

Immigration without mediation: Brazilians reaction to an influx of Venezuelans*

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Abstract

How does an immigration shock affect natives' voting behavior? While many studies explore (a) natives' attitudes toward immigrants and (b) the electoral appeals of anti-immigrant parties, much less is known about how immigration directly affects the electoral performance of incumbents. I argue that an immigration shock will harm the incumbent because it is the citizens in the regions with immigration that will be most affected by the immigration shock. The exposure to this shock results in a change in their voting behavior, leading them to punish the incumbent. Therefore, this study examines the impact of immigration from Venezuela in 2018 on Brazil's Workers' Party (PT) electoral outcomes. I rely on instrumental variable regression to causally identify the effect of the immigration shock and to show that it damaged the electoral performance of PT in most elections that were held just after the shock occurred. My results suggest that akin to other globalization shocks, heightened levels of immigration can elicit a political backlash.

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There are almost 300 million migrants around the world ([International Organization for Migration, 2022](#)). Consequently, much has been written on natives' attitudes toward immigrants, with the majority of studies indicating that these attitudes tend to be unfavorable due to factors related to economic and/or socio-cultural considerations. In terms of economics, one thread in the literature on immigration highlights how citizens are wary of immigrant's impact on the labor market ([Malhotra, Margalit, and Mo, 2013](#)) or on the fiscal burden they impose on the taxpayers ([Bansak, Hainmueller, and Hangartner, 2016; Hainmueller and Hiscox, 2010](#)). Focusing on the identitarian and cultural uneasiness, another thread argues that immigrants are perceived as distinct and are less likely to fit well within receiving national cultures ([Finseraas and Kotsadam, 2017; Hainmueller and Hangartner, 2013; Jardina, 2019; Ward, 2019](#)). Whether for economic or socio-cultural reasons, fear breeds resentment against the immigrant.

It is unclear, however, if this negative effect is the direct result of immigration itself. In most advanced democracies, there are populist far-right leaders that use immigration for their political gain ([Bustikova, 2014; Colantone and Stanig, 2018; Ignazi, 1992; Van Der Brug, Fennema, and Tillie, 2005](#)). This presence of anti-immigrant parties in the political arena may elevate the salience of immigration issues and make citizens' view of it more negative regardless of the actual level of immigration. Hence, it is hard to isolate the effect of immigration on voters' views, absent the confounding propaganda from extremists. In this paper, I empirically test the direct effect of immigration on electoral behavior, focusing on a case where political actors have not politicized immigration.

I argue that immigration is a shock – a change in citizens' reality caused by exogenous factors – that may affect voting behavior. Shocks as different as natural disasters ([Bechtel](#)

and Hainmueller, 2011), international commerce (Colantone and Stanig, 2018), and major construction projects (Stokes, 2016) can have a significant impact on the citizens within affected areas, leading to a change in their electoral behavior. I argue that immigration shock results in a negative turn in attitude because of an enhanced sense of economic and/or cultural threat – as reasoned by group threat theory (Alesina and Tabellini, 2022; Blalock, 1967; Schlueter and Scheepers, 2010; Whitaker and Giersch, 2015) – even without radical politicians. Immigration is a shock that derives from globalization and, as such, will have results similar to other shocks from the same phenomena. Trade shocks that derived from China’s rise in international trade, for example, disproportionately impacted regions where companies or workers suffered the most from the competition created by these cheaper goods. Similarly, immigration’s direct adverse effects are more meaningful in the regions exposed to immigrants. Consequently, immigration shocks will have a local negative effect on incumbent performance because the most affected citizens will want to change the political *status quo*, making more restrictive on immigration.

I test this argument by analyzing the electoral impact of the Venezuelan immigration shock in Brazil¹. Brazil is a country where no current party or politician advocates an anti-immigration agenda. Consequently, the Brazilian case allows the evaluation of the impact of immigration on public electoral preferences with little to no interference from the political elite, as is the case in the countries used in the literature to analyze immigration (e.g., Dennison and Geddes, 2019; Dustmann, Vasiljeva, and Piil Damm, 2019; Hjorth and

¹Venezuela’s diaspora is one of the largest human displacements in Americas’ history, with around 6 million Venezuelans leaving the country – almost a fifth of Venezuela’s population (R4V, 2022). Venezuelan immigration was sudden and significant, resulting in marked impacts in Brazil as well as other countries in the Western hemisphere. In the case of Brazil, more than 260,000 Venezuelans emigrated to the country within a brief period, making the Venezuelan diaspora an immigration shock without any parallel at least since the country’s redemocratization in 1985.

Larsen, 2022; Mayda, Peri, and Steingress, 2022).

I assembled an original dataset that combines information on the Brazilian cities where Venezuelan migrants report living in Brazil with municipal-level electoral and socioeconomic data. I test the effect of the quantity of Venezuelan migrants on the electoral performance of the Workers' Party (PT) in cities with Venezuelan migrants. The PT, a center-left party, ruled the country from 2003 to 2016, and it is widely perceived as Brazil's strongest party (Klašnja and Titiunik, 2017; Mainwaring, Power, and Bizzarro, 2018; Novaes, 2018; Samuels and Zucco, 2018). I focus on the federal and state elections held in 2018². Federal and state elections are very different regarding the types of candidates, the salient issues, and the level of public interest, and therefore increase the generalizability of my findings.

Empirically testing the effect of immigration shocks on electoral behavior is difficult: immigrants' destinations are driven by factors that can cofound the effects of immigration on voting behavior. Immigrants seek places with more economic opportunities and where they feel they will be more welcomed (Alesina and Tabellini, 2022; Dustmann, Vasiljeva, and Pil Damm, 2019). The same reasons that motivate an immigrant to choose some cities over others affect the voting preferences of natives in those cities, resulting in the risk of endogeneity by reverse causality. Immigrant presence might be causing changes in the city's population's political behavior, but, as well, the city's population's political behavior might be causing the immigration presence.

