

# ***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 2020 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. 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 voters' 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.<sup>1</sup> South-South migrants often flee political and economic turmoil but share similar demographics with locals in their host countries. Our research aims to fill this gap.

This article examines how an immigration shock reshapes political agendas, especially by introducing a new topic during a crisis in the Global South. Does immigration salience rise across all party families? How do politicians position themselves, and do those in regions more exposed to immigration respond differently? We argue that such a crisis adds a new, unclaimed issue to the political agenda—one that demands attention due to its significance. In the short term, this shock provides parties with opportunities to differentiate and strategically frame the issue to their advantage. Specifically, we expect that, as immigration is a new agenda item for these Global South countries, no single party will claim ownership over it. This contrasts with developed countries, where decades of migration debates have typically seen right-wing parties dominate immigration issues (e.g., Gessler and Hunger 2022; Hutter and Kriesi 2022; Grande, Schwarzbözl, and Fatke 2019).

Regarding issue framing, we first expect that following a South-South immigration shock, exposed politicians will adopt more pro-immigration and humanitarian stances,

<sup>1</sup> 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.

as cultural anxiety is less likely in contexts of low cultural distance (Tabellini 2020; Rozo and Vargas 2021). Low cultural distance may enhance conditions for contact theory, reducing anxiety and fostering empathy between natives and migrants (Allport, Clark, and Pettigrew 1954; Pettigrew and Tropp 2008). These humanitarian, pro-immigration stances are expected to be more prevalent among left-wing politicians.

Second, we anticipate that politicians, regardless of regional exposure, may use immigration to amplify fears and critique the migrants' home government if it holds an opposing ideology. For example, if a left-wing government drives a crisis in the sending country, right-wing politicians in the receiving country may frame the issue as a warning against socialism, positioning it as a potential threat to the host country. In South-South migration contexts, such warnings can resonate with the electorate, allowing right-wing politicians to critique leftist ideologies while appealing to exiles disillusioned with their home regime. Targeting the sending country's government, rather than migrants themselves, may be particularly effective in the Global South, where liberal immigration policies often grant migrants swift access to voting rights (Blair, Grossman, and Weinstein 2022; Hammoud-Gallego and Freier 2023). This strategy allows politicians to associate ideological opponents with the sending regime and gain support from frustrated immigrants who are soon-to-be voters.

We test this theory using the Venezuelan exodus, which has brought over 6.6 million immigrants to Latin American countries. To do this, we develop a novel dataset of online political discourse from members of the Chilean and Peruvian parliaments—two major destinations for these migrants. This dataset includes over 3 million tweets from 2013 to 2020, enabling us to examine how immigration is integrated into daily political discourse due to Twitter's temporally granular measures (Esberg and Siegel 2023; González-Rostani, Incio, and Lezama 2024). This approach complements prior studies that rely on static data from electoral manifestos or campaign strategies (e.g., Green-Pedersen and Otjes 2019; Ruedin and Morales 2019; Van Spanje 2010).

Using a range of computational text-analysis methods—from simple dictionaries to advanced techniques like unsupervised topic analysis and OpenAI models—we

combine these approaches with an instrumental variable strategy to address potential endogeneity from immigrants' self-selection into specific regions. Our findings show that politicians' discourse on immigration became highly salient following the immigration shock, with parties framing the issue in distinct ways. All party families<sup>2</sup> increased the salience of immigration in their discourse, with no significant differences observed among them. Additionally, we find limited evidence that regional exposure affects salience, suggesting a disconnect between national debates and local experiences. Our analysis also reveals that immigration is a highly divisive issue shaped by ideological orientations.

We find that pro-immigration discussions were more prevalent in exposed regions, primarily driven by left-wing politicians. In contrast, anti-immigration rhetoric shows no dependence on immigrant population size. This aligns with recent studies reporting 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 of immigration framing across party families shows that right-wing politicians are more likely than left-wing politicians to reference Venezuela's socialist regime, while left-wing politicians favor a human rights frame. These findings indicate that the immigration crisis has been strategically leveraged by politicians, with right-wing parties using it to reinforce their electoral advantage by associating leftist ideology with the origins of this humanitarian crisis. We also show that most right-wing statements are pro-immigration, which suggests that the framing of immigration is highly context-dependent (Chong and Druckman 2007; Zaller 1992), diverging from the typical anti-immigration framing employed by right-wing parties in developed countries (Gessler and Hunger 2022; Hutter and Kriesi 2022; Abou-Chadi and Krause 2020). Additionally, our results align with previous evidence showing increased right-wing support following the immigration shock, particularly in regions with a history of left-wing insurgency (Rozo and Vargas 2021). They are also consistent with Holland, Peters, and Zhou's 2024

<sup>2</sup>We define party families as groups of parties based on their ideological positions, classified as left, center, and right (see Figure for further details).

findings that Colombian voters often misidentify Venezuelan migrants as leftists due to concerns about similar political shifts in their own country.

Our empirical approach employs novel techniques, including OpenAI's API, to classify political statements as pro-, neutral-, or anti-immigration, extending prior work that demonstrates OpenAI's utility for topic classification (Gilardi, Alizadeh, and Kubli 2023; González-Rostani, Incio, and Lezama 2024). Specifically, we use this tool to capture political stances, moving beyond topic identification and traditional sentiment analysis. Our language-agnostic approach enables analysis of political speech across languages, offering flexibility for comparative studies (Licht 2023; Courtney et al. 2020; De Vries, Schoonvelde, and Schumacher 2018).

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. 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, with our analysis of Chile and Peru allowing for comparison across two major recipient nations.

Our findings underscore the significant, polarizing role elites play following an immigration shock. Understanding the frames employed by elites is essential, as voter attitudes toward immigration are shaped by the salience of specific frames (Schleiter,

Tavits, and Ward 2022; Getmansky, Sinmazdemir, and Zeitzoff 2018; Brader, Valentino, and Suhay 2008; Pérez 2015; Kustov, Laaker, and Reller 2021). For instance, our findings on pro-immigration frames suggest that politicians can encourage greater tolerance toward migrants (Schleiter, Tavits, and Ward 2022). Conversely, the anti-left and anti-socialism frames employed by right-wing politicians may heighten polarization and anti-migrant bias (Holland, Peters, and Zhou 2024). There is also potential for a right-wing populist backlash in the region post-shock (Rozo and Vargas 2021), with migrants (as new voters) likely reinforcing this conservative shift.

## THE EFFECT OF IMMIGRATION SHOCK ON POLITICAL DISCOURSE

### *An immigration crisis as a political opportunity*

External shocks offer unique opportunities for changes in the political arena (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), 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, 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).

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. 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 introduced 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](#)).

### ***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 Roza 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 immigration 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.

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).<sup>3</sup> 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.

<sup>3</sup>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).

*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 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 wealthy countries who argue that the right promotes xenophobia after an immigration shock (e.g., Gessler and Hunger 2022; Hutter and Kriesi 2022), we contend that in regions affected by political crises from similarly developed countries, right-wing candidates will criticize migrants' leftist governments rather than the migrants themselves. This strategy leverages perceived similarity and familiarity between countries. Our argument aligns with Holland, Peters, and Zhou (2024), who finds that voters often overestimate the number of leftist immigrants and worry about their electoral impact. Similarly, Rozo and Vargas (2021) show that Colombian municipalities with histories of left-wing insurgency are more likely to support right-wing politicians following 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

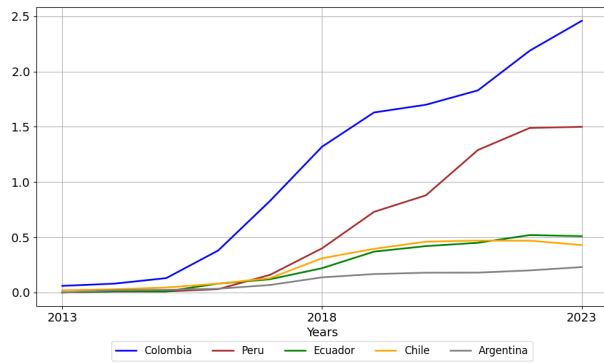
migrants likely oppose leftist governments, providing right-wing parties an opportunity to ally with these migrants, who may eventually become a supportive voter base.<sup>4</sup> Therefore, we expect right-wing politicians to focus on anti-socialism and anti-Venezuela rhetoric rather than anti-immigration. 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 examining 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 accusations of electoral irregularities. Falling oil prices led to reduced government revenue, severe shortages, high inflation, and an economic contraction of two-thirds of Venezuela's GDP from 2013 to 2019 ([Knight and Tribin 2020](#)), resulting in protests and the exodus of approximately 7.7 million Venezuelans ([R4V 2024](#)).

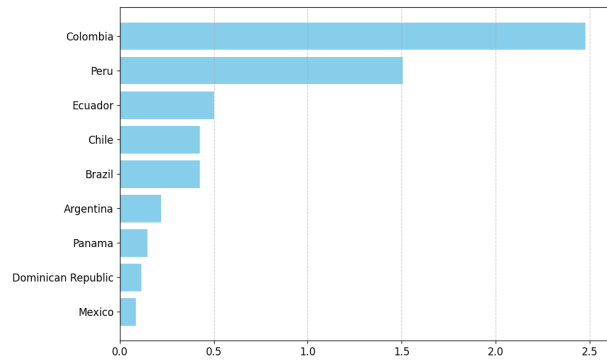
This case offers a unique opportunity to study the political effects due to the sudden influx of immigrants into Spanish-speaking Latin American countries unaccustomed to high immigration levels, triggered by factors exogenous to the recipient countries. The influx began in 2015 and accelerated after 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 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).

<sup>4</sup>Holland, Peters, and Zhou ([2024](#)) document that only 12% of Venezuelan migrants identify as leftists.



**Figure 1:** Evolution of the Number of Immigrants in the Top 5 Spanish-Speaking Countries

Note: Y-axis represents millions of Venezuelan nationals. Source: Authors' own elaboration based on R4V (2024).



**Figure 2:** Latin American Countries with the Highest Number of Venezuelan Immigrants

Note: X axis represents millions of Venezuelan nationals reported by country. Source: Authors' own elaboration based on R4V (2024).

