threaten the host country.. These results are consistent with the political effects of immigration being a strategic national-level phenomenon, largely disconnected from local experiences with migrants (Rozo and Vargas [2021](#); Ajzenman, Dominguez, and Undurraga [2023](#); Lebow et al. [2024](#)).

Our analysis focused on politicians in hosting countries after a South-South migration shock, where differences in ethnicity, language, skills, or religious backgrounds are less pronounced than in South-North contexts. While we observe similar increases in salience as in developed countries, our findings regarding party-family roles and framing diverge from previous research on developed countries, where immigration conflicts already structured the party system, migration rules are less liberal, and perceptions of out-group threats are more significant. In such contexts, right-wing parties are more likely to dominate the issue, promoting anti-immigration views, while mainstream left parties tend to follow and are unlikely to articulate their own perspectives on the issue (see Gessler and Hunger [2022](#); Hutter and Kriesi [2022](#); Abou-Chadi and Krause [2020](#), for recent examples). Our work demonstrates that the mechanisms sustaining salience and elite polarization around the issue are context-dependent.

While our analysis has focused on short-term political responses to crises and provided a template for temporally disaggregated analysis, several avenues for future research remain. First, we have examined a case of left-wing political crises in the sending country with right-wing politicians capitalizing on the issue. It would be particularly interesting to explore whether nationalist regimes, such as present-day El Salvador or the right-wing dictatorships of the 1960s in Latin America, trigger similar responses to migration among left-wing politicians in host countries. Additionally, we have analyzed two countries with the largest settlement proportions. An interesting extension would be to study political responses when the shock primarily affects migration routes rather than settlements, where contact theory conditions are less likely to hold, as examined by Woldemikael (2022) and Ajzenman, Aksoy, and Guriev (2022) from voters' perspective. Finally, extending the analysis to cover a broader timeframe in the upcoming years would help identify long-term trends and changes in the political treatment of immigration, particularly in the Global South, where migrants will soon become voters.

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ONLINE APPENDIX

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A SOUTH-SOUTH MIGRATION

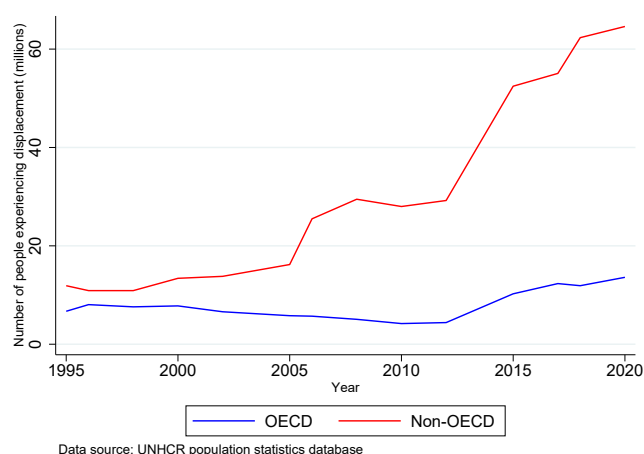


Figure A.1: Evolution of the number of people affected displacement in OECD and non-OECD countries
Note: Data from UNHCR population statistics database.

A.1 Public Salience of Venezuelan's Migration

The influx of refugees and migrants from Venezuela has not gone unnoticed by citizens; rather, it has captured considerable attention from the general public. As illustrated in [Figure A.2](#), there is a notable surge in Google searches for the term “Venezuelans,” signaling an increased awareness and concern regarding the influx of Venezuelan refugees and migrants. There is a notable peak in the popularity of the issue between 2018 and 2020, coinciding with the significant influx of migrants to the region. To illustrate, when examining the trend in Peru (represented by the red line), the popularity of searches remained relatively low until around 2016, after which it began to rise steadily.

The heightened popularity of these searches not only demonstrates a broader societal interest and concern regarding Venezuelan migration but also reflects the recognition of the profound impact and significance of this phenomenon within the region.

A.2 Policies

The influx of Venezuelan migrants has prompted significant policy responses in host countries. [Table A.1](#) presents a chronological overview of key immigration policies implemented by Chile and Peru in response to the Venezuelan exodus. These policies reflect the evolving nature of the crisis and the host countries' attempts to manage its impact. Both nations have implemented a range of measures, from creating new visa categories and temporary residence permits to establishing shelters and modifying identification requirements. Notably, Chile's policies seem to focus more on border control and national security, while Peru's approach appears to emphasize regularization and socio-economic integration.