Therefore, in order to arrive at valid causal inference, I use the distance of Brazilian cities to the Venezuelan border as an instrumental variable for the impact of the Venezuelan influx

²The elections in the analysis are for the president and federal and state deputies. The ones missing are senators and governors. Although both positions represent the whole state, the dynamic in the Brazilian coalition formation for elections might result in not having a PT candidate in the ballot box in some cities

on Brazilians' electoral preferences, focusing on the immigration effect on PT's vote share. I propose that the distance to the border only affects PT's voting share through the increase in immigrants. I perform a matching analysis to circumvent a problem of a zero-inflated regression in the first regression in mine 2SLS. Matching allows for a set of comparable cities, avoiding extreme counterfactuals and problems of imbalance. I find that the presence of Venezuelan immigrants significantly decreases the PT's vote share in a variety of elections held in 2018.

My study makes three distinct contributions. First, I present a test of the direct effect of immigration on electoral preferences in the absence of cues derived from party elites, who had not, to this point, sought to exploit the Venezuelan immigration crisis for political gain. Second, this paper provides essential insight into the effects of the massive displacement of Venezuelans over the last decade, effects which still need to be better understood. Finally, I contribute to our understanding of the impact of immigration on developing countries, notably in Latin America, that have received relatively little attention in the previous literature.

The impact of immigration shocks on voting behavior

The debate in the literature on how in-groups (natives) deal with out-groups (immigrants) has two contradictory propositions. On the one hand, the “contact theory” proposes that neutral to positive intergroup interaction decreases anti-out-group sentiments ([Allport, Clark, and Pettigrew, 1954](#); [Schlueter and Scheepers, 2010](#); [Wagner et al., 2003](#)). On the other hand, there is the “group threat theory” which proposes that an increase in the out-group popula-

tion results in more anxiety by the in-group due to an increasing sense of threat (Alesina and Tabellini, 2022; Blalock, 1967; Schlueter and Scheepers, 2010; Whitaker and Giersch, 2015). Although each perspective results in opposite conclusions regarding the rising number of immigrants, they are not mutually exclusive. For example, there is evidence of them happening simultaneously (Dustmann, Vasiljeva, and Piil Damm, 2019; Schlueter and Scheepers, 2010). Moreover, the prevalence of one over the other might be due to individual and societal heterogeneity (Hainmueller and Hangartner, 2013; Homola and Tavits, 2018; Schlueter and Scheepers, 2010; Wagner et al., 2003). Therefore, it is supposedly unclear which theory would be in place to assess immigration impact in a particular case.

Nevertheless, the literature on immigration largely supports the group threat theory and agrees that natives have anti-immigrant sentiments. This body of literature identifies two primary mechanisms that explain this rejection of immigration – political economy and sociopsychological factors (Alesina and Tabellini, 2022; Hainmueller and Hopkins, 2014). From the political economy perspective, opposition to immigration stems from concerns that immigrants will lead to lower wages due to increased labor-market competition (Alesina and Tabellini, 2022; Malhotra, Margalit, and Mo, 2013) or in higher fiscal burden due to increasing demand for welfare services (Hainmueller and Hiscox, 2010). From the sociopsychological perspective, opposition to immigration is driven by anxieties related to cultural and national identity. Native-born individuals perceive immigrants as more distinct and, consequently, less likely to fit in with their national culture and are therefore more likely to reject them (Hainmueller and Hangartner, 2013; Ward, 2019).

This large consensus in favor of the group threat theory derives from the fact that the public's perception of immigration is mediated by the political elite in the cases analyzed by

the literature. In Western Europe and North America, which is where the vast majority of the literature focused (Whitaker and Giersch, 2015), there is a history of anti-immigration radical right parties, which are the parties “that employ the immigration issue as the core political concern in political campaigns or that are considered by elites of other parties to do so” (Van Der Brug, Fennema, and Tillie, 2005, 538). For decades, these parties have been promoting rejection of immigration flows in some European countries (Ignazi, 1992). Their activity have forced establishment parties to take a position on the issue as well (Berman, 2021; Hjorth and Larsen, 2022), moving the general public’s zone of acquiescence towards rejecting immigrants (Norris, 2005). Therefore, political elites play a significant role in shaping public opinion on immigration.

The discussion above results in two implications that affect voting behavior. First, these radical parties ‘nationalize’ the immigration issue, affecting voting behaviors even without immigration shocks. The increasing national salience of immigration results in voters that have no direct contact with immigrants relying heavily on party cues to define their position regarding immigration (see Conover and Feldman, 1989; Snyder and Ting, 2002). Second, it is unclear whether political leaders who use anti-immigrant language are genuinely motivated by a perceived threat from immigrant groups, or if they are simply influencing the public’s opinions through their rhetoric. This calls into question the validity of the group threat theory. Both implications, therefore, have a significant impact on voting behavior.

Consequently, the literature lacks an explanation of how immigration might affect natives’ voting behavior in a situation where the topic of immigration is not nationally salient due to activism from the political elites. It is unclear whether group threat theory or contact theory would be more prevalent when no political entrepreneur tries to use immigration for

her own political gain. This results in the question of whether immigration has positive or adverse effects on the incumbent and/or the political establishment's electoral performance.

I argue that immigration is a shock – an exogenously given change in citizens' reality – with negative impacts for the incumbent. In my theory, the initial reaction of natives complies with the group threat theory, even without the elites' mediation. The reason for group threat theory's higher effectiveness in comparison to contact theory derives from the length of exposure. Contact theory relies on people from different groups interacting with each other, which requires a longer time span, especially if there is a significant difference between groups or cultural barriers like, for example, language. A sense of threat, however, could be immediately sparked due to the arrival of immigrants. Consequently, the negative impact of immigration affects voting behavior.

A large literature has noted the importance of different kinds of shock affecting politics. There are studies on the impact of natural disasters ([Achen and Bartels, 2017, N.d.](#); [Bechtel and Hainmueller, 2011](#)), major construction projects ([Stokes, 2016](#)), starvation ([Rozenas and Zhukov, 2019](#)). All these shocks change the voting behavior favorably or negatively towards the incumbent since voters perceive her as responsible for causing or solving the shock. Another common characteristic of all shocks is that their effect is geographically localized, with their impact only being critical in the exposed regions. In the non-exposed areas, these topics only become meaningful to make voters change their voting behavior if they become national issues through the action of the political elite or the media. I expect immigration to have similar localized impacts, affecting political behavior mainly in the exposed regions.