## DATA AND METHODS

To capture the complex dynamics of immigration, we use original, temporally disaggregated data. Traditional sources, such as elite surveys and expert datasets, provide only infrequent snapshots, making it difficult to assess the nuanced attitudes and responses of political actors accurately. We collected over two million tweets posted by politicians from 2013 to 2020. We first examine the immigration crisis's effect on the salience of the issue among politicians. Then, using OLS analysis with an instrumented immigration shock, we estimate its impact on different framing topics—such as socialism and pro- or anti-immigration stances.

### The Cases

We focus our analysis on Peru and Chile, two primary destinations for Venezuelan immigrants (see Figure 2). We examine the migration shock's impact on parliamentary elites, tracking their actions before and after the crisis. Specifically, we analyze legislators who were in Congress when the shock occurred. In Chile, we study members of the Congress elected in 2018, while in Peru, we focus on those elected in 2016.<sup>5</sup>

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

<sup>5</sup>The Chilean Congress elected in 2018 served until 2022. In Peru, the Congress elected in 2016, originally intended to serve until 2021, was dissolved in December 2019 due to a political crisis. A new Congress was then elected in 2020 to complete the term until 2021.

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 the shock, 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).

## **Data**

### *Politicians statements*

To examine the relationship between immigration exposure and politicians' discourse on Twitter, we identified the accounts of legislators from 2013 to 2020, covering the period before, during, and after the Venezuelan exodus. Using the Twitter API, we collected all tweets from 223 Chilean and 295 Peruvian legislators, then, we retained only those who served in Congress during the immigration shock—141 and 114 legislators for Chile and Peru, respectively (see Table D.7).<sup>6</sup> Our dataset, which includes retweets, quotes, replies, posting dates and times, and user handles, represents 88% of Peruvian legislators and 71% of Chilean legislators. We analyze changes in saliency across the entire period (2,026,110 tweets), with a specific focus on rhetoric about immigration after the shock occurred 2018–2019 (515,433 tweets).

Unlike complex and infrequent party manifestos (Dolezal et al. 2012), Twitter offers daily insights into politicians' strategies, aligning with the dynamic approach to party

<sup>6</sup>Data collection occurred between November and December 2023.

politics as showed 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). 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 2024). For instance, regarding the Venezuelan crisis, previous studies have demonstrated that Twitter serves as a useful tool for citizens in exile (Esberg and Siegel 2023).

### *Exposure to Immigrants*

Our objective is to estimate the causal effect of Venezuelan immigration on legislators' publications. To address potential endogeneity, we employ a shift-share instrumental variables strategy, using historical Census data on immigrant settlement distributions. This widely used approach in migration literature, as demonstrated by Ajzenman, Dominguez, and Undurraga (2023), Rozo and Vargas (2021), and Lebow et al. (2024), helps isolate exogenous variation in immigrant inflows. Our analysis draws on the 2007 and 2017 Censuses for Peru and the 2002 and 2017 Censuses for Chile, with 2017 being the latest available for both countries. Immigrant shares per electoral district, along with recent immigrant stocks, are calculated using the 2017 Census for both countries. We estimate variation over the past five years based on a question identifying individuals' residence during that period and their country of origin. Figure 3a shows the regional share of foreign arrivals in Chile and Peru between 2012 and 2017. We supplement these data with bilateral migrant flow data from 45 countries, recorded by the UN Population Division, to construct immigration inflow variables for 2010–2017.

For the initial immigration share, we use data from Peru's 2007 Census and Chile's 2002 Census, supplemented by individual-level visa and residency records to update the Chilean data. In Chile's case, we focus on authorized immigration, justified by the country's geographic isolation due to the Andes (Ajzenman, Dominguez, and Undurraga 2023).

*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. Since CHES:LA includes only large parties, we coded the remaining parties with congressional representation as left, right, or center.<sup>7</sup>

***Measurements: Legislators' Rhetoric***

Our outcome variables capture politicians' immigration discourse through a text-based analysis of Twitter statements. We first identified immigration-related tweets dating back to 2013, then estimated variations in strategies and topics across party families, as well as the impact of immigration exposure on these framings. The specific outcomes are defined below.

*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 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 for full dictionaries). 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. Further details on the steps used to identify these statements are provided in Appendix C.1.

<sup>7</sup>See appendix B for the list of parties included in the analysis.



Figure 3b shows the share of posts about immigration 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). 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 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 2024).

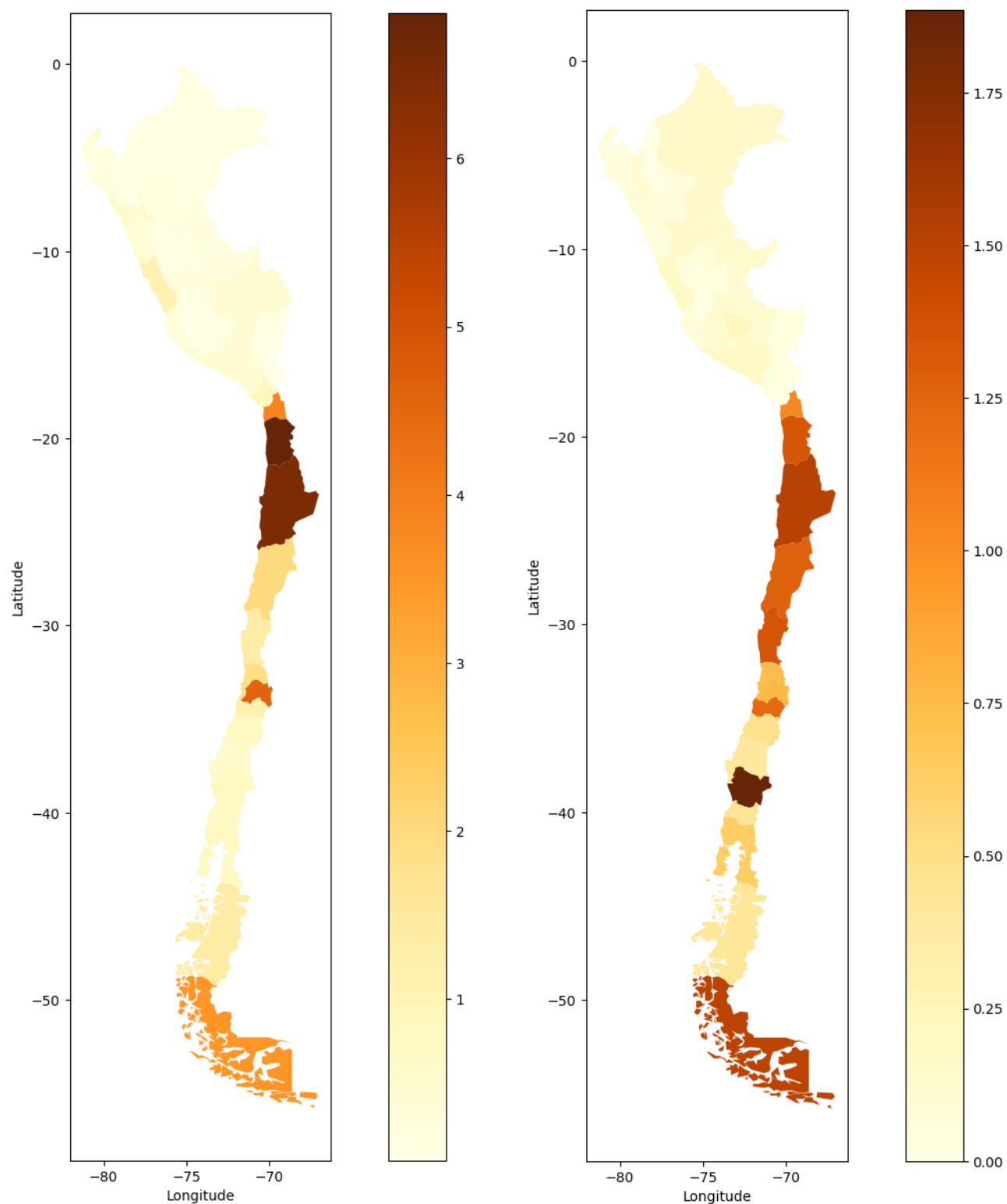
Each tweet about immigration was scored from "Highly Pro-Immigration" (2) to "Highly Anti-Immigration" (-2), with a neutral category (0). For our analysis, we simplified the classification into pro-immigration, neutral, and anti-immigration. We validated this method with two RAs who classified 1,376 tweets, and OpenAI achieved an accuracy rate of 84%.<sup>8</sup>

### *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). Our 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.<sup>9</sup> A score of -1 indicates an average left-wing tweet, while a score of 1 indicates an average right-wing

<sup>8</sup>Further details about the prompt and validation process are provided in Appendix C.2.

<sup>9</sup>This maintains the distance between reference texts (Martin and Vanberg 2008).



**(a) New Immigrants in the period 2012-17**  
 Note: This map shows regions in Chile and Perú. The colors illustrate the share of the population in different regions in Chile and Perú that have arrived from a foreign country in the period 2012-2017. Source: 2017 census for Chile and Perú.

**(b) Share of Tweets discussing immigration in 2018**  
 Note: This map shows regions in Chile and Peru. The colors illustrate the share of the posts by legislators representing the different regions in Chile and Perú that refer to immigration. Source: authors calculations.

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

tweet. Detailed calculations are provided in Appendix C.2. This method follows the approach used by Le Pennec (2021).

### *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 on immigration.<sup>10</sup>

Additionally, we examine two frames when discussing immigration: Venezuela and socialism. We identify tweets related to these topics using keyword dictionaries.<sup>11</sup> For a summary of the measures discussed in this section, see Table D.8.

### ***Empirical Strategy***

To analyze elite responses to the immigration shock, we begin by assessing the salience of immigration issues over the period of analysis (2013-2020) across our entire sample of tweets. The primary dependent variable for these analyses is the proportion of immigration-related statements among all tweets. This metric captures changes in the prominence of immigration in legislators' discourse. We then narrow our focus to immigration-related statements specifically from the years immediately following the immigration shock (2018-2019). At this stage, we aggregate statements at the legislator level and examine various framings—such as policy stances, topics, and ideological dimensions—using the share of each framing within immigration statements as dependent variables.