2 A SOUTH-SOUTH MIGRATION

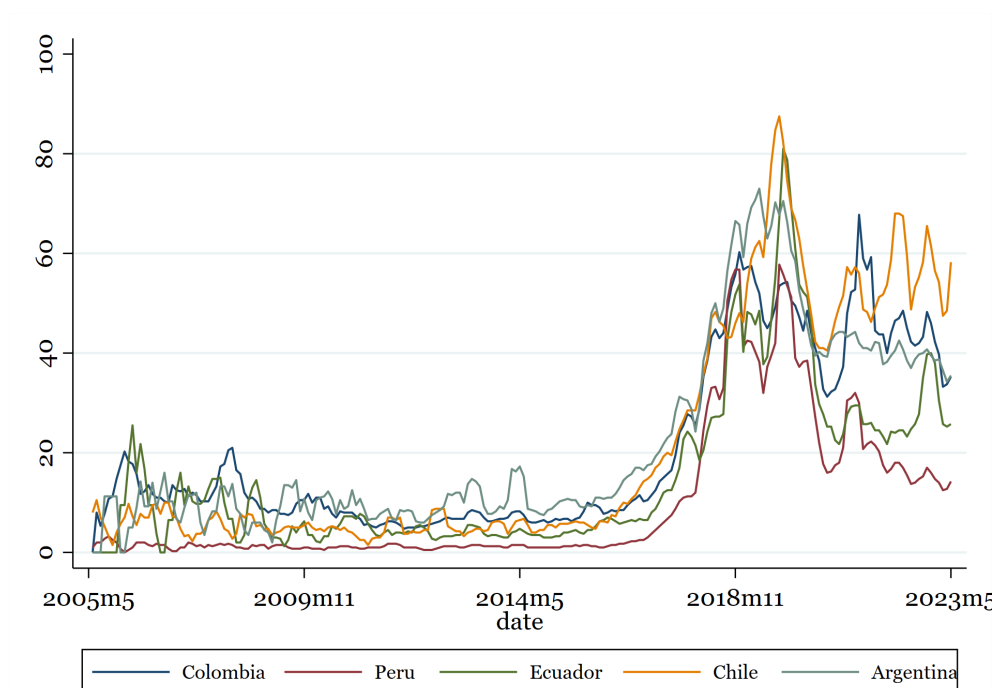


Figure A.2: Public Saliency: Venezuelans

Note: The graph shows the 4-month moving average of the search interest relative to the highest point on the chart for the given region and time for the word "Venezolanos" (Venezuelans), from 2005 to May, 2023. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. A score of 0 means that there was not enough data for this term. Source: Authors' own elaboration base on Google Trends' data.

TABLE A.1: Immigration Policies During the Venezuela Migration Exodus

Country	Date	Institution	Description	Source
Chile	02/2022	Ministry of Foreign Affairs	Formation of a working group with the Bolivian government, subsidizing and adopting measures presented by UNHCR such as the Regional Response Plan for Venezuelan Refugees and Migrants	https://www.minrel.gob.cl/noticias-antteriores/situacion-migratoria-en-la-macro-zona-norte-de-chile
Chile	05/2023	Chamber of Deputies and Ministry of the Interior	Deployment of the Armed Forces at the border of the northern macro-zone for 3 months	https://www.bcn.cl/leychile/navegar?idNorma=1189669&idParte=10410548
Chile	07/2023	Ministry of the Interior and Public Security	National migration and foreign policy applying cross-cutting approaches for control such as biometric identification, new residency requirements, economic development, integration, family reunification, etc.	https://serviciomigraciones.cl/wp-content/uploads/2023/07/PNM-V-ERSION-EJECUTIVA.pdf
Peru	2017	Ministry of Foreign Affairs	National Migration Policy 2017-2025	http://transparencia.rree.gob.pe/index.php/datos-generales-11/13-normas-emitidas-por-la-entidad/133-decretos-supremos-ds/2017-5/10116-ds-n-015/file
Peru	2019	International agencies	Study on the socio-economic profile of the Venezuelan population and their host communities: a look towards inclusion	https://www.observatoriovenezolanodemigracion.org/noticias/politica-migratoria-cambiante-del-estado-peruano-ha-dificultado-la-inclusion-de-inmigrantes-venezolanos

(Continúa en la siguiente página)

Immigration Policies During the Venezuela Migration Exodus (continued)

Country	Date	Institution	Description	Source
Peru	2018	Presidency of Peru and Ministry of the Interior	Policies for control and identification: requirements for the PTP and Special Resident migratory status	https://www.acnur.org/fileadmin/Documentos/BDL/2017/11018.pdf
Peru	2017	Municipality of San Juan de Miraflores	Creation of the largest shelter in Lima for Venezuelan migrants	https://perureports.com/meet-first-venezuelan-neighborhood-lima/6000/
Peru	2020	Presidency of Peru and Ministry of the Interior	Change from PTP to Temporary Permanence Permit Card (CPP) for people with irregular residence, in practice the benefited population was low	https://busquedas.elperuano.pe/normaslegales/decreto-supremo-que-a-prueba-medidas-especiales-excepcionale-decreto-supremo-n-010-2020-in-1895950-4/
Peru	2021	Presidency of Peru and Ministry of the Interior	Ease of immigration regularization for children and adolescents and expansion of the foreign ID card to include foreigners who have a request to access resident migration status	https://cdn.www.gob.pe/uploads/document/file/1813182/DS%20002-2021-IN.pdf?v=1618708384

B CHILEAN AND PERUVIAN'S PARTIES

We employ the CHES:LA project (Martínez-Gallardo et al. 2022), an expert survey on political parties' programmatic and ideological positions, to categorize parties into ideological families. Tables B.2 and B.3 present the parties' ideological scores, assigned party families, and their positions on immigration as assessed by experts. We classify parties based on their ideological scores: those below 4 are categorized as "left," those above 7 as "right," and those between 4 and 7 as "center."

We observe a correlation between the parties' attitudes and their positions on migration. However, the CHES:LA survey relies on expert opinions of political parties rather than legislators' views and rhetoric, which limits our understanding of their positions and dynamics regarding the impact of Venezuelan immigration. Our work contributes to this field by providing more dynamic coverage of the issue and analyzing direct statements from legislators.

TABLE B.2: Parties Chile

	Party Family	L-R Ideol.	Immigration Position	Immigration Salience
Evolución Política	Right	7.33	6.92	3.69
Partido Comunista de Chile	Left	1.22	1.69	4.31
Partido Demócrata Cristiano	Center	5.00	4.58	3.31
Partido Humanista	Left	1.65	1.22	4.73
Partido Radical Socialdemócrata	Left	3.88	3.75	3.91
Partido Socialista de Chile	Left	3.11	2.58	3.77
Partido por la Democracia	Left	3.61	2.67	3.62
Renovación Nacional	Right	7.11	7.58	4.21
Revolución Democrática	Left	2.28	1.38	4.00
Unión Demócrata Independiente	Right	8.94	9.00	4.21

TABLE B.3: Parties Peru

	Party Family	L-R Ideol.	Immigration Position	Immigration Salience
Acción Popular	Center	6.13	6.22	3.40
Alianza para el Progreso	Center	6.93	6.44	3.50
Avanza País	Right	7.50	6.40	4.50
Frente Amplio	Left	2.00	4.60	4.27
Frente Popular Agrícola del Perú	Center	4.79	5.75	2.80
Fuerza Popular	Right	7.80	7.70	5.00
Juntos por el Perú	Left	2.50	4.17	4.50
Partido Aprista Peruano	Right	7.27	7.00	5.00
Partido Democrático Somos Perú	Right	7.00	6.14	4.00
Partido Morado	Center	6.07	4.30	4.00
Partido Popular Cristiano	Right	7.93	6.11	4.45
Perú Libre	Left	0.67	8.83	6.50
Podemos Perú	Center	6.47	7.00	5.18
Renovación Popular	Right	9.83	9.33	7.17
Unión por el Perú	Left	2.42	6.90	5.20