More specifically, immigration is a type of shock that derives from globalization. Globalization results in the expansion “in the scale and speed of flows of capital, goods, people,

and ideas across borders with the effect of decreasing the effects of distance” (Norris, 2005, 23). Besides immigration, another important example of globalization shock is the trade shock. Diverse empirical findings in advanced democracies show that trade shock results in a political backlash in the “losers” regions – regions where the higher flow of goods has a negative effect³ (Autor et al., 2016; Autor, Dorn, and Hanson, 2016; Colantone and Stanig, 2018). The natives in those exposed regions are changing their voting preference by rejecting the political establishment and supporting more radical and populist candidates (Autor et al., 2016; Autor, Dorn, and Hanson, 2016; Colantone and Stanig, 2018).

Immigration shocks behave similarly to trade shocks. Immigration also results in “losers” regions. I theorize that, in those exposed regions, immigration shocks result in (perceived or actual) economic and cultural hardship. The natives in those exposed regions are the ones who will be anxious that the immigration shock will result in higher competition for jobs and that public welfare will be distributed more to immigrants than natives. They will, as well, be anxious about the perspective of cultural and demographic changes. Therefore, immigration has a localized effect on voting behavior by making voters in exposed regions more favorable to political change, generating an anti-establishment and anti-incumbent sentiment.

Case context

The way Brazilians have responded to the arrival of Venezuelan immigrants provides a good example of how immigration can directly influence voting behavior. This is because Brazil-

³These regions exposed to the trade shock lose from opening to the international market because they suffer economically since their manufacturers cannot compete with cheaper international goods in the national market.

ians' attitudes towards Venezuelans are not as heavily influenced by the rhetoric and cues put forth by political elites and parties, as is typically seen in much of the existing research on this topic. Figure 1 shows how comparatively less salient immigration is to Brazilian parties compared to a selected group of advanced democracies in the V-Party dataset⁴ (Staffan. I. Lindberg et al., 2022). It is possible to note two different groups in this selection of countries.

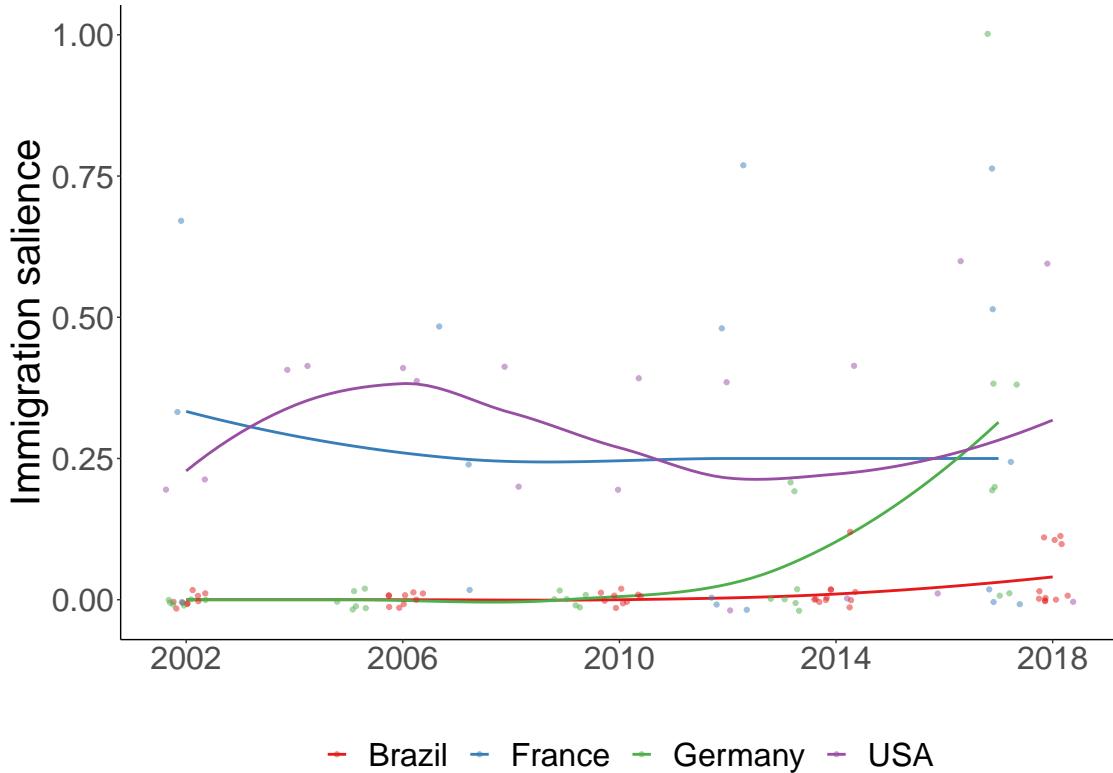
France and the USA have a long tradition of relevant parties highlighting immigration – the National Front and the Republican party, respectively. Conversely, Germany and Brazil do not have a history of immigration saliency. However, the Alternative for Germany (AfD) party made immigration a critical topic in the agenda in recent German elections⁵. There is no similar trend in Brazil, despite the influx of Venezuelans in recent years (see figure 2). Consequently, and unlike its European counterparts, Brazil's radical right populism, represented by former president Jair Bolsonaro (Hunter and Power, 2019), does not espouse anti-immigration rhetoric as one can see in advanced democracies. Immigration has not been a relevant topic on the Brazilian electoral agenda since, at least, its redemocratization in 1985.

The particular dynamics between the Workers' Party (PT), Venezuela, and Bolsonaro made immigration slightly more salient during the 2018 election. First of all, the higher quantity of Venezuelans coming to the country results in greater media and popular attention to the matter, forcing the political actors to address this issue. PT was, and still is, very resistant to criticizing the Venezuelan government, and some segments of the party publicly praise the Venezuelan regime (e.g., PT, 2021). PT's government and the Venezuelan regime

⁴The V-party is a dataset of experts' responses. In this case, the data is the proportion of experts said that immigration is an important topic for each party in the country's party system

⁵All experts that answered the V-Party agree that immigration is an essential topic for the AfD party

Figure 1: Parties concern with immigration (selected countries)



Note: Immigration saliency is measured as the proportion of experts that agreed that immigration is a salient topic for each party that disputed the national election. Each dot represents a party in the party system, and the line as LOESS regression to highlight the different trends between the countries

are examples of the ‘pink tide,’ the wave of electorally successful left-wing governments in Latin America in the early two-thousands. PT is a center-left party, but the resistance to dissociate it from the regime in Venezuela is a significant source of criticism, serving as a justification to label the party as radical and undemocratic.