We estimate the following OLS model, using individual legislators as the unit of analysis. For the salience analysis, the sample includes all politicians, including those who never discussed immigration. When analyzing the construction of immigration

<sup>10</sup>For more on NMF, see O'Callaghan et al. (2015), and Greene and Cross (2017) for its use in political speech analysis.

<sup>11</sup>Refer to Appendix C.3 for dictionary details. Table C.6 presents the percentage of tweets for each frame, and Table D.9 summary statistics by legislator.

rhetoric, we restrict the sample to those who have tweeted about immigration. Since we are interested in the heterogeneous responses across party families, we include dummies for right and center, with left as the baseline. Control variables (vector  $X_{pt}$ ) include the politician's gender and the total tweet count per politician (to weigh more active users). We also include fixed effects by congressional district, which control for time-invariant characteristics of each region ( $\delta_i$ ):

$$Y_p = \beta_0 + \beta_1 \text{Right}_p + \beta_2 \text{Center}_p + \gamma X_p + \delta_i + \varepsilon_p \quad (1)$$

Where  $p$  refers to the politician, and  $i$  refers to their district. The coefficient of interest,  $\beta_1$ , represents the effect of politician  $p$ 's right-wing ideology on tweeting about immigration relative to their counterparts on the left. For instance, when examining immigration salience, a positive  $\beta_1$  ( $\beta_1 > 0$ ) would suggest that right-wing legislators emphasize this issue more than left-wing legislators within the same electoral district. The dependent variable  $Y_p$  varies by specification: for salience, it represents the percentage of posts about immigration relative to all posts of politician  $p$ ; for immigration rhetoric, it indicates the percentage of a given topic or framing among immigration-related statements tweeted by politician  $p$ . The primary independent variable in this model is  $\text{Right}_p$ , a binary indicator for right-wing party affiliation.

To further identify the impact of immigration exposure on politicians' behavior, we exploit regional variation in immigration inflows. Regions with higher immigrant influxes—such as frontier and capital areas may exhibit a greater propensity to engage in immigration discourse (see [Figure 3a](#) and [Figure 3b](#)). We estimate this relationship as follows:

$$Y_{p,18-19} = \beta_0 + \beta_1 \text{Right}_p + \beta_2 \text{Center}_p + \beta_3 \Delta \text{imm}_{p,12-17} + \gamma X_p + \mu_c + \varepsilon_p \quad (2)$$

Where the dependent variable  $Y_p$  is similar to the one described in equation 1;  $\beta_1$ , captures the effect of right-wing affiliation on  $Y_p$  relative to the left, and  $\beta_3$  represents the impact of exposure to the immigration shock on  $Y_p$ . Moreover,  $\Delta \text{imm}_p = \frac{\text{NewImmigrants}_p}{\text{Population}_p}$

represents the share of new immigrants relative to the population over the past five years. Control variables in this model are consistent with those in model 1, but since we are incorporating regional exposure, we do not include fixed effects by district. Instead, we include a dummy per country  $c$  ( $\mu_c$ ) and the number of legislators by district  $i$ . Another variation to this model is the incorporation of an interaction term between the party family and the share of immigrants.

To estimate the effect of new immigrants' arrival on different dependent variables, we focus on the share of immigrants who arrived from another country in the last five years (2012-2017) in each electoral district of the member of Congress  $p$ : ( $\Delta imm_p = \frac{NewImmigrants_p}{Population_p}$ ). This question is asked in both countries' censuses.

#### *Measurement: Regional Exposure to the Immigration Shock*

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.

$$\widehat{\Delta imm_{p,12-17}} = \sum_n \theta_{p,07}^n \times \Delta \log(imm)_{12-17}^n \quad (3)$$

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 (pre-shock). The term  $\Delta \log(imm)_{12-17}^n$  represents the log changes in the stock of immigrants in each district. Using UN data, the flow was computed for a few top sources (Argentina, Bolivia, Brazil, China, Colombia, Ecuador, Peru, Spain, the United States, and Venezuela for both countries, and Haiti for Chile and Japan for Peru) to other LAC countries (excluding Chile and Peru).

Our shift-share instrument addresses potential endogeneity by leveraging pre-existing settlement patterns. The orthogonality of the shock to other unobserved variables, required for a causal interpretation of equation 2, relies on the pre-shock distribution of immigrant communities rather than the new immigrant influx itself. This

instrument assumes that new migrants tend to settle in areas with established ethnic communities and that the initial size of these communities is unaffected by any concurrent political shifts. In the absence of the shock (i.e., the Venezuelan exodus), it is assumed that political rhetoric trends would have remained consistent across regions, regardless of initial immigrant shares. Therefore, variation in these initial shares allows us to identify the effect of exposure on political behavior.

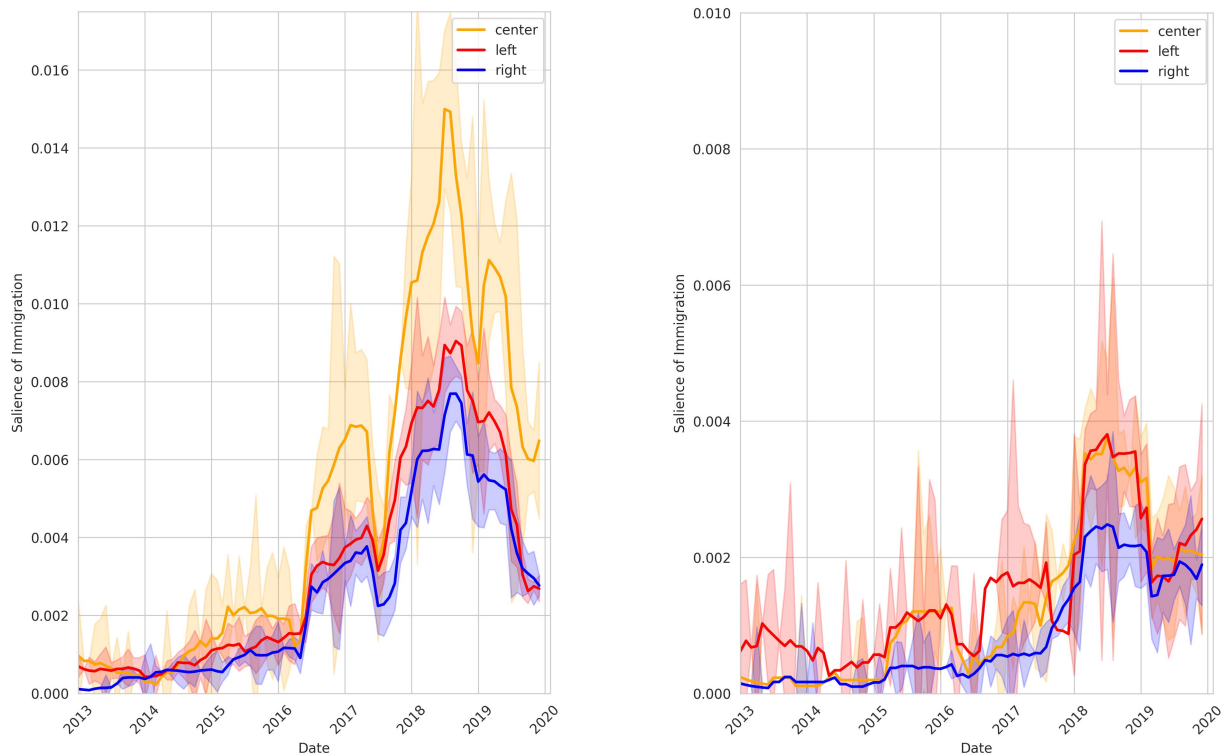
## RESULTS

This section presents evidence that the Venezuelan exodus has significantly amplified Twitter discussions on immigration among political elites in host countries. Notably, this increase is driven more by national-level debates than by regional exposure to the immigration shock. Consistent with our theory, since immigration was not on the agenda before this shock, all major party families—both left and right—increased its salience, with no single group monopolizing the issue. Further analysis of ideological influence on immigration coverage reveals that party families took divergent approaches. Among leftist legislators, exposure to immigration correlates with a marked increase in pro-immigration statements. In contrast, exposed right-leaning politicians, show no significant difference in their pro- or anti-immigration rhetoric; instead, they frequently frame the issue within anti-socialism and Venezuela's regime context.

### *Rising Salience of Immigration*

We argue that the sudden influx of Venezuelan immigrants increases the salience of the immigration issue among political elites. As a new agenda issue, we expect this increased attention to span all-party families, without any single-party family dominating the discourse. [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. The topic gained traction after this first wave, 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



**Figure 4: 12-Month Moving Average of Immigration Salience - Chile and Peru (2013-2020)**

Note: the figure shows salience of immigration operationalized as the ratio of statements about immigration to the total number of public statements made. For this plot, we included legislators' tweets from 2013 to 2020. Left (red), Center (yellow), and Right (blue) are defined as discussed in B. Source: Authors' own elaboration based on data retrieved from Twitter

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 2024; Hemphill, Russell, and Schöpke-Gonzalez 2021; Barberá et al. 2019). As a benchmark, even at its peak, Covid-19—one of the most severe crises of the 21st century—comprised only 10% of statements (see Appendix E).<sup>12</sup> 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. In comparing these countries, we observe that in Chile, the increase in salience is steeper than among Peruvian parliamentarians.

In both cases, we do not see differences across party families in the short term. Table 1 further demonstrates a similar increase in immigration salience across party lines. In Column 1, we fail to reject the null hypothesis that right or centrist legislators

<sup>12</sup>As another benchmark, González-Rostani, Incio, and Lezama (2024) documents that in 2015, the largest topics in Chilean Congress members' tweets were Education (6.82%) and Health (4.36%). With a 1.5% share, as we document for Immigration, it would rank as a top issue, exceeding topics like Corruption, Crime, Inflation, Unemployment, Gender, Drug Trafficking, and Foreign Debt.



exhibit higher salience than the left, indicating similar levels of attention across party families.

| VARIABLES       | (1)<br>Imm Tweets (%) | (2)<br>Imm Tweets (%) | (3)<br>Imm Tweets (%) |
|-----------------|-----------------------|-----------------------|-----------------------|
| Right           | -0.104<br>(0.109)     | -0.115<br>(0.096)     | -0.147<br>(0.165)     |
| Center          | 0.134<br>(0.134)      | 0.132<br>(0.118)      | 0.121<br>(0.127)      |
| Share Imm       |                       | 0.038<br>(0.026)      |                       |
| Right*Share Imm |                       |                       | 0.046<br>(0.035)      |
| Observations    | 241                   | 234                   | 234                   |
| R-squared       | 0.329                 | 0.138                 | 0.136                 |
| Controls        | Yes                   | Yes                   | Yes                   |
| Model           | OLS                   | IV                    | IV                    |
| F-stat          |                       | 112.3                 | 29.60                 |

Robust standard errors in parentheses

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

TABLE 1: Effects of exposure to immigration on legislators' salience of immigration.