Note: The ideological position goes from 1 (extreme left) to 10 (extreme right). Position on immigration is a 10 point scale going from 1 (welcoming) to 10 (restrictive). Immigration salience is also a 10 point scale going from 1 (low) to 10 (high). Source: Author's own elaboration based on CHES:LA

C MEASUREMENTS: LEGISLATORS' RHETORIC

C.1 Salience: Identifying Immigration Statements

Our first outcome variable, the salience of immigration, is measured by the frequency of tweets about immigration relative to total statements. We identify immigration-related tweets following several steps summarized in Figure C.3. We start by using an adapted dictionary approach, combining close reading of politicians' statements, machine learning techniques, and commonly used public words to reference immigration. Initially, we compile a list of relevant keywords related to immigration, such as "immigrant," "migrant," "refugee," and "asylum seeker" (see C.3). These keywords filter tweets by identifying those containing at least one of the specified terms.¹⁵ Next, natural language processing techniques expand our dataset. We train a Naive Bayes Classification Model to identify tweets similar to those classified by the dictionary. We also search for tweets mentioning Venezuelans, carefully evaluating them since discussions about Venezuela extend beyond migration.

We hand-code all tweets related to immigration in one country to assess the accuracy of our selection and ensure that only relevant statements are included in our analysis.¹⁶ This process identifies word combinations that may refer to immigration and words that should not be included in our dictionary. Consequently, we create an updated dictionary of single words and word pairs to extend the analysis to other countries. Finally, we apply the updated dictionary to the remaining countries and have two independent coders evaluate a sample of 500 tweets per country. The accuracy of classification exceeds 0.85 in all cases, indicating a high level of accuracy in identifying tweets related to immigration while excluding unrelated content. We refine the dictionary based on misclassified cases, removing irrelevant classifications such as "migrating birds."

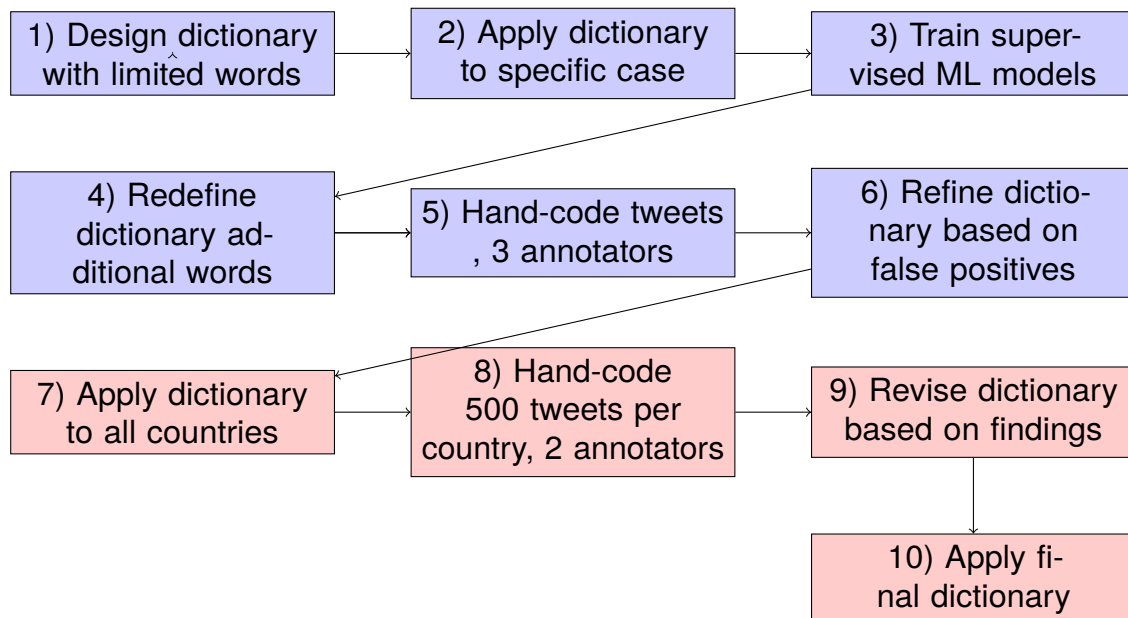


Figure C.3: Summary of the steps for detecting immigration-related tweets

Note: Blue refers to steps implemented with only one country (Perú), red refers to steps including both countries.

¹⁵The initial dictionary focuses on terms directly related to immigration and excludes specific terms like "Venezuelan" by itself.

¹⁶Three annotators coded the tweets, and any discrepancies were thoroughly re-evaluated.

C.2 Open AI

Our Python function configures ChatGPT-3.5 with a few instructions (detailed in the next section) and connects to the OpenAI API. The function processes all tweets and executes the given instructions. The function processes all tweets and executes the given instructions. Based on the prompt in [subsubsection C.2.1](#), the tweets were classified into one of the topics queried by PELA. The cost of using the OpenAI API for this project was XXX USD.