The specific relationship between PT and Venezuela results in an ambivalent position from Bolsonaro. On the one hand, Bolsonaro attacked the pro-immigration piece of legislation approved before his presidency ([VEJA, 2018](#)). On the other hand, he sustains the necessity to protect the Venezuelans fleeing the country and entering Brazil ([de Andrade,](#)

2018). This ambivalence made him avoid the topic during the 2018 campaign and set Bolsonaro apart from different right-wing populists across the globe, which lionized a clear anti-immigration stance. The lack of a clear policy position from Bolsonaro and running from a small and weak party resulted in the voters having no party cues regarding immigration.

To the best of my knowledge, this is different from all cases used to assess the importance of immigration on voting behavior (Alesina and Tabellini, 2022; Hainmueller and Hopkins, 2014; Hjorth and Larsen, 2022; Mayda, Peri, and Steingress, 2022; Schmidt-Catran and Czymara, 2023; Van Der Brug, Fennema, and Tillie, 2005; Whitaker and Giersch, 2015). In the literature, immigration is an increasingly salient issue through the push from the radical right (Berman, 2021). The comparative lack of these cues allows the Brazilian case to be more effective in studying the direct effect of immigration on voting behavior without as much interference from the political elites.

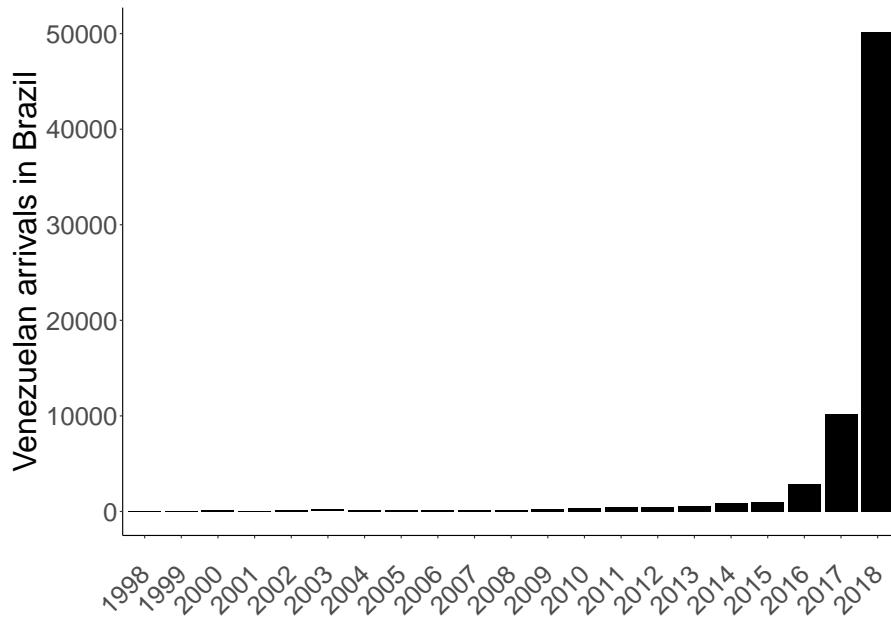
The Venezuelan diaspora is the consequence of President Hugo Chávez's political legacy. Despite initial success, Chávez's and Maduro's, his successor, governments resulted in a sizeable socioeconomic crisis since the end of the last commodity boom cycle (around 2010). After its end, Venezuela's economy entered into disarray with stagflation and a shortage of fundamental goods like food and medicine, with substantial social consequences, like the sharp increase in violence. Consequently, the country is in dire socio-economic situation for many years now.

In parallel, *Chavismo* promoted a profound political change in Venezuela. Chávez sponsored a new constitutional assembly in 1999, which “closed Congress, purged the judiciary, and appointed new electoral authorities” (Levitsky and Loxton, 2013, 125). Moreover, there are several denunciations against Maduro's government with accusations of human rights

abuses, persecution of the opposition, and tampering with the elections ([Human Rights Watch, 2021](#)). Therefore, the odds of an opposition victory nowadays are slim, making any political change in Venezuela through elections difficult. In sum, Chávez's regime's political persecution, corruption, and mismanagement of the Venezuelan economy result in a large-scale humanitarian crisis. Consequently, the 'natural' decision for many Venezuelans was to *exit* the country ([Clark, Golder, and Golder, 2017](#); [Vivas and Paez, 2017](#)). More than 6 million Venezuelans have left the country ([R4V, 2022](#)) – almost one-fifth of the country's population, resulting in one of the biggest displacements in the American continent's history.

This massive diaspora happened in three waves ([Vivas and Paez, 2017](#)). The first wave occurred from 2000 to 2012. It was primarily composed of relatively wealthy Venezuelans that left the country due to non-economic reasons (e.g., political persercussion), and they had the resources to emigrate to the United States and Europe ([Vivas and Paez, 2017](#)). The second wave was from 2012 to 2015, and it was a mixture of middle-class and low-income Venezuelans that fled the country for the same reasons as the first wave, plus with the first signs of economic deterioration. They emigrated to the US, Europe, Colombia, and Panama ([Vivas and Paez, 2017](#)). Finally, the last wave is mostly from low-income Venezuelans escaping the scarcity of essential goods and medication and the lack of any perspectives for political change. This wave emigrates to any viable place, including Brazil which is a very challenging country to emigrate to since it is the only neighboring country that does not speak Spanish. Out of the totality of the Venezuelan diaspora, more than 261 thousand ([R4V, 2022](#)) decided to migrate to Brazil. The data in figure [2](#) provides a sense of the Venezuelan immigration flow in Brazil through time.

Figure 2: Distribution of Venezuelans requesting Brazilian visas



Note: The number represents only the Venezuelans requesting a Brazilian visa.