*Notes:* The table displays the results of OLS and IV estimates on tweets posted in 2018 and 2019 from all legislators included in the analysis. Individual members as the unit of analysis. The dependent variables are the share of immigration-related tweets as explained in subsection C.1. 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.

An alternative explanation could be that regions with high immigrant influxes, like frontier and capital cities, might be more engaged in immigration discourse due to direct impacts such as demographic shifts, economic changes, and cultural diversity (Ajzenman, Dominguez, and Undurraga 2023; Caruso, Canon, and Mueller 2021; Roza and Vargas 2021). Our theory suggests that legislators should reflect constituents' concerns, viewing immigration as salient in these regions. If no association exists, however, national debate rather than local experiences may be driving salience. We test this using the IV approach outlined above.

Columns 2 and 3 from Table 1 indicate that regional exposure to the immigration shock does not explain immigration salience. Even when interacting exposure with party families (Column 3), we fail to reject the null hypothesis. These results suggest

that immediate consequences of the immigration influx or district representation do not necessarily drive the increased salience among legislators.

### ***Position regarding Immigration Across Party Families***

We have shown that immigration salience has increased, but this does not seem to be explained by regional exposure or party ideology. Does this suggest that left- and right-wing positions converge on the immigration issue when we consider South-South migration shocks? [Table 2](#) presents our findings, predicting which party family is more likely to hold pro- or anti-immigration positions based on our OpenAI-assisted classification. The table indicates that, on average, right-wing legislators post 18.4 percentage points (pp) fewer pro-immigration tweets and 12.9 pp more anti-immigration tweets than left-wing legislators (Columns 1 and 2, respectively). One possible explanation is that right-wing legislators represent regions with higher immigration exposure. To test this, we incorporate regional exposure as a variable in the models and find that, even when controlling for exposure, right-wing legislators are still less pro-immigration than left-wing legislators, though significant differences in anti-immigration statements are no longer observed (Columns 3 to 6).

Additionally, Columns 3 and 5 reveal that legislators from regions with higher immigration exposure post 3.2 pp more pro-immigration statements. However, this increase appears mainly driven by left- or center-aligned legislators (Column 5). Therefore, although we reject the hypothesis that one party family exclusively owns the immigration issue, we still find distinct positional differences between them.

Notably, while right-wing legislators generally express less pro-immigration views than their left-wing counterparts, the majority of their statements (over 60% of tweets) are still pro-immigration, with less than 20% being anti-immigration. [Figure 5](#) displays the density distribution by party family, presenting a contrast to findings from developed countries, where right-wing parties predominantly adopt anti-immigration positions (e.g., Gessler and Hunger [2022](#); Hutter and Kriesi [2022](#); Abou-Chadi and Krause [2020](#)). This limited xenophobic response and generally pro-immigration stance raise the question of

| VARIABLES          | (1)<br>Pro-Imm        | (2)<br>Anti-Imm      | (3)<br>Pro-Imm        | (4)<br>Anti-Imm    | (5)<br>Pro-Imm      | (6)<br>Anti-Imm   |
|--------------------|-----------------------|----------------------|-----------------------|--------------------|---------------------|-------------------|
| Right              | -18.473***<br>(5.660) | 12.941***<br>(4.018) | -38.846**<br>(18.096) | 11.636<br>(11.600) | -14.313*<br>(7.893) | 8.079<br>(5.674)  |
| Center             | -1.073<br>(8.782)     | 9.091<br>(7.621)     | -12.694<br>(13.160)   | 18.059<br>(11.272) | -1.223<br>(7.962)   | 10.220<br>(7.317) |
| Share Imm          |                       |                      | 3.180**<br>(1.363)    | 0.055<br>(1.167)   |                     |                   |
| Right*Share Imm    |                       |                      |                       |                    | 0.695<br>(1.871)    | 1.986<br>(1.880)  |
| No Right*Share Imm |                       |                      |                       |                    | 2.931*<br>(1.694)   | -0.062<br>(1.023) |
| Observations       | 182                   | 182                  | 176                   | 176                | 176                 | 176               |
| R-squared          | 0.357                 | 0.395                | 0.250                 | 0.197              | 0.112               | 0.073             |
| Controls           | Yes                   | Yes                  | Yes                   | Yes                | Yes                 | Yes               |
| Model              | OLS                   | OLS                  | IV                    | IV                 | IV                  | IV                |
| F-stat             |                       |                      | 53.51                 | 53.51              | 39.06               | 39.06             |

Robust standard errors in parentheses

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

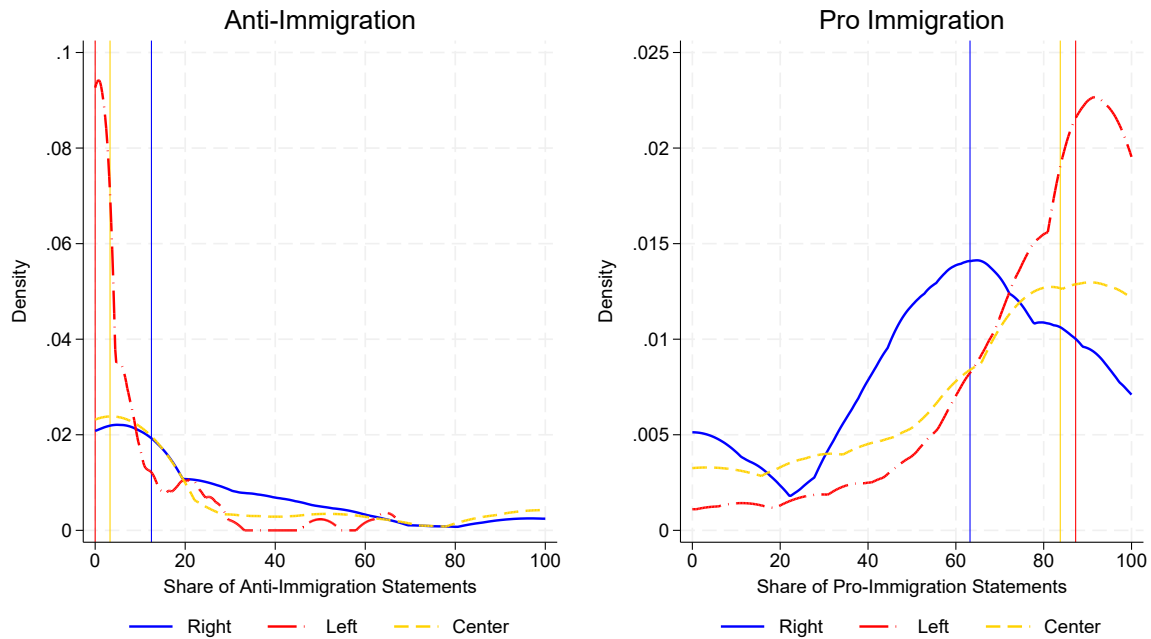
TABLE 2: Party Families and Position Toward the Immigration Issue.

Notes: Models estimated using data from members of Congress who discussed immigration in 2018-2019 on Twitter. The unit of analysis is individual legislators. Dependent variables represent the proportion of immigration-related , calculated as a share of each legislator's total immigration-related tweets. All models control for legislator gender, district magnitude (number of representatives per electoral district), and total tweet volume. Robust standard errors in parentheses. The F-stat indicates the F statistic of the first stage.

whether these patterns reflect an ideological convergence on immigration or strategic vote-maximizing, which we explore in the following section.

### ***Party and Ideological Influences on Immigration***

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 start by estimating the ideological score of each statement, expecting variation across party families. We then analyze framing



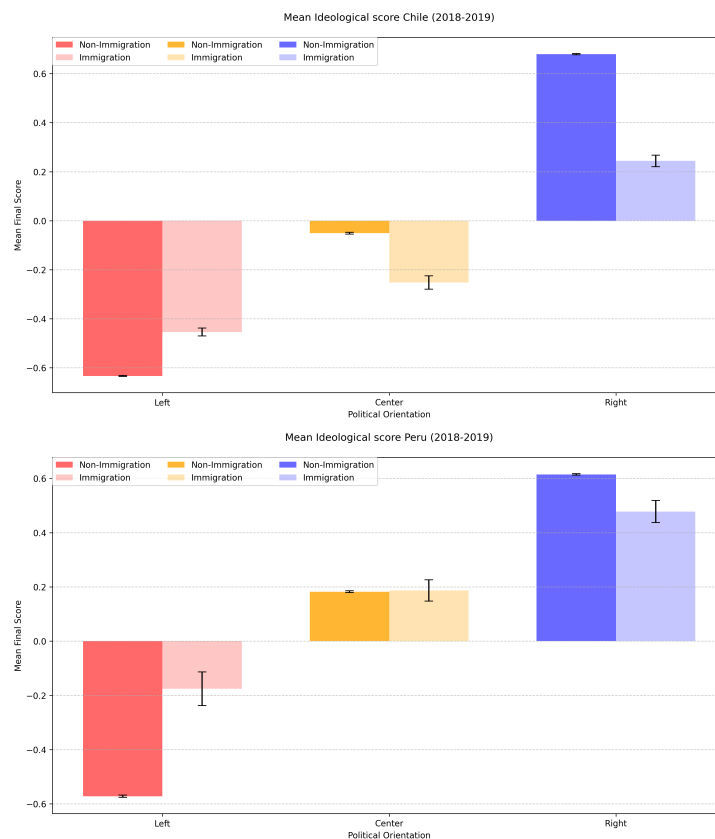
**Figure 5: Anti-Immigration and Pro-Immigration by Party Families**

Note: Lines represent the density distribution of tweets posted in 2018 and 2019. Parties are grouped in families (represented by colors) following [section B](#)

through topic modeling and formalize this exploration with regression analysis over different framings.