C.2.1 Prompt

The prompt we used to configure the language model parameters is detailed below. It is a complete list of instructions to avoid ambiguities during classification.

```
prompt = ( "Prompt for Classifying Tweets on Immigration:" "Objective: Classify
tweets from members of the Chilean Congress regarding their stance on immigration, "
"based on the content and implications of the tweet. Pay special attention to the context,
including irony, " "negation, and the specific use of language that may indicate criticism or
support of immigration policies." "Classification Categories:" "Highly Pro-Immigration (2):
Tweets that strongly advocate for immigration, emphasizing support through " "explicit
messages against discrimination, highlighting economic benefits, or welcoming senti-
ments. " "Includes tweets using negation or irony to criticize anti-immigration stances,
or directly accusing others of promoting hate or discrimination." "Pro-Immigration (1):
Likely supportive but less emphatic, subtly advocating for immigrant rights or benefits. "
"This includes criticizing restrictive policies proposed by others, questioning the motives
behind such policies, " "or using indirect speech to oppose anti-immigration rhetoric
(e.g., questioning the ethics or logic of restrictive policies)." "Neutral (0): Tweets that are
descriptive or neutral, discussing immigration-related events, administrative actions, " "or
mentioning issues without advocating for or against immigration policies. This includes
discussions on geopolitical " "or humanitarian issues in countries like Venezuela without
explicitly linking these issues to immigration stances." "Anti-Immigration (-1): Likely op-
poses immigration, subtly suggesting restrictions or expressing concerns " "over societal
impacts without explicit hostility. This includes agreeing with or supporting policies that
restrict or control immigration." "Highly Anti-Immigration (-2): Strongly opposes immigra-
tion, explicitly associating negative aspects such as " "crime or economic burdens with
immigrants, or advocating for strict regulations and deportations. " "Clear expressions of
support for restrictive or punitive immigration measures fall into this category." "Unrelated
(99): Tweets that do not pertain to immigration or only mention it in passing without any
clear stance " "or relevant content." "Key Considerations for Classification:" "1. Look
for indicators of irony, sarcasm, or negation that may flip the apparent meaning of a
statement. " "A tweet that on the surface might seem to support anti-immigration actions
but is actually criticizing such views should be considered pro-immigration." "2. Assess
the context of quotes: determine whether the politician is endorsing the views they quote
or using the quote to criticize those views." "3. Distinguish between criticism of foreign
political situations and immigration views: Criticism of a political situation in another
country should be classified as neutral unless it explicitly links to views on immigration."
"Analyze the tweets provided below, and for each, indicate only the number(s) it pertains
to (NEVER A TEXT), based on the central theme of the tweet in relation to the topics
and keywords listed." "Remember, the classification should be based on the tweet, not
on general expressions or sentiments. Do it from a Chilean Perspective. Provide only
the number(s) of the relevant topic(s), nothing else." )
```

C.2.2 Validation

To validate our classification strategy, we employed two approaches. The first involved human coding. From a pool of tweets pre-selected by dictionaries as potentially discussing immigration, we sampled 954 tweets for Chile and 646 for Peru. Two research assistants (RAs), undergraduate students majoring in social sciences, independently classified these tweets, determining whether they genuinely discussed immigration.

The level of agreement between the annotators was high ¹⁷. Subsequently, a coauthor reviewed the classifications and resolved any discrepancies between the RAs to establish the final reference classification.

This reference classification was then used to evaluate the performance of the OpenAI classification. Table C.4 presents the accuracy measures comparing the reference classification with OpenAI's results. The validation analysis reveals a strong agreement between OpenAI's classification and the reference classification, with an overall accuracy of 84.0% and a substantial Cohen's Kappa of 0.678. Particularly noteworthy is the excellent performance in identifying positive statements, demonstrated by high precision (0.866), recall (0.922), and F1-score (0.893) for this category. These results indicate that the OpenAI classification system is highly reliable.

Metric	Overall	Neutral (0)	Positive (1)	Negative (2)
Accuracy	0.840			
Cohen's Kappa	0.678			
Precision	-	0.780	0.866	0.782
Recall	-	0.580	0.922	0.809
F1-Score	-	0.664	0.893	0.796

TABLE C.4: Validation Metrics: OpenAI vs. Human Classification

C.3 Dictionaries

C.3.1 Immigration

This section presents the construction of dictionaries to identify the immigration issue. We begin with a minimum dictionary (refer to Figure C.4), followed by the incorporation of combinations of two words, as indicated in Figure C.5. Finally, we include combinations of three words (see Figure C.6).

Figure C.4: Minimum initial dictionary

- data = ["migrantes", "inmigrantes", "inmigrante", "xenofobia", "refugiados", "migratoria", "inmigracion", "migrante"]
- Venezuela = ['venez', 'maduro', 'hugo chavez']
- Socialism = ['socialis', 'comunis', 'cuba', 'nicaragua', 'hugo chavez', 'fidel castro', 'evo morales', 'daniel ortega']

¹⁷The percentage of agreement is 86, and the Cohen's Kappa value is 0.67 showing significant agreement between coders