Empirical strategy

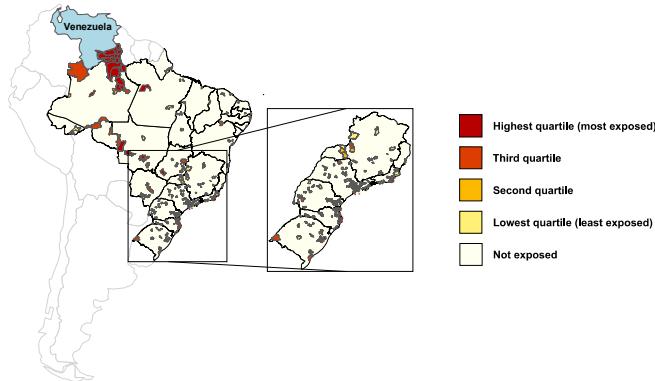
Brazil's federal system comprises the national government, the states' governments, and the cities' governments. The cities are the smallest political unit in Brazil, making them the most appropriate unit of measurement to evaluate behavior differences between regions exposed and not exposed to immigration. For this reason, I created a new dataset that links Brazil's voting share, and immigration flows aggregated at the city level.

Regarding the immigration data, I use the Migration National Registration System (SISMIGRA), which has data on all foreigners who request the Migration National Register (RNM). The RNM encompasses all different types of visas in Brazil. In this dataset, 68,831 Venezuelans requested an RNM from 1998, when Chávez took power, to 2018⁶. This dataset

⁶Only in 2018, 50,212 Venezuelans requested the RNM

provides the city in which the foreigner declares to live. There are 320⁷ cities with at least one Venezuelan reporting to live there. I quantify the number of Venezuelans per city and use this measure to indicate local exposition to immigrants. The map in figure 3 shows how Venezuelans are geographically distributed across Brazil.

Figure 3: Map of the distribution of Venezuelans in Brazil



Note: The quartiles indicate the number of Venezuelans in the municipality as a function of the city's population.

The RNM, like any visa, facilitates migrant life in the new country, allowing easier access to public goods and making it possible to work legally in Brazil. In the case of the Venezuelans, there is little to no risk of requesting the RNM since the chance of deportation was not on the horizon since Venezuelans could safely apply for refugee status. Consequently, and importantly for this research, the RNM does not generate any bias that would make any group of the Venezuelan diaspora overrepresented within the visa applicants population.

There are two characteristics concerning using the RNM data that lead to attenuation bias and, consequently, make my results conservative. RNM data does not include all Venezuelans

⁷There are Venezuelans declaring to live in Brasília. However, Brasília is the federal district, not legally a city. For this reason, I exclude it from the analysis.

in the country (see the data from R4V (2022) for reference). As a result, the RNM data only allow me to analyze a segment of the Venezuelan diaspora in Brazil. Thus, my results are underestimating the impact of the presence of Venezuelans in the cities. The second bias derives from the fact that many Venezuelans may have moved from where they registered after requesting the RNM. Not remaining not only does not reduce the effect of immigration on the cities where the migrants request the visa since a short contact results in a negative bias against immigrants (Hangartner et al., 2019) but might have made more cities in Brazil exposed to the Venezuelan diaspora that I was not capable of accounting. In sum, RNM provides a reliable but partial account of the Venezuelan shock in Brazil; consequently, the effect of immigration could be higher than what I can assess is higher than I can assess.

I combine this immigration data from RNM with socio-demographic and electoral data at the city level. The electoral data comes from the Brazilian Electoral Supreme Court (TSE). TSE organizes the electoral process and aggregates electoral results from cities and states. I use data from the last Brazilian census in 2010⁸ for the socio-demographic measurement. Finally, I also combine the official estimation of the cities' population in 2018 to analyze the impact of the Venezuelan immigration shock as a function of the city's population.

My goal is to understand the impact of immigration shock on voting behavior. For this reason, my dependent variable is the PT's voting share at the city level for each elected office. The choice for focusing solely on PT is twofold. First, PT is the greatest representation of the political establishment in the country. Although PT was no longer in the presidency in 2018 due to the impeachment of Dilma Rousseff in 2016, the party had still won the

⁸The 2020 census did not occur due to the COVID pandemic.

previous presidential elections.⁹ Furthermore, PT was primarily perceived as holding the lion's share of responsibility for the country's poor situation in 2018 (Hunter and Power, 2019). Finally, Michel Temer, the president who took power after the impeachment, did not run for reelection. Consequently, PT was the party Brazilians saw as embodying the political establishment, while Bolsonaro was the outsider.

Second, PT is comparatively a strong party, allowing this analysis to be comparable with other democracies with strong party systems. Brazilian parties' fragility and superficial connection with the public is one of the most well-known characteristics of Brazil's party system (Klašnja and Titiunik, 2017; Mainwaring, Power, and Bizzarro, 2018; Novaes, 2018). The consequence is a system known for politicians switching between parties (Desposato, 2006), high party fragmentation in the legislature (Mainwaring, Power, and Bizzarro, 2018), and an overall lack of partisanship (Samuels and Zucco, 2018). PT is the exception.

PT evolved from social groups and grassroots movements, forming a party with close relations with many Brazilians (Hunter, 2010; Samuels and Zucco, 2018). In 2002, Lula, from PT, was elected Brazil's president. He managed to end his mandate with historical approval, solidifying PT's appeal to the Brazilian electorate and distinguishing PT even further from the other parties in the country. Despite consolidating a personalistic appeal around Lula (Hunter and Power, 2019), PT remains the center of the Brazilian political debate (Samuels and Zucco, 2018), and it is a party comparable to most democracies across the globe.

My theoretical framework proposes that immigration shocks will first result in the assumptions from the group threat theory, where the influx of immigrants will result in natives

⁹2002, 2006, 2010, and 2014

becoming more anxious about an immigration influx due to economic and/or cultural reasons. The impact of these anxieties and sense of threat on voting behavior is a desire to change and punish the incumbents and the political establishment. Hence, I hypothesize that the cities exposed to this shock will have a voting preference against the PT. I test the impact of the immigration shock on the voting for president, federal deputy, and state deputy¹⁰.

I use the logarithm of the smallest distance (in kilometers) between all Brazilian cities' polygon's centroid to Venezuela's border¹¹ as my instrumental variable. The map in Figure 3 shows how most of the cities in the fourth quartile are close to the Venezuelan border. In fact, the entire state of Roraima — the state bordering Venezuela — is in the fourth quartile, the cities most exposed to the immigration shock.