Legislators might use ideological cues when discussing immigration. To test this, we measure the ideological scores of statements (both about immigration and non-immigration). [Figure 6](#) shows these scores by party family, comparing immigration (light colors) and non-immigration statements (darker colors). 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 findings align with our theoretical expectations of ideological differentiation. [Figure 6](#) reveals a distinct ideological divide in immigration discourse between left- and right-wing legislators, suggesting that legislators approach immigration through their ideological frameworks. Yet, immigration-related tweets are generally more ideologically moderate than other tweets from both left- and right-wing parties. This moderation is



**Figure 6: Mean Ideological Score by Party Families and Immigration Content**

Note: Bars represent the mean of the ideological score (-1 left, 1 right) for legislators' tweets posted in 2018 and 2019 by ideological party family and subject (immigration or not immigration). The dark color bars represent the ideological score of non-immigration-related tweets, while the light color bars represent the ideological score of immigration tweets. Error bars show standard errors of the means. Source: Authors' own elaboration based on data retrieved from Twitter.

particularly evident among Peru's left-wing and Chile's right-wing legislators, whose immigration discourse notably shifts toward the center.

Next, to gain further insight into the strategic motivations and differentiation strategies underlying these ideological frameworks, we examine how this rhetoric develops across party families, beginning with an unstructured topic analysis. Table 3 presents the most representative words for four latent topics identified through NMF analysis, highlighting distinct patterns in immigration discourse across party families.

In Chile, Topics 2 and 4 (43.8% of tweets) emphasize rights and humanitarian concerns, with a greater predominance of left-wing legislators, reflected in terms such as 'derechos,' 'mujeres,' and 'trabajo.' In contrast, right-wing legislators focus on administrative and national issues, predominantly in Topic 1, using terms like 'pais,' 'gobierno,' and 'extranjeros.' In Peru, left-wing discourse is more present in Topic 2, which centers on rights and Trump's policies. Right-wing legislators, however, dominate Topic 1, which

addresses Venezuelan migration using terms like 'venezolanos' and 'Maduro,' revealing divergent frames across party families. Notably, the disparity in topic usage (Distance L-R) is more pronounced in Peru than in Chile, indicating a more polarized immigration discourse in the former.<sup>13</sup>

|              | Chile       |            |             |                | Peru        |            |              |            |
|--------------|-------------|------------|-------------|----------------|-------------|------------|--------------|------------|
|              | Topic 1     | Topic 2    | Topic 3     | Topic 4        | Topic 1     | Topic 2    | Topic 3      | Topic 4    |
|              | para        | politica   | venezolanos | migrantes      | venezolanos | trump      | japonesa     | campo      |
|              | migracion   | niños      | chile       | derechos       | peru        | politica   | inmigracion  | ciudades   |
|              | pais        | migratoria | venezuela   | este           | pais        | contra     | amistad      | migracion  |
|              | nuestro     | trump      | maduro      | como           | para        | migratoria | años         | ciudad     |
|              | gobierno    | gobierno   | dictadura   | junto          | peruanos    | donald     | peruano      | solo       |
|              | inmigrantes | sobre      | como        | organizaciones | venezuela   | derechos   | japon        | estar      |
|              | haitianos   | separados  | piñera      | trabajo        | maduro      | mocion     | peru         | preparadas |
|              | chile       | familias   | millones    | todos          | esta        | niños      | congresoperu | resentidos |
|              | inmigracion | eeuu       | guaido      | mujeres        | xenofobia   | migrantes  | exteriores   | todas      |
|              | extranjeros | derechos   | frontera    | proceso        | como        | gobierno   | relaciones   | ante       |
| %            | 40.8        | 13.1       | 15.4        | 30.7           | 67.8        | 18.0       | 7.7          | 6.5        |
| Left (%)     | 36.0        | 14.9       | 12.3        | 36.8           | 55.5        | 35.3       | 5.0          | 4.2        |
| Center (%)   | 42.4        | 12.0       | 21.7        | 23.9           | 60.7        | 17.9       | 8.1          | 13.3       |
| Right (%)    | 47.1        | 10.9       | 17.5        | 24.5           | 79.5        | 9.2        | 8.7          | 2.6        |
| Distance L-R | -11.1       | 4.0        | -5.2        | 12.3           | -24.0       | 26.1       | -3.7         | 1.6        |

TABLE 3: Topic Analysis - NMF 4 clusters regarding Immigration statements

Note: The columns display the most representative words for each topic and the distribution of topics across party families by country. The analysis includes all immigration-related tweets from 2018 and 2019 in Peru and Chile. The row labeled "%" indicates the size of each topic, while the rows labeled Left, Center, and Right represent the proportion of each party family addressing that topic. The row "Distance L-R" shows the difference in the shares between the left and right party families.

Our results so far have indicated that politicians have integrated the immigration issue into their agendas, framing it within their ideological perspectives. The left and right diverge notably in their approaches. In what follows, we present further evidence supporting the hypothesis that right-wing parties strategically employ voters' fears, leveraging the immigration shock for ideological gain. Specifically, we analyze the focus on 'socialism'—particularly criticisms of the Venezuelan regime—and the emphasis on Venezuelan immigrants relying on dictionaries (outlined in measurement section).

Table 4 presents results consistent with our theoretical expectations. Columns 1 and 2, using simple OLS models, show that the right references socialism and Venezuela 4.8 pp and 11.8 pp more than the left, respectively. These findings hold when accounting for regional exposure to the immigration shock (columns 3 and 4). Furthermore, the interaction between exposure and party ideology does not significantly impact the use of these

<sup>13</sup>Appendix F presents similar results for Venezuela-specific immigration statements, with right-wing legislators describing immigrants as 'brothers' 'fleeing' Maduro's regime.

frames, suggesting that references to socialism or Venezuela in immigration discourse likely reflect politicians' strategic choices rather than direct exposure to immigrants.

| VARIABLES          | (1)<br>Socialism   | (2)<br>Venezuela     | (3)<br>Socialism   | (4)<br>Venezuela     | (5)<br>Socialism   | (6)<br>Venezuela    |
|--------------------|--------------------|----------------------|--------------------|----------------------|--------------------|---------------------|
| Right              | 4.809**<br>(2.044) | 11.487***<br>(4.364) | 3.148**<br>(1.445) | 10.444***<br>(4.037) | 4.647**<br>(2.323) | 14.450**<br>(6.108) |
| Center             | 4.668<br>(4.430)   | -9.630<br>(7.420)    | 3.592<br>(4.752)   | -5.584<br>(6.811)    | 4.032<br>(4.935)   | -4.409<br>(7.070)   |
| Share Imm          |                    |                      | -0.098<br>(0.265)  | -0.202<br>(1.248)    |                    |                     |
| Right*Share Imm    |                    |                      |                    |                      | -0.502<br>(0.550)  | -1.282<br>(1.528)   |
| No Right*Share Imm |                    |                      |                    |                      | 0.210<br>(0.302)   | 0.619<br>(1.857)    |
| Observations       | 182                | 182                  | 176                | 176                  | 176                | 176                 |
| R-squared          | 0.337              | 0.525                | 0.025              | 0.321                | 0.021              | 0.316               |
| Controls           | Yes                | Yes                  | Yes                | Yes                  | Yes                | Yes                 |
| Model              | OLS                | OLS                  | IV                 | IV                   | IV                 | IV                  |
| F-stat             |                    |                      | 94.34              | 94.34                | 39.06              | 39.06               |

Robust standard errors in parentheses

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

TABLE 4: Party Families and Framing Used when Discussing the Immigration Issue.

*Notes:* Models estimated using data from members of Congress who discussed immigration in 2018-2019 on Twitter. The unit of analysis is individual legislators. Dependent variables represent the proportion of immigration-related statements falling into each specified category, calculated as a share of each legislator's total immigration-related tweets. All models control for legislator gender, district magnitude (number of representatives per electoral district), and total tweet volume. Robust standard errors in parentheses. The F-stat indicates the F statistic of the first stage

To facilitate the interpretation of the framing effects' magnitude, we re-estimated the models with a dummy variable indicating high usage of socialist and Venezuelan frameworks as the dependent variable. We then examined the effect of legislators' ideological orientation on the likelihood of high-frame usage. Figures G.8 and G.9 show that right-wing legislators are about 20% more likely to be among the top users of these frameworks.<sup>14</sup>

Overall, these analyses demonstrate that while immigration has become more salient across all party lines, politicians frame it through distinct ideological lenses, supporting our hypothesis that parties differentiate rather than converge on positions following the

<sup>14</sup>These estimates remain robust across different thresholds.



immigration shock. In this South-South context, where immigration is a novel issue, we observe that although the right is less pro-immigrant and more critical of immigration than the left, it nonetheless adopts selective pro-immigrant stances. This stance reflects the right's focus on crisis impacts and regulatory responses, particularly concerning Venezuela. The right uses this issue both to criticize the politics of the sending country and to evoke fears that the left in the host country could pursue similar policies, effectively critiquing opponents while appealing to soon-to-be immigrant voters. In contrast, the left emphasizes broader immigrant rights and societal concerns without addressing the origins of the crisis or immigrant backgrounds.

## **CONCLUSION**

In this article, we demonstrate that large immigration shocks profoundly shift political elites' discourse, bringing new issues to the agenda and creating opportunities for framing. We argue that such shocks compel politicians to address immigration using their preferred frames. To test this, we analyze legislators' Twitter histories surrounding the Venezuelan exodus to Latin America. Our findings reveal two main insights: first, migration inflows heighten the issue's salience across all party lines, though this increase is unrelated to regional exposure. Second, framing varies by party affiliation—left-leaning politicians in exposed regions often adopt a pro-immigration stance, while right-wing politicians, regardless of exposure, emphasize fears about socialist regimes as potential threats to the host country.