Figure C.5: Dictionary of two words combinations

```
data = [ ("yosoyvenezolano", "años"), ("antecedentes", "extranjeros"), ("antimigratoria", "derechos"), ("antimigratoria", "presidente"),
  ("años", "inmigracion"), ("años", "japonesa"), ("campo", "extranjero"), ("cancilleriaperu", "migratoria"), ("cancilleriaperu",
  "venezolanos"), ("chile", "venezolanos"), ("ciudadanos", "extranjeros"), ("ciudades", "extranjero"), ("conmemoracion", "japonesa"),
  ("crisis", "huyen"), ("crisis", "migratoria"), ("derechos", "migrantes"), ("emigrar", "millones"), ("escapan", "miles"), ("exodo",
  "maduro"), ("extranjero", "migracion"), ("extranjero", "migratorias"), ("extranjero", "venezolanos"), ("extranjeros", "migraciones"),
  ("extranjeros", "socialismo"), ("extranjeros", "venezolanos"), ("extranjeros", "xenofobia"), ("familias", "inmigrantes"), ("familias",
  "migrantes"), ("familias", "migratoria"), ("familias", "venezolanos"), ("frontera", "migracionespe"), ("frontera", "migratoria"),
  ("frontera", "venezolanos"), ("hermanos", "huyen"), ("huyen", "maduro"), ("huyen", "venezolano"), ("huyen", "venezolanos"),
  ("inmigracion", "japonesa"), ("inmigracion", "migracion"), ("inmigrantes", "pais"), ("inmigrantes", "paises"), ("internacional",
  "migrante"), ("internacional", "refugiados"), ("japonesa", "marco"), ("japonesa", "migracion"), ("migracion", "solo"), ("migracion",
  "todas"), ("migracion", "venezolana"), ("migracion", "venezolanos"), ("migraciones", "personas"), ("migraciones", "situacion"),
  ("migraciones", "trabajo"), ("migraciones", "venezolanos"), ("migrantes", "niños"), ("migrantes", "pais"), ("migrantes", "personas"),
  ("migrantes", "situacion"), ("migrantes", "trump"), ("migrantes", "venezolano"), ("migrantes", "venezolanos"), ("migrantes",
  "venezuela"), ("migratoria", "niños"), ("migratoria", "paises"), ("migratoria", "personas"), ("migratoria", "politica"), ("migratoria",
  "trump"), ("migratorias", "puede"), ("migratorias", "solo"), ("migratorias", "todas"), ("miles", "refugiados"), ("niños", "trump"), ("pais",
  "xenofobia"), ("paises", "refugiados"), ("personas", "refugiados"), ("peruanos", "venezolana"), ("peruanos", "venezolanos"),
  ("peruanos", "xenofobia"), ("argentinos", "venezolana"), ("argentinos", "venezolanos"), ("argentinos", "xenofobia"), ("chilenos",
  "venezolana"), ("chilenos", "venezolanos"), ("chilenos", "xenofobia"), ("ecuatorianos", "venezolana"), ("ecuatorianos",
  "venezolanos"), ("ecuatorianos", "xenofobia"), ("colombianos", "venezolana"), ("colombianos", "venezolanos"), ("colombianos",
  "xenofobia"), ("problemas", "venezolana"), ("puede", "venezolanos"), ("trabajo", "venezolanos"), ("venezolana", "venezolanos") ]
```

Figure C.6: Dictionary with a combination of three words

```
data = [ ("frontera", "peru", "venez"), ("peruanos", "salud", "venezolanos"), ("perú", "educaci", "venez"), ("frontera", "cerr", "venez"),
  ("permiso", "renovable", "trabajo"), ("peru", "venezolanos", "lleg"), ("delinc", "frontera", "venez"), ("trabaj", "peruan", "venez"),
  ("venezol", "recibir", "peru"), ("venezol", "ingres", "frontera"), ("venezol", "salud", "frontera"), ("venezol", "golp", "miraflores"),
  ("venezol", "norte", "frontera"), ("venezol", "peruan", "dialogo"), ("venezol", "peruan", "explot"), ("venezol", "peru", "labor"),
  ("venezol", "fronter", "ecuado"), ("peru", "colombianos", "expuls"), ("frontera", "colombianos", "ingres"), ("frontera", "miner", "ilegal"),
  ("extra", "mineros", "ecuador"), ("refugio", "venezol", "frontera"), ("peru", "venezolanos", "proteger"), ("peru", "venezolanos",
  "porcentaje"), ("peru", "venezolanos", "hermandad"), ("peru", "venezolanos", "turista"), ("peru", "venezolanos", "calidad"), ("gracias",
  "venezolanos", "apoyar"), ("miles", "venezolanos", "apoyar"), ("argentina", "venezolanos", "peruanos"), ("afect", "venezol",
  "peruano"), ("crimin", "venezol", "fronter"), ("trabaj", "venezol", "solid"), ("preocupan", "venezol", "peruanos"), ("trabajo", "venezol",
  "visas"), ("nacionalizar", "venezol", "peru"), ("brazos", "venezol", "peru"), ("llegad", "venezol", "peru"), ("bienvenid", "drama",
  "venezolanos"), ("trabaja", "reconstru", "venezolanos"), ("venezol", "chile", "protest"), ("venezol", "chile", "captur"), ("venezol",
  "chile", "acogi"), ("venezol", "chile", "llegan"), ("venezol", "chile", "joven"), ("venezol", "peru", "comunidad"), ("venezol", "exilio",
  "ppkamigo"), ("venezol", "apoyemos", "peru") ]
```

C.3.2 Immigration, Venezuela

The data reveals interesting patterns in political discourse on immigration in Chile and Peru. In both countries, right-wing parties mention immigration less overall (0.30% in Chile, 0.12% in Peru), but focus more on Venezuela when discussing immigration (17.1% in Chile, 53.7% in Peru). Notably, attention to Venezuelan immigration is much higher in Peru than in Chile across all political spectrums, with the Peruvian right dedicating over half of their immigration-related tweets to Venezuela. In contrast, left and center parties in both countries show a more balanced distribution in their mentions of immigration and Venezuela, although with significant differences between the two countries.

	Chile		Peru	
	Immigration	Venezuela	Immigration	Venezuela
Left	0.35	1.20	0.17	0.56
Center	0.36	1.04	0.15	0.76
Right	0.30	1.17	0.12	1.34
Total	0.33	1.17	0.14	0.93
	Within Immigration Tweets		Within Immigration Tweets	
Left		14.3		25.6
Center		14.1		30.2
Right		17.1		53.7
Total		15.2		36.0

TABLE C.5: Summary Descriptives

Note: The numbers refer to percentages.

Source: Authors' own elaboration based on data retrieved from Twitter

C.4 Ideological Score

To unpack whether political leaders revise their language and ideological framing we estimate an ideological score per each tweet following Le Pennec (2021). This measure indicates to what degree a tweet of a politician is similar to the corpus of other tweets of the parties considered as left-wing or right-wing. This method builds on the *Wordscores* method (Laver, Benoit, and Garry 2003).

We computed the frequencies p_w^R and p_w^L that represent how frequent a word w is in all the tweets in the left or right

$$p_w^i = \frac{\sum_{j \in ic_{wj}}}{\sum_{j \in im_j}}$$

where c_{wj} is the counts of word w in statement j , and m_j is the total number of words of statement j . We estimated these frequencies in a year basis, allowing right-left to vary the way they expressed over time. We also performed this analysis for the tweets that were not classified as discussing immigration issues.