My explanatory variable is the Immigration Exposure Index (IEI) which represents the degree of impact the immigration influx had in each city. To estimate it, I use the proportion of Venezuelans in a city to the city's population, i.e.,

$$IEI = \frac{\text{Venezuelans}}{\text{Venezuelans} + \text{Brazilians}}$$

an IEI is a value that goes from 0 to 1. All cities with IEI equal to 0 are non-exposed cities, while any city with *IEI* greater than 0 is in the group of cities exposed to immigration. The city with the most significant share of Venezuelans was the neighboring city of Pacaraima in the state of Roraima, where Venezuelans that requested an RNM only in 2018 represented

¹⁰I did not do an analysis of the senatorial election because there was not a PT's candidate in all cities

¹¹I transform Venezuela's polygon into a multipoint geographical object using the `st_cast()` from the `sf()` R package

almost 29% of the total population¹².

I use an Instrumental Variable (IV). IV allows the creation of a valid reduced form regression that can produce a valid causal link “when the researcher has access to a variable (the instrument, which we’ll call z_i), that is correlated with the causal variable of interest, s_i , but uncorrelated with any other determinants of the dependent variable” ([Angrist and Pischke, 2009](#), 85). Here, this means using an instrument – border distance – to study the causal impact of immigration on voting behavior with the expectation that the border distance is uncorrelated to unobserved variables relevant to defining voting behavior.

The use of IV in the study of immigration is common ([Alesina and Tabellini, 2022](#); [Dustmann, Vasiljeva, and Piil Damm, 2019](#); [Hangartner et al., 2019](#); [Mayda, Peri, and Steingress, 2022](#)). Its common use of relying on different strategies to assess the causal effects of immigration derives from a shared understanding that the immigration phenomenon suffers from a problem of endogeneity. Immigration and relevant characteristics in the regions where they settled suffered from simultaneity — where immigrants’ decision of a place to settle happened at the exact moment that changes in attitudes and/or other localized shocks ([Alesina and Tabellini, 2022](#)). This endogeneity problem might significantly bias the results and make any causal claims between immigration shock and voting preference unfeasible.

The literature considers that the endogeneity problem related to immigration is usually associated with immigrants’ preference to go to cities or regions with more economic opportunities and/or where they will feel welcomed([Alesina and Tabellini, 2022](#); [Dustmann, Vasiljeva, and Piil Damm, 2019](#)). For example, more than a third of Brazilian emigrants to

¹²In the appendix, there is a a table showing the summary statistics of IEI.

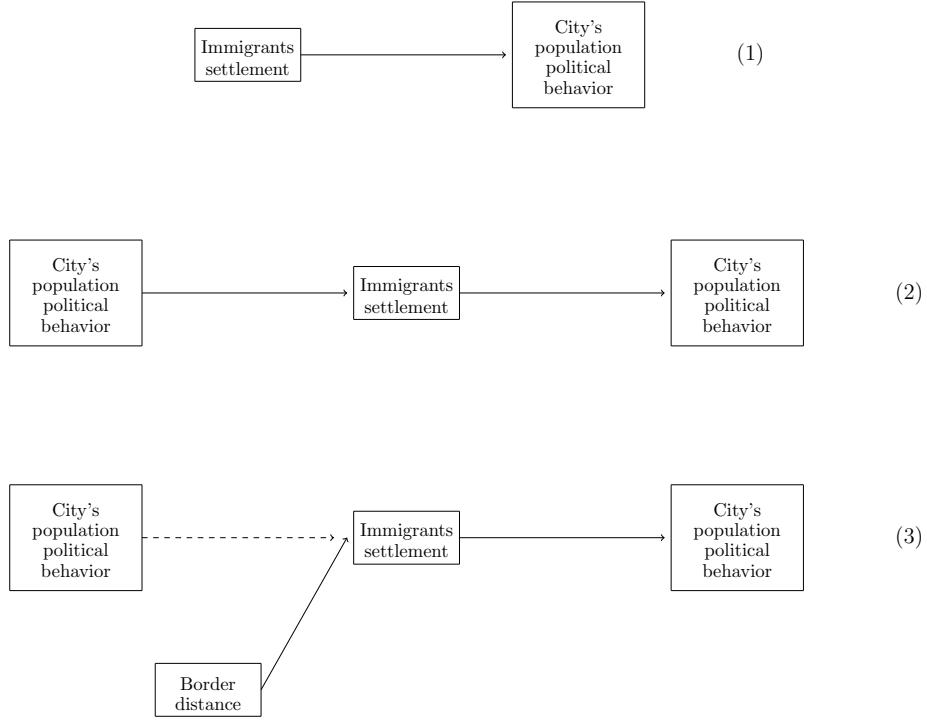
the US are in three metropolitan areas¹³ ([Waters and Batalova, 2022](#)) due to the existence of previous Brazilian communities in those areas that make Brazilian newcomers feel more welcomed in the United States. The factors that motivate an immigrant to choose a city over another “may be related to the same factors that affect voting behavior and/or are directly caused by the political preferences of populations in the receiving regions” ([Dustmann, Vasiljeva, and Pil Damm, 2019](#), 2036).

Figure 4 shows a schematization of the problem of using OLS and how using the distance to the border as an instrumental variable helps to circumvent this problem. The first logical flow represents the direct impact of immigration on political behavior. It is my objective is to analyze it. Reality, however, is arguably closer to the second logical flow. Political behavior in the cities also causes the choice for settlement. Hence, the best viable option is logical flow 3, where the border distance diminishes the risk of reverse causality. The border distance instrument allows me to break this cyclical dynamic in the second logical flow and permits more confidence concerning the causal effect of Venezuelan immigration shock on voting preference.