This paper enhances our understanding of politicians' responses to South-South migration shocks, where differences in ethnicity, language, skills, and religious backgrounds are less pronounced than in South-North contexts. Our findings on party-family roles and framing diverge from research on developed countries, where immigration conflicts are prominent on the political agenda, migration policies are less liberal, and perceptions of out-group threats are stronger. In these contexts, right-wing parties are more likely to dominate the issue, promoting anti-immigration views, while mainstream left parties tend to follow without articulating distinct perspectives (see Gessler and Hunger 2022; Hutter and Kriesi 2022; Abou-Chadi and Krause 2020, for recent ex-

amples). Our work shows that the mechanisms driving salience and elite polarization around immigration are context-dependent. Additionally, our results support the view that immigration's political effects are a strategic national-level phenomenon, not connected to local struggles with migrants (Rozo and Vargas 2021; Ajzenman, Dominguez, and Undurraga 2023; Lebow et al. 2024).

While we have focused on two cases, we believe our results may extend to other South-South migration contexts. The contrast between Chile's institutionalized party system and Peru's more fragmented one strengthens this expectation. Additionally, anecdotal evidence from other recipient countries, such as Colombia's cross-party anti-xenophobia agreement (Migra-Venezuela 2019), further supports our argument that anti-immigration strategies may not dominate in these contexts.

Our analysis has focused on short-term political responses to crises and offers a template for temporally disaggregated analysis; however, several avenues for future research remain. First, we examined a case involving left-wing crises in the sending country, with right-wing politicians capitalizing on the issue. It would be valuable to explore whether nationalist regimes, such as present-day El Salvador or the right-wing dictatorships of 1960s Latin America, elicit similar responses among left-wing politicians in host countries. Additionally, while our study focused on two countries with the highest settlement rates, future research should examine political responses when migration shocks primarily affect transit routes rather than settlement areas, where contact theory conditions and the strategic view of migrants as future voters are less applicable. Finally, extending the analysis over a broader timeframe could help reveal long-term trends in the political treatment of immigration, especially in the Global South, where migrants will soon become voters.

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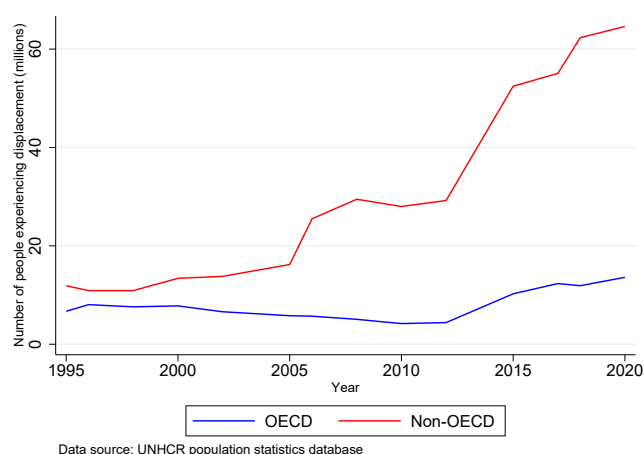
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# ONLINE APPENDIX

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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

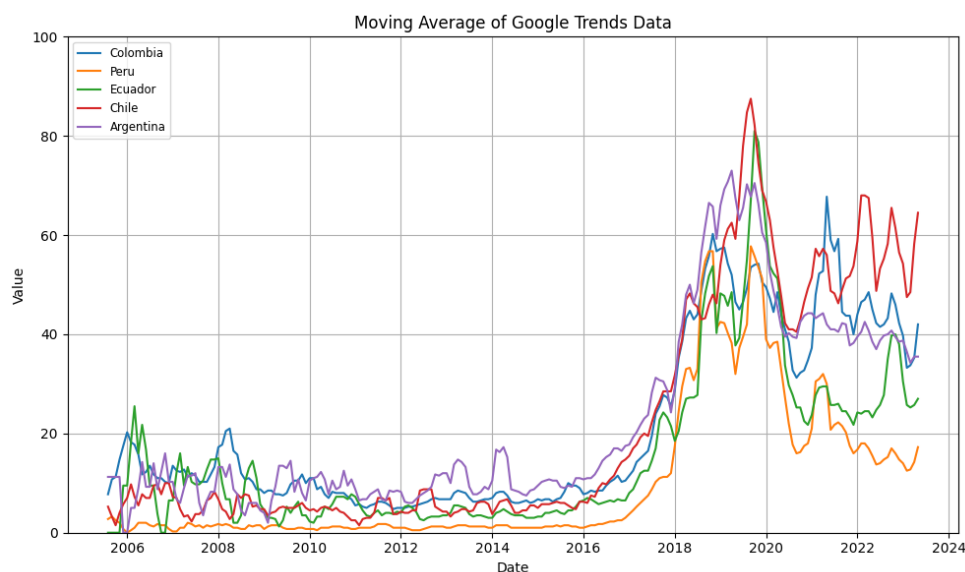
The influx of refugees and migrants from Venezuela has not gone unnoticed by citizens; rather, it has captured considerable attention from the general public. As illustrated in [Figure A.2](#), there is a notable surge in Google searches for the term “Venezuelans,” signaling an increased awareness and 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                         | <a href="https://www.minrel.gob.cl/noticias-antteriores/situacion-migratoria-en-la-macro-zona-norte-de-chile">https://www.minrel.gob.cl/noticias-antteriores/situacion-migratoria-en-la-macro-zona-norte-de-chile</a>   |
| 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  | <a href="https://www.bcn.cl/leychile/navegar?idNorma=1189669&amp;idParte=10410548">https://www.bcn.cl/leychile/navegar?idNorma=1189669&amp;idParte=10410548</a>   |
| 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. | <a href="https://serviciomigraciones.cl/wp-content/uploads/2023/07/PNM-V-ERSION-EJECUTIVA.pdf">https://serviciomigraciones.cl/wp-content/uploads/2023/07/PNM-V-ERSION-EJECUTIVA.pdf</a>   |
| Peru    | 2017    | Ministry of Foreign Affairs                      | National Migration Policy 2017-2025   | <a href="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">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</a>                               |
| Peru    | 2019    | International agencies                           | Study on the socio-economic profile of the Venezuelan population and their host communities: a look towards inclusion   | <a href="https://www.observatoriovenezolanodemigracion.org/noticias/politica-migratoria-cambiante-del-estado-peruano-ha-dificultado-la-inclusion-de-inmigrantes-venezolanos">https://www.observatoriovenezolanodemigracion.org/noticias/politica-migratoria-cambiante-del-estado-peruano-ha-dificultado-la-inclusion-de-inmigrantes-venezolanos</a> |
| Peru    | 2018    | Presidency of Peru and Ministry of the Interior  | Policies for control and identification: requirements for the PTP and Special Resident migratory status   | <a href="https://www.acnur.org/fileadmin/Documentos/BDL/2017/11018.pdf">https://www.acnur.org/fileadmin/Documentos/BDL/2017/11018.pdf</a>   |
| Peru    | 2017    | Municipality of San Juan de Miraflores           | Creation of the largest shelter in Lima for Venezuelan migrants   | <a href="https://perureports.com/meet-first-venezuelan-neighborhood-lima/6000/">https://perureports.com/meet-first-venezuelan-neighborhood-lima/6000/</a>   |

(Continúa en la siguiente página)

## Immigration Policies During the Venezuela Migration Exodus (continued)

| Country | Date | Institution                                     | Description   | Source  |
|---------|------|---|---|---|
| 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                                       | <a href="https://busquedas.elperuano.pe/normaslegales/decreto-supremo-que-a-prueba-medidas-especiales-excepcionale-decreto-supremo-n-010-2020-in-1895950-4/">https://busquedas.elperuano.pe/normaslegales/decreto-supremo-que-a-prueba-medidas-especiales-excepcionale-decreto-supremo-n-010-2020-in-1895950-4/</a> |
| 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 | <a href="https://cdn.www.gob.pe/uploads/document/file/1813182/DS%20002-2021-IN.pdf?v=1618708384">https://cdn.www.gob.pe/uploads/document/file/1813182/DS%20002-2021-IN.pdf?v=1618708384</a>   |

**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 political 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 | Saliency |
|--------------------------------------|--------------|------------|----------------------|----------|
| Amplitud                             | Right        | -          | -                    | -        |
| Evolución Política                   | Right        | 7.33       | 6.92                 | 3.69     |
| Federación Regionalista Verde Social | Left         | -          | -                    | -        |
| Izquierda Ciudadana                  | Left         | -          | -                    | -        |
| Mov. Indep. de Renovación Absoluta   | Left         | -          | -                    | -        |
| 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 Igualdad                     | Left         | -          | -                    | -        |
| Partido Liberal de Chile             | Left         | -          | -                    | -        |
| Partido Progresista                  | Left         | -          | -                    | -        |
| Partido Radical Chileno              | Left         | -          | -                    | -        |
| 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 | Saliency |
|----------------------------------|--------------|------------|----------------------|----------|
| 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 saliency is also a 10 point scale going from 1 (low) to 10 (high). Parties with out CHES score were classified manually by authors.

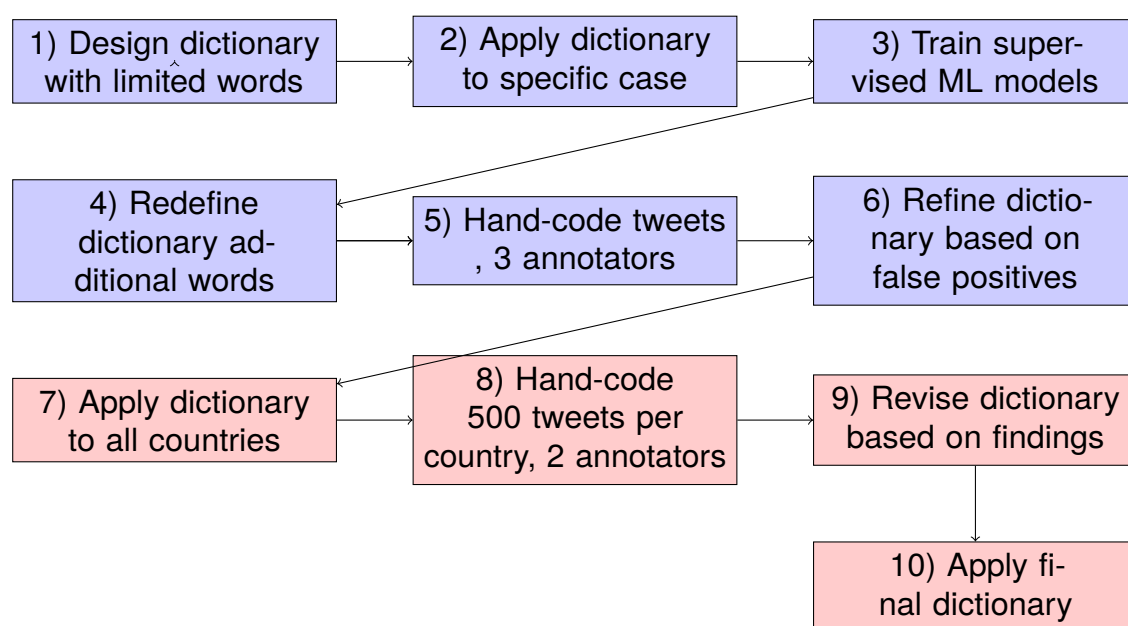
Source: Author's own elaboration based on CHES:LA

**C MEASUREMENTS: LEGISLATORS' RHETORIC****C.1 Saliency: Identifying Immigration Statements**

Our first outcome variable, the saliency 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.<sup>15</sup> 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.<sup>16</sup> 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.