Using these frequencies, we can compute the right-wing score of each word w :

$$s_w = \frac{p_w^R}{p_w^R + p_w^L} - \frac{p_w^L}{p_w^R + p_w^L} \quad (4)$$

A tweet j score S_j , representing the parties' positioning in the left-right axis is calculated by:

$$S_j = \frac{\sum_w p_{wj} \times s_w}{S_R} \quad (5)$$

where S_R is the score of the aggregation of all the tweets of the right-wing group.¹⁸ Thus, the score of a tweet is not limited to a specific range, but a score of -1 represents an average tweet from the left, while a score of 1 represents an average tweet from the

¹⁸This is done to preserve the distance between the reference texts (Martin and Vanberg 2008).

right. In both cases, these scores are estimated by utilizing the vocabularies associated with the left and right wings for tweets not related to migration.

C.5 Topic Analysis: NMF

C.5.1 By party family

Chile							
Left				Center			
Topic 1	Topic 2	Topic 3	Topic 4	Topic 1	Topic 2	Topic 3	Topic 4
migrante todos este migracion pais como personas derechos para migrantes	dictadura colombia chilenos humanitaria crisis pais maduro venezuela chile venezolanos	pacto migracion proyecto crisis nueva politica gobierno sobre migratoria inmigracion	como millones israel años palestinos trump niños para refugiados inmigrantes	nuestro gobierno esta migracion inmigracion politica pais haitianos migratoria para	somos nuestro delincuencia chile niños como sobre hijos piñera inmigrantes	refugiados sjmchile chilenos claudioarriagad carolinagoic estan derechos contra como migrantes	miles democratica pueblo dictadura refugiados maduro sobre venezuela venezolanos chile
41.00	16.62	22.44	19.94	36.53	17.33	24.00	22.13
				proceso regular ordenada segura nuestro extranjeros pais migracion para migrantes	mayoría chilenos millones contra esta venezuela dictadura maduro chile venezolanos	presidente derechos gobierno esta niños crisis sobre nueva politica migratoria	miles bachelet tema chile para ilegales sobre ilegal inmigrantes inmigracion
				37.32	15.19	19.24	28.25

TABLE C.6: Topic Analysis - NMF 4 clusters regarding Immigration statements by ideological party family
Source: Authors' own elaboration based on data retrieved from Twitter.

Peru							
Left				Center			
Topic 1	Topic 2	Topic 3	Topic 4	Topic 1	Topic 2	Topic 3	Topic 4
peruanos pais mujeres esta como venezolanos sobre peru para migrantes	tambien discriminacion belmont delincuentes pais dice todos venezolanos contra xenofobia	internacional crisis como pueblo contra desplazados historia acnur para refugiados	rechazo mocion niños humanos donald derechos contra trump migratoria politica	sobre venezolana esta venezuela pais migrantes para peruanos peru venezolanos	unidos latinos politica para pais miles millones donald trump inmigrantes	este para porque machismo contra como belmont esta racismo xenofobia	tienen extranjero casi desde para solo ciudades como campo refugiados
56.36	16.36	16.16	10.71	58.04	14.69	16.36	10.77
				hermanos todo venezuela como esta maduro pais peruanos peru venezolanos	ahora congresoperu aniversario japon peru peruano amistad años inmigracion japonesa	países extranjeros gran xenofobia sobre migrantes personas migraciones inmigrantes para	pero derecho miles niños fueron solidaridad mujeres como mundo refugiados
				60.69	6.52	25.72	7.07

TABLE C.7: Topic Analysis - NMF 4 clusters regarding Immigration statements by ideological party family
Source: Authors' elaboration based on Twitter data.

C.5.2 By topic: Venezuela

<i>Chile</i>					<i>Peru</i>			
	Topic 1	Topic 2	Topic 3	Topic 4	Topic 1	Topic 2	Topic 3	Topic 4
	frontera	guaido	exodo	rector	hermanos	articulo	venezuela	ministro
	visa	tienen	regimen	primer	huyen	solidaridad	argentina	venezolano
	migratoria	ingreso	chilenos	muchos	esta	este	peru	extranjeros
	esta	migrantes	chileno	chilenos	migrantes	oportunidades	muchos	olivios
	migrantes	venezuela	nicolas	bello	maduro	para	libertad	trabajo
	venezolanos	diputado	gobierno	inmigrantes	para	inmigracion	millones	delincuentes
	humanitaria	asilo	venezolanos	venezolano	venezuela	peru	somos	como
	crisis	pide	dictadura	como	venezolanos	sobre	chile	venezolanos
	venezuela	venezolanos	contra	nuestro	peru	migracion	venezolanos	xenofobia
	para	chile	maduro	pais	pais	venezolana	peruanos	contra
%	38.4	20.9	24.0	16.7	43.0	13.2	19.7	23.9
Left (%)	42.6	20.3	21.2	15.9	35.1	14.9	21.6	28.4
Center (%)	35.1	18.0	27.9	18.9	34.7	16.7	20.7	27.9
Right (%)	33.3	23.2	25.7	17.7	53.1	9.9	18.5	18.5
Distance L-R	9.3	-2.9	-4.6	-1.8	-18.0	5.0	3.1	9.8

TABLE C.8: Topic Analysis - NMF 4 clusters regarding Immigration & Venezuela statements

Chile							
Left				Center			
Topic 1	Topic 2	Topic 3	Topic 4	Topic 1	Topic 2	Topic 3	Topic 4
migrante	dictadura	pacto	como	chilenos	quedar	llamo	venezolana
todos	colombia	migracion	millones	miles	refugiados	consulado	mundo
este	chilenos	proyecto	israel	nuestra	ingreso	perdio	inmigrantes
migracion	humanitaria	crisis	años	democratica	crisis	humanidad	forma
pais	crisis	nueva	palestinos	dictadura	minrel_chile	venezolana	como
como	pais	politica	trump	sobre	ayuda	hijo	primer
personas	maduro	gobierno	niños	maduro	situacion	fuera	chilenos
derechos	venezuela	migratoria	para	venezolanos	humanitaria	tacna	venezolano
para	chile	sobre	refugiados	venezuela	venezolanos	gobierno	pais
migrantes	venezolanos	inmigracion	inmigrantes	chile	para	chileno	nuestro
41.26	16.53	22.10	20.11	49.55	22.52	11.71	16.22
				Topic 1	Topic 2	Topic 3	Topic 4
				todos	mayoria	venezolana	comunismo
				libertad	ddhh	cuba	gobierno
				esta	dictador	crisis	presos
				democracia	venezolanos	responsabilidad	sobre
				pais	miles	visa	dice
				alimentos	chilenos	esta	pais
				este	gobierno	migratoria	venezolanos
				venezuela	contra	democratica	perseguidos
				venezolanos	dictadura	venezuela	politicos
				chile	maduro	para	inmigrantes
				29.96	32.07	28.69	9.28