As mentioned above, two mechanisms explain why reality is likely the second case represented in figure 4. [Homola and Tavits \(2018\)](#) show that left- and right-leaning individuals react differently to the effect of close contact with immigrants. Left-leaning individuals have a preexisting cheerful disposition towards immigrants, reinforced by positive contact with immigrants, decreasing immigration-related threats. Conversely, right-leaning individuals have a negative tendency towards immigrants that is not alleviated with positive contact ([Homola and Tavits, 2018](#)). Hence, left-leaning cities are more likely to welcome immigrants, while

¹³Boston, Miami, and New York

Figure 4: Instrumental variable justification



right-leaning are less likely to do so, making cities with a left-leaning majority will be more likely to be a haven for immigrants. This, in turn, results in a greater stock of immigrants settling in the city, making the city more appealing to leftists and less attractive to rightists. Consequently, the immigration distribution might result in left- and right-leaning moving in or out of towns, affecting the electoral result at the municipal level.

The factors that give a city more economic opportunity also affect citizens' voting behavior. It is possible to see the correlation between higher economic opportunity and voting behavior through different mechanisms. For example, a higher economic opportunity might indicate an excellent economic outlook that benefits the incumbent ([Vavreck, 2009](#)). Another possible scenario is that the city is wealthier than average. Cities or regions with a primarily affluent population will have voting preferences markedly different from those with a mostly lower strata population ([Jusko, 2015](#)).

Therefore, using an instrumental variable approach is an effort to circumvent those confounding variables, allowing a causal evaluation of the impact of the immigration shock on voting behavior in the cities exposed to immigrants. Nevertheless, the instrumental variable must satisfy several assumptions. [Sovey and Green \(2011\)](#) provides an overview of using instrumental variables in political science and indicates six issues' categories that must be addressed using an instrumental variable.

The first issue is the matter of the model itself. The model follows the common practice of using instrumental variables in studying immigration (e.g., [Alesina and Tabellini, 2022](#); [Dustmann, Vasiljeva, and Piil Damm, 2019](#); [Hangartner et al., 2019](#); [Mayda, Peri, and Steingress, 2022](#)). More specifically, this research follows the same rationale from ([Hangartner et al., 2019](#)). They evaluate the impact of the Syrian refugee crisis in Greece by using the Greek islands' distance from Turkey as the instrument. Finally, the use of geographical factors or natural phenomena are commonly used in instrumental variable models in many types of research (for example, [Stokes, 2016](#); [Theil and Finke, 1983](#)). Consequently, my approach to using distance as an instrument variable aligns with prior work, resulting in more substantial confidence in the model's reliability.

Two additional concerns are the independence assumption and the exclusion restriction. Both refer to the instrument's lack of direct impact on the dependent variable's potential outcome. In the case of the exclusion restriction assumption, I assume that the distance to the border cannot affect PT's voting share in any way except through the Venezuelan immigration rate. Although some literature underscores the effect of a border on individual behavior (e.g., [Abramson, Carter, and Ying, 2022](#)), I use the results of the previous election

(in 2014¹⁴) to control for possible electoral trends that might generate a spurious relationship between the treatment and the PT's electoral results. Furthermore, I perform a sensitivity analysis that tests the impact of a hypothetical unknown covariate on my results. Its results show the strength of my results and diminish the risks of a spurious relationship between my instrument and my outcome variable.

Another risk of a violation of the exclusion restriction is the crisis in Venezuelan resulting in other flows through the border (e.g, contraband, and drug trafficking) that would affect voting behavior as well. For obvious reasons, it is hard to have a sense of the magnitude of those waves; however, data on cocaine trafficking show that it found its peak in Venezuela in 2017 after a continuous increase since 2012 ([Ramsey and Smilde, 2020](#)). Hence, it does not match the immigration flow. Moreover, cocaine flow in Venezuela is just a fraction of the Colombian flow ([Ramsey and Smilde, 2020](#)). Due to the high value of cocaine, I believe that other illegal markets have behaved similarly on the Brazilian-Venezuelan border. Therefore, these possible waves have had a more prolonged impact (since around 2012) and, for this reason, have affected voting behavior already in the 2014 election.

The fourth issue is instrument strength. If the instrument is too weak, there are significant risks of bias in the results ([Sovey and Green, 2011](#)). In Table 1, there is the first stage regression. The F-statistic in all elections that I analyze is above 20, well above the necessary threshold to guarantee it is not a weak instrument ([Sovey and Green, 2011](#)).

The last two issues are monotonicity and Stable Unit Treatment Value Assumption (SUTVA). The monotonicity assumption holds because there are no capable defiers. No

¹⁴In the appendix, there is a map with PT's voting distribution in 2014 to show that the party's votes were not regionally sorted. See, as well, the robustness check section.

Table 1: First stage regression

	<i>Dependent variable:</i>		
	Immigration Exposure Index		
Instrument	−0.014*** (0.001)	−0.014*** (0.001)	−0.014*** (0.001)
MHDI	0.015 (0.024)	0.024 (0.023)	0.015 (0.024)
Gini index	−0.011 (0.012)	−0.011 (0.012)	−0.011 (0.012)
Rural proportion	0.006 (0.006)	0.005 (0.006)	0.006 (0.006)
Poor proportion	−0.0001 (0.0001)	−0.0002 (0.0001)	−0.0001 (0.0001)
Female proportion	0.119* (0.062)	0.105* (0.061)	0.119* (0.062)
Presidential 2014	−0.007 (0.005)		
State legislature 2014		0.001 (0.006)	
Fed. legislature 2014			−0.007 (0.005)
Constant	0.047 (0.031)	0.047 (0.031)	0.047 (0.031)
Observations	528	528	528
R ²	0.227	0.225	0.227
Adjusted R ²	0.217	0.214	0.217
Residual Std. Error	0.011 (df = 520)	0.011 (df = 520)	0.011 (df = 520)
F Statistic	21.836*** (df = 7; 520)	21.513*** (df = 7; 520)	21.836*** (df = 7; 520)

Note:

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

Brazilian city was or is capable of rejecting receiving Venezuelans or any immigrant since it is a national matter where local politicians have little to no power to intervene. However, there is a concern that the effects of the immigration shock spill over to neighboring cities. Affected citizens might go to these cities searching for jobs or better access to public goods. Nevertheless, this risk is significantly reduced by the use of matching, which is necessary to circumvent the zero-inflated regression in the first stage regression of my two-stage least-square (2SLS) framework where the regression equations are as follows:

$$\text{IEI} = \alpha_1 + \beta_1 Z + C'\gamma_1 + \varepsilon_1 \quad (1)$$

$$\text{PT's vote share} = \alpha_2 + \beta_2 \widehat{\text{IEI}} + C'\gamma_2 + \varepsilon_2 \quad (2)$$

where Z is the distance to Venezuela. C is a vector of covariates composed of a set of socio-demographics from the 2010 census and PT's voting share in 2014 to account for possible electoral trends¹⁵.