## 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

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

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

executes the given instructions. The function processes all tweets and executes the given instructions. Based on the prompt in [subsection C.2.1](#). The cost of using the OpenAI API for this project was 8.53 USD.

Scores 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.

### 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 sentiments. " "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 opposes 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 immigration, 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.<sup>17</sup> 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

Our second approach is to use **Fighting Words approach** to identify the most distinctive words associated with anti-immigration, pro-immigration, and neutral stances in political discourse. This approach calculates the log-odds ratio with a Dirichlet prior for each word across three categories, providing a measure of how strongly each word is associated with one category compared to the others.

This approach highlights words that best capture the sentiment and themes of each stance, providing insights into the language patterns associated with different immigration views.

For example, among those with an anti-immigration stance, we find words such as "delincuentes" (criminals) and "antecedentes" (background checks), reflecting a framing that associates immigrants with crime and emphasizes requirements for proof of good conduct ("antecedentes") for entry ("ingreso") into the country. Additionally, the term "extranjero" (foreigner) is used instead of "inmigrante" (immigrant), portraying immigrants as outsiders or alien to the nation.

In contrast, pro-immigration language includes words like "refugiados" (refugees), "personas" (people), and "niños" (children), which convey a more humanizing perspective, often evoking empathy. Terms such as "derechos" (rights) indicate a focus on

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

protecting immigrants' rights, while "xenofobia" (xenophobia) appears frequently in the context of condemning xenophobic attitudes or actions.

Neutral statements typically refer to government actions and policies, with terms like "comisión" (commission), "gobierno" (government), and "política" (policy), as well as words describing specific aspects of the immigration situation, such as "frontera" (border).

TABLE C.5: Fighting Words for Immigration Stance Categories

| Anti-immigration |       | Pro-immigration |       | Neutral     |       |
|------------------|-------|-----------------|-------|-------------|-------|
| Word             | Score | Word            | Score | Word        | Score |
| extranjeros      | -4.96 | migratoria      | -5.07 | comision    | -5.06 |
| peru             | -5.13 | inmigrantes     | -5.09 | gobierno    | -5.14 |
| gobierno         | -5.13 | migracion       | -5.11 | pais        | -5.14 |
| inmigracion      | -5.31 | politica        | -5.22 | peru        | -5.25 |
| peruanos         | -5.39 | derechos        | -5.40 | inmigracion | -5.31 |
| migraciones      | -5.51 | peru            | -5.44 | ahora       | -5.34 |
| migracion        | -5.57 | niños           | -5.57 | inmigrantes | -5.38 |
| antecedentes     | -5.57 | xenofobia       | -5.60 | maduro      | -5.41 |
| ingreso          | -5.57 | personas        | -5.77 | politica    | -5.45 |
| politica         | -5.60 | refugiados      | -5.81 | frontera    | -5.56 |
| solo             | -5.67 | inmigracion     | -5.85 | personas    | -5.56 |
| maduro           | -5.67 | migrante        | -5.86 | migracion   | -5.60 |
| delincuentes     | -5.71 | solo            | -5.90 | situacion   | -5.69 |
| haitianos        | -5.78 | venezuela       | -5.93 | trabajo     | -5.69 |
| venezuela        | -5.78 | debe            | -5.93 | venezolana  | -5.74 |

Further details on how fighting word scores were calculated can be found below:

- **Text Vectorization:** First, the code converts cleaned text data into a document-term matrix using CountVectorizer, where each column represents a word, and each row represents a document (tweet).
- **Frequency Counts:** The words are then separated based on stance categories (anti-immigration, pro-immigration, and neutral), with word counts summed across documents within each category.
- **Log-Odds Calculation with Dirichlet Prior:** For each word, the log-odds ratio is computed with a Dirichlet prior to prevent zero-frequency issues and to smooth low-frequency counts. This calculation identifies words with the highest log-odds scores in each category, indicating their distinctiveness for that stance.
- **Top Words Extraction:** Finally, the code extracts the top words for each category based on their log-odds scores, reporting words that are most likely to distinguish one category from the others.

## 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' ]

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", "ecuador"), ("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", "fronte"), ("trabaj", "venezol", "solid"), ("preocupan", "venezol", "peruanos"), ("trabajo", "venezol", "visas"), ("nacionalizar", "venezol", "peru"), ("brazos", "venezol", "peru"), ("ilegal", "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.6: 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.<sup>18</sup> 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 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.

## D MEASUREMENT DESCRIPTIVE STATISTICS

| Country | Legislature | Tweets during<br>2013-2020 | Tweets during<br>2018-2019 | Number of<br>Legislators |
|---------|-------------|----------------------------|----------------------------|--------------------------|
| Chile   | 2018-2022   | 1,271,545                  | 299,915                    | 141                      |
| Peru    | 2016-2020   | 754, 565                   | 215,518                    | 114                      |

TABLE D.7: Number of Tweets per Country and legislature

*Notes:* The "Legislature" column indicates the years of the legislature under study for each country. The third column shows the total number of tweets posted by these individuals between 2013 and 2020, which forms our sample for analyzing the evolution of immigration issue salience. The "2018-2019" column presents the number of tweets posted right after the immigration shock, representing the sample used to examine how politicians construct rhetoric around immigration. Source: Authors' elaboration based on data retrieved from Twitter.

TABLE D.8: Descriptive Statistics for Tweets after the immigration shock (2018 and 2019)

| Country | Tweets  | Imm.<br>(% of Tweets) | Immigration Tweets (% of Imm.) |           |           |           |
|---------|---------|-----------------------|--------------------------------|-----------|-----------|-----------|
|         |         |                       | Pro-Imm.                       | Anti-Imm. | Venezuela | Socialism |
| Chile   | 299,915 | 0.63                  | 73.00                          | 11.09     | 16.03     | 3.02      |
| Peru    | 215,518 | 0.24                  | 61.00                          | 23.58     | 46.67     | 4.89      |
| Total   | 515,433 | 0.47                  | 68.91                          | 15.69     | 27.3      | 3.71      |

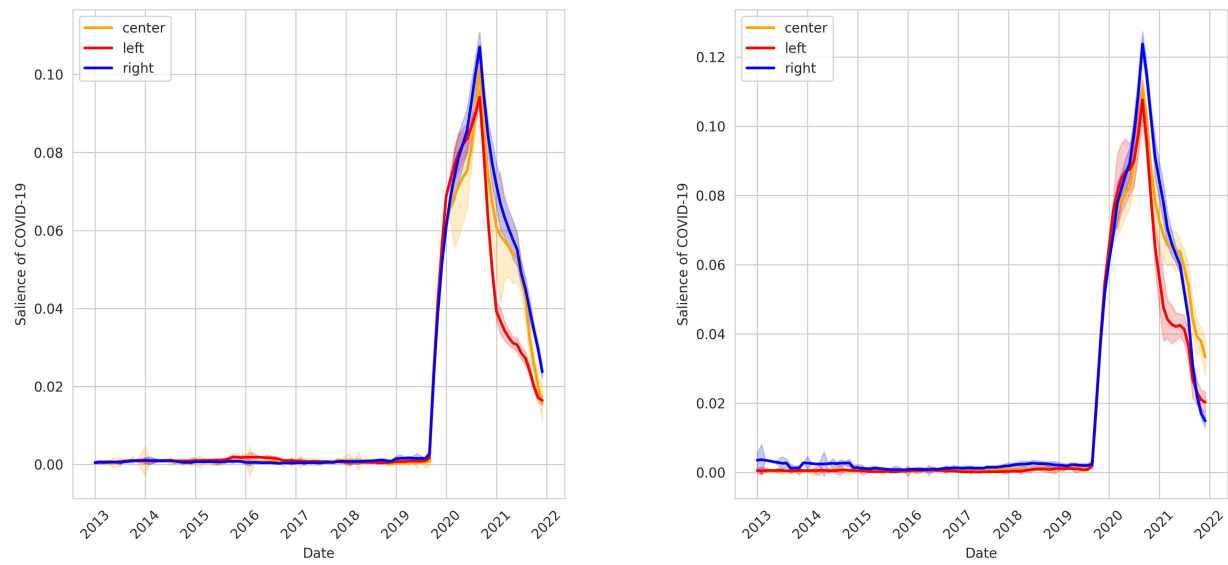
*Notes:* The first column shows the total number of legislators' tweets in 2018-2019 (post-immigration shock). The second column is the percentage of tweets about immigration. The remaining columns are estimated based on the number of tweets about immigration. Authors' elaboration based on data retrieved from Twitter.