TABLE C.9: Topic Analysis - NMF 4 clusters regarding Immigration & Venezuela statements by ideological party family

Peru							
Left				Center			
Topic 1	Topic 2	Topic 3	Topic 4	Topic 1	Topic 2	Topic 3	Topic 4
esto	presidente	migratoria	somos	contra	venezolanos	desafios	todos
solo	genero	internacional	tienen	huyen	5yjdy1nfi	universidad	xenofobia
dice	esta	maduro	otros	migrantes	refugio	migratoria	como
como	este	opinion	están	maduro	pedido	oportunidades	urresti
delincuentes	problema	peru	gobierno	chile	multipartidario	para	venezolanos
pais	para	humanitaria	pero	pais	cancilleriaperu	inmigracion	danielurresti1
esta	peru	crisis	trabajadores	venezuela	martinhidalgo	peru	trabajo
para	sobre	migrantes	trabajo	peru	canaln_	sobre	para
venezolanos	venezolana	refugiados	venezolanos	venezolanos	rppnoticias	migracion	delincuentes
xenofobia	migracion	venezuela	peruanos	peruanos	exitosape	venezolana	olivos
34.81	17.78	23.70	23.70	51.00	4.78	19.52	24.70
				Topic 1	Topic 2	Topic 3	Topic 4
				gobierno	r1sgtipaph	esta	listos
				sobre	receta	pais	sumarse
				esta	recaudo	delincuentes	ciudadanos
				venezuela	habitantes	todo	entre
				pais	poniendo	pueblo	ministro
				migrantes	dilapidadas	exodo	tenemos
				peruanos	pequeño	como	tambien
				para	vera	huyendo	extranjerios
				peru	obligados	huyen	medicos
				venezolanos	emigrar	maduro	contra
				60.19	4.94	25.31	9.57

TABLE C.10: Topic Analysis - NMF 4 clusters regarding Immigration & Venezuela statements by ideological party family

C.6 Topic Analysis: BERT

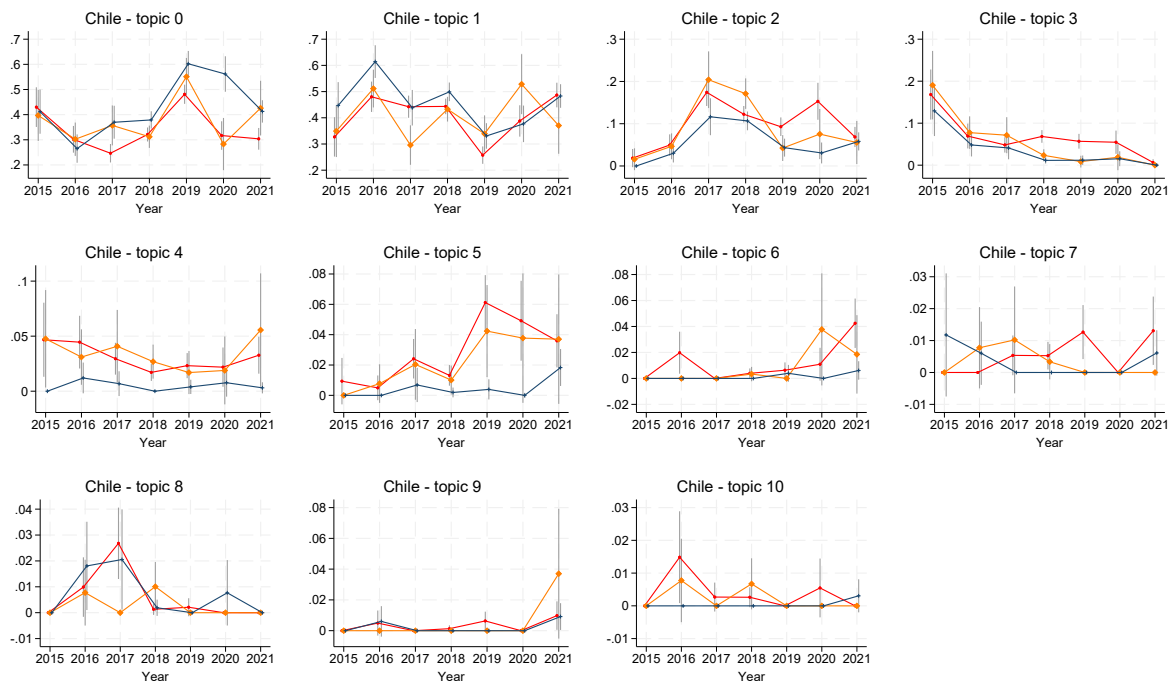
Additionally, we use BERTopic, which utilizes HuggingFace transformers and TF-IDF to generate document embeddings with pre-trained transformer-based language models. These embeddings are then clustered to create topic representations. Unlike traditional models like Latent Dirichlet Allocation or Non-Negative Matrix Factorization (NMF), BERTopic maintains semantic relationships among words. Once clusters are established, we use the OpenAI API to retrieve topic representations and identify keywords for each cluster. The language is set to ‘multilingual,’ and the algorithm automatically determines the number of topics. This method outperforms classical models that do not use transfer learning (Laurer et al. 2024). Applying such models to political texts is relatively new and has been implemented recently (Bestvater and Monroe 2023; Licht 2023; Widmann and Wich 2023; Laurer et al. 2024; González-Rostani, Incio, and Lezama 2024).