TABLE D.9: Summary Statistics by Legislators

| Variable                     | N   | Min | Max    | Mean     | p50     | p25    | p75    | p90     |
|------------------------------|-----|-----|--------|----------|---------|--------|--------|---------|
| Total Tweets                 | 254 | 0   | 17209  | 2029.264 | 1264    | 525    | 2554   | 5105    |
| Share of Tweets Imm          | 241 | 0   | 5.2545 | 0.4430   | 0.2374  | 0.0562 | 0.5994 | 1.0962  |
| <b>Frames % of Imm. Tw.:</b> |     |     |        |          |         |        |        |         |
| Share Socialism              | 182 | 0   | 100    | 3.7143   | 0       | 0      | 0      | 11.1111 |
| Share Venezuela              | 182 | 0   | 100    | 27.3167  | 16.6667 | 0      | 50     | 75.8621 |
| Share Pro-Immigration        | 182 | 0   | 100    | 68.9158  | 75.7353 | 50     | 100    | 100     |
| Share Anti-Immigration       | 182 | 0   | 100    | 15.6922  | 2.8783  | 0      | 20     | 50      |

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

## E BENCHMARK SALIENCE



**Figure E.7: 12-Month Moving Average of Covid Salience - Chile and Peru (2013-2022)**

Note: the DV is the salience of covid operationalized as the ratio of statements about Covid-19 to the total number of public statements made. Left, Center and Right are defined as discussed in [Figure](#) . Source: Authors' own elaboration based on data retrieved from Twitter

**F TOPIC ANALYSIS: NMF**

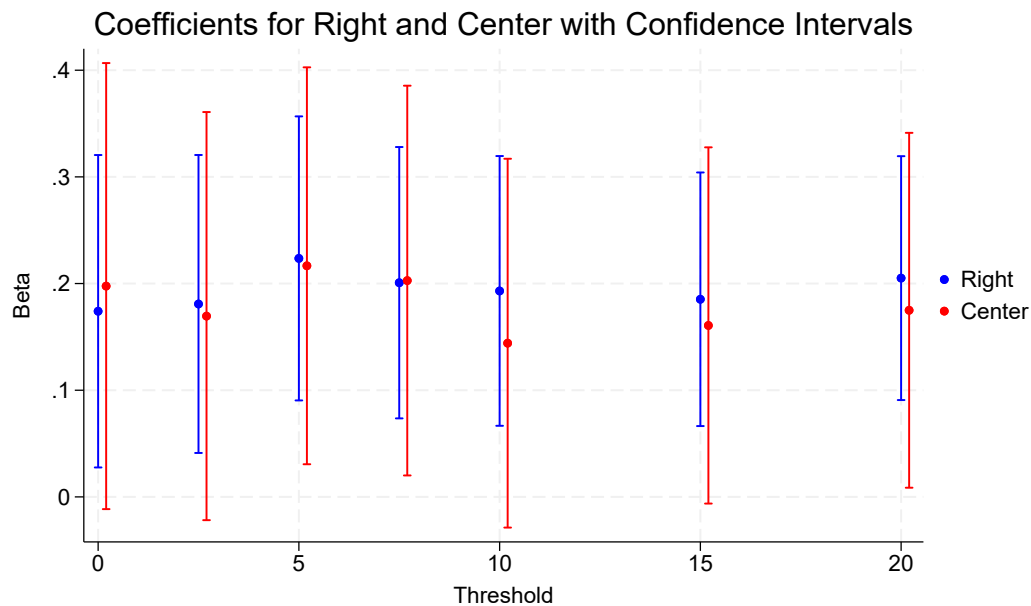
Table F.10 confirms the main results. In Chile, left-wing discourse emphasizes migrants' conditions (e.g., Topic 1), while right-wing discourse highlights political aspects with terms like 'dictadura' and 'Maduro' (e.g., Topic 4). In Peru, right-wing parties frame Venezuelans as victims of an authoritarian regime (e.g., 'hermanos,' 'huyen,' 'Maduro' in Topic 1), whereas left-wing parties focus on work-related issues (e.g., 'trabajo,' 'jovenes' in Topic 3).

|              | <i>Chile</i> |            |                |             | <i>Peru</i> |            |             |             |
|--------------|--------------|------------|----------------|-------------|-------------|------------|-------------|-------------|
|              | Topic 1      | Topic 2    | Topic 3        | Topic 4     | Topic 1     | Topic 2    | Topic 3     | Topic 4     |
|              | chile        | nuestro    | frontera       | maduro      | maduro      | migracion  | trabajo     | venezuela   |
|              | venezolanos  | pais       | para           | dictadura   | venezolanos | venezolana | venezolanos | peruanos    |
|              | venezuela    | venezolano | chilena        | gobierno    | para        | sobre      | jovenes     | chile       |
|              | para         | rector     | senadornavarro | chileno     | pais        | para       | peruanos    | peru        |
|              | sobre        | primer     | informante     | presidente  | huyen       | peru       | para        | venezolanos |
|              | migrantes    | quien      | humanitaria    | venezolanos | hermanos    | comision   | buen        | total       |
|              | migracion    | bello      | crisis         | consulado   | como        | rree       | inmigrantes | amigos      |
|              | situacion    | gran       | durante        | ddhh        | nuestros    | ahora      | ministro    | socialismo  |
|              | ingreso      | migrar     | sido           | miles       | peru        | exteriores | porque      | pais        |
|              | piñera       | compromiso | hipocrita      | puede       | esta        | relaciones | ciudadanos  | democratas  |
| %            | 55.8         | 8.6        | 9.4            | 26.2        | 41.6        | 15.3       | 16.8        | 26.3        |
| Left (%)     | 61.9         | 13.4       | 10.3           | 14.4        | 17.9        | 5.1        | 41.0        | 35.9        |
| Center (%)   | 44.0         | 4.0        | 4.0            | 48.0        | 34.5        | 28.6       | 6.0         | 31.0        |
| Right (%)    | 55.8         | 6.7        | 10.8           | 26.7        | 51.7        | 10.6       | 16.6        | 21.2        |
| Distance L-R | 6.0          | 6.7        | -0.5           | -12.2       | -33.7       | -5.5       | 24.5        | 14.7        |

TABLE F.10: Topic Analysis - NMF 4 clusters regarding Venezuelan statements by ideological party family

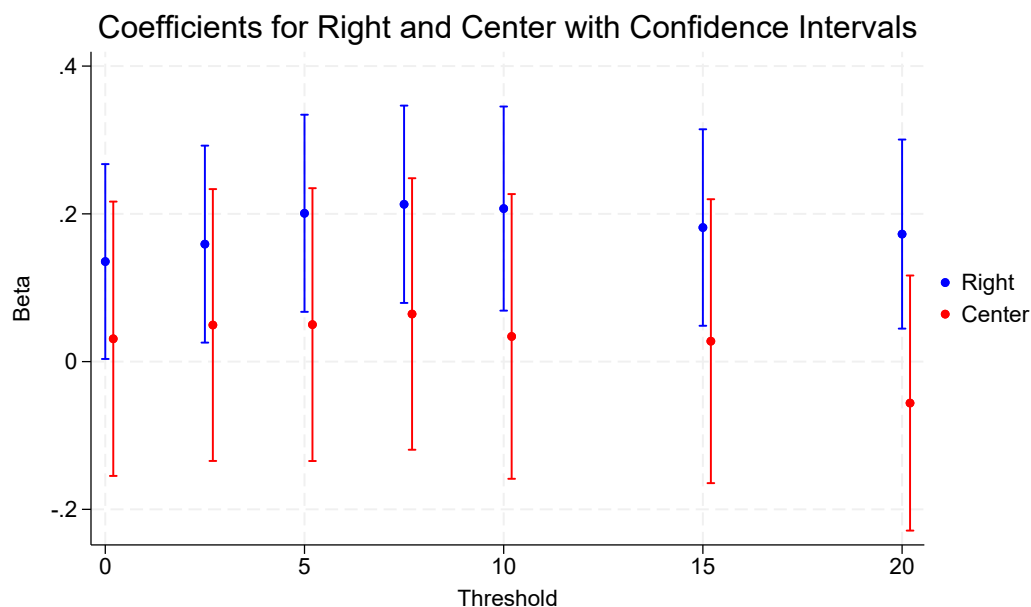
Note: The columns show the most probable words within each topic, and the topic distributions among the party families by country. All the sample of immigration tweet from 2018 and 2019 in Peru and Chile was used.

## G SOCIALISM AND VENEZUELA



**Figure G.8:** Probability of having a high share of statements about Socialism by party family (baseline Left)

Note: This figure presents the estimated coefficients (Beta) from a Linear Probability Model, illustrating the change in the probability of support for Right (blue) and Center (red) ideological positions across different thresholds (i.e., alternative definitions of high-share of statements about socialism). Each coefficient represents the estimated increase in probability associated with each threshold, with confidence intervals displayed to show the level of uncertainty. The results highlight how shifts in threshold levels do not influence the results.



**Figure G.9:** Probability of having a high share of statements about Venezuela by party family (baseline Left)

Note: This figure presents the estimated coefficients (Beta) from a Linear Probability Model, illustrating the change in the probability of support for Right (blue) and Center (red) ideological positions across different thresholds (i.e., alternative definitions of high-share of statements about Venezuela). Each coefficient represents the estimated increase in probability associated with each threshold, with confidence intervals displayed to show the level of uncertainty. The results highlight how shifts in threshold levels do not influence the results.



| Country | Anti-Immigration  | Pro-Immigration   |
|---------|---|---|
| Chile   | <ul style="list-style-type: none"> <li>• “Queremos a estas personas deshumanizadas fuera de nuestras fronteras”: AFEP pide la expulsión de venezolanos</li> <li>• “Este es el estándar del nuevo director nacional del INDH? [...] Chileno primero los migrantes y el resto a la fila”</li> </ul>   | <ul style="list-style-type: none"> <li>• “Ningún ser humano puede ser discriminado por su condición racial, social, religiosa, económica o política”</li> <li>• “Todas las personas tienen derechos y los migrantes son igualmente personas a quienes debemos reconocer como aportes a nuestra economía”</li> </ul>                         |
| Peru    | <ul style="list-style-type: none"> <li>• “124 delincuentes con armas y drogas [...] 118 venezolanos. Todo extranjero en el territorio nacional con antecedentes, ilegales [...] DEPORTARLOS”</li> <li>• “Que vergüenza da ver a fiscales liberando a choferes extranjeros sin licencia de conducir [...] ¿Que espera el gobierno para expulsarlo?”</li> </ul> | <ul style="list-style-type: none"> <li>• “En Navidad recordamos el nacimiento de un niño en medio de un viaje forzoso [...] No hagamos a los migrantes en el Perú lo que no queremos que les hagan a nuestros compatriotas”</li> <li>• “Para un país que tiene millones peruanos fuera inaudito expulsar refugiados extranjeros”</li> </ul> |

TABLE G.11: Examples of Pro, and Anti-immigration tweets in Chile and Peru

## References

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