Figures C.7 and C.8 confirm similar results, with 11 automatically generated BERT-topics over time and by party family for Chile and Peru, respectively. These figures show divergence in emphasis by different party families, at least in certain periods, with few exceptions such as the discussion on the Pope’s appeal for sanctuary for refugees. In Chile, right-wing legislators focus on the impact of Venezuelan immigrants and regulations (e.g., topic 0), while left-wing and center legislators emphasize social issues and immigrant women’s rights (e.g., topic 5). In Peru, right-wing legislators lead discussions on the Venezuelan migratory impact (e.g., topic 0), while the left and center prioritize defending immigrant rights and condemning discrimination (e.g., topics 1 and 2), with the left uniquely addressing violence and human rights violations against female immigrants (topic 7). Overall, the right concentrates on crisis impact and regulation, while the left emphasizes immigration rights and societal concerns.

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Figure C.7: Salience of each topic in Chile across party families



References. Red: Left, Orange: Center, Blue: Right. Note: the DV is the salience of each operationalized as the ratio of statements about each of the topics to the total number of public statements made about Immigration. To compute these means, a control using the length of the tweet was used. Robust standard errors were computed. Left, Center and Right are defined as discussed in Figure . Topics: 0: "Venezuelan immigrants in Chile and their impact on the country's migration policies", 1: "La crisis migratoria y la política del gobierno sobre los derechos de los niños y los inmigrantes en el país, junto con el proyecto de ley de migración extranjera en proceso en el gobierno", 2: "Haitian Migration Crisis in Chile", 3: "Palestinian refugees and their situation in Israel and other countries", 4: "Xenofobia and its implications", 5: "Social Issues and Women's Rights", 6: "Vacunación de migrantes en situación irregular y su impacto en la salud pública", 7: "Hate Crimes and Anti-Immigrant Sentiment in Germany", 8: "Migration and its Impact on European Countries", 9: "Migrant Camp Fire and Education Blame", 10: "Immigration history and experiences of Italians and Germans from Trieste to Yugoslavia, and the impact on their lives" Source: Authors' own elaboration based on data retrieved from Twitter.

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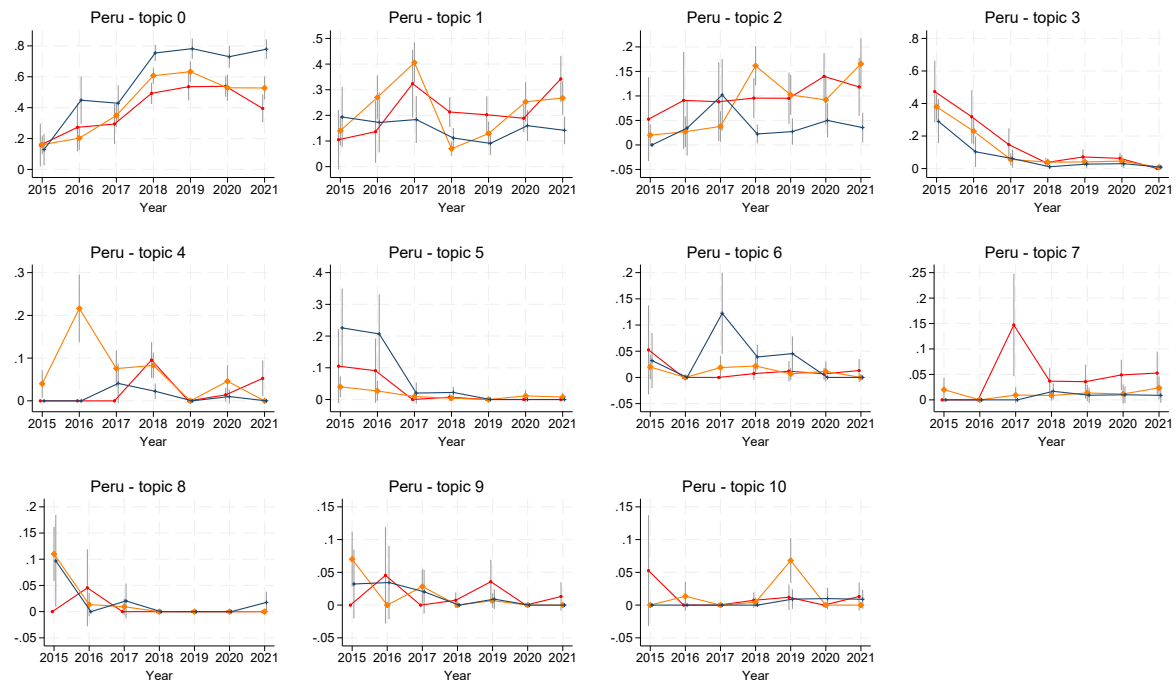


Figure C.8: Salience of each topic in Peru across party families

References. Red: Left, Orange: Center, Blue: Right. Note: the DV is the salience of each operationalized as the ratio of statements about each of the topics to the total number of public statements made about Immigration. To compute these means, a control using the length of the tweet was used. Robust standard errors were computed. Left, Center and Right are defined as discussed in Figure . Topics: 0: "Venezuelan migration to Peru and its impact", 1: "Política migratoria y derechos de los migrantes", 2: "Xenophobia and discrimination against foreigners and citizens, including racism, homophobia, and misogyny", 3: "Crisis de refugiados en Europa y el mundo", 4: "Donald Trump's Immigration Policy", 5: "Crisis de refugiados en Alemania y Europa", 6: "Japanese-Peruvian Friendship and Immigration Anniversary", 7: "Women's Rights and Violence Against Migrant Women", 8: "Syrian and Afghan refugees fleeing to Europe, living conditions, and humanitarian efforts", 9: "papa francisco pide acojan refugiados, familia, inmigrantes y migrantes en iglesias de europa", 10: "cities prepared for migration and urban planning" Source: Authors' own elaboration based on data retrieved from Twitter.