In the case of the first-stage regression, IEI has the problem of being a zero-inflated variable. One possible approach to solve this issue is to randomly select a sample of not exposed, as it is often done in case-control studies. However, there is the risk of getting a sample filled with “extreme counterfactuals” or other biases that cast doubts on the validity of the results¹⁶. To deal with this problem and to ameliorate the concerns about violating the SUTVA assumption, I match treated and control cities based on observables.

I process the data through matching to solve the zero-inflated problems because matching has some key advantages. This method removes “extreme counterfactuals” that diverge too significantly from cities where Venezuelan immigrants settled (King and Zeng, 2006; Lyall, 2010) without human intervention, which may result in “cherry-picking.” Further, the selection is less model dependent (Ho et al., 2007). Finally, matching reduces bias, variance, and mean square errors (Ho et al., 2007).

The covariates selection for matching is based on factors known to affect voting behavior.

¹⁵See the robustness checks for a further discussion on the risks of the results are only electoral trends.

¹⁶Nevertheless, I ran the same model that I show in the results using a random sample instead of matching. The results are the same as the ones using matching. See the appendix.

All of them come from the 2010 census. They are the city's (i) population, (ii) the municipal Human Development Index (MHDI), (iii) household Gini index, (iv) average income per capita, (v) the proportion of the population below the poverty line, (vi) proportion of adults that graduate at least from middle school, (vii) proportion of the rural population, and (viii) proportion of the female population. I match using the Mahalanobis distance between pre-immigration shock covariates¹⁷. Table 2 displays the post-matching statistics.

Table 2: Matching statistics

Covariates	Mean treated	Mean control	Std. mean diff.	t-test(p-value)	KS
Before matching					
Population	322587.57	20103.84	35.26	0	0.69
MHDI	809.00	474.13	109.62	0	0.52
Gini index	0.74	0.65	143.95	0	0.53
Avg. income per capita	0.51	0.49	24.79	0	0.09
Poverty (%)	10.49	23.99	-104.98	0	0.39
Education (%)	0.57	0.39	186.73	0	0.66
Rural population (%)	0.12	0.38	-149.00	0	0.59
Female population (%)	0.50	0.49	86.19	0	0.44
After matching					
Population	322587.57	152777.47	19.80	0.00	0.24
MHDI	809.00	775.06	11.11	0.00	0.11
Gini index	0.74	0.74	2.97	0.13	0.06
Avg. income per capita	0.51	0.50	17.21	0.00	0.14
Poverty (%)	10.49	10.02	3.63	0.00	0.08
Education (%)	0.57	0.56	13.84	0.00	0.11
Rural population (%)	0.12	0.12	-0.52	0.72	0.11
Female population (%)	0.51	0.51	-0.80	0.69	0.07

Note: Post matching statistic of Brazilian cities socio-demographic data.

Table 2 shows that the matching group is more balanced than before the matching data processing. Nevertheless, exposed cities and non-exposed cities are statistically different for many of these covariates. Since matching is flexible enough to be unrelated to my model

¹⁷I use the R package ‘Matching.’ The Mahalanobis distance is similar to the Euclidean distance equation but with the variance-covariance matrix of the covariates to ensure that all covariates are on the same scale, making it the most appropriate method in this case

selection (Ho et al., 2007), I include these covariates as controls in my model.

Results

Figure 8 displays coefficients of a 2SLS regression of PT voting share on variables of interest¹⁸. The results indicate that the Venezuelan immigration influx harmed PT's voting share in all elections in 2018. The estimated IEI's coefficient for the presidential candidate is -1.855 ($se = 0.448$). In the case of legislative elections, the estimated IEI coefficients are -1.515 ($se = 0.686$) and -2.084 ($se = 0.768$) for the federal and state deputies' elections, respectively.

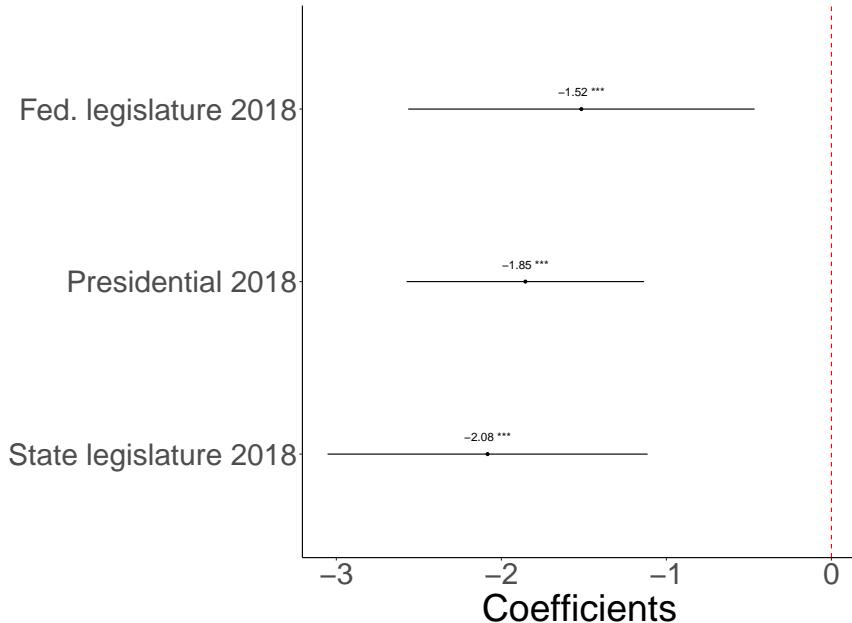
These results suggest some variation in the size of the effect of the immigration shock. The city with the smallest value for IEI – Niterói – barely differs in its voting share from those not exposed to the immigration shock. Niterói is a big city (511,786 habitants in 2018) in the Rio de Janeiro metropolitan area, and only one Venezuelan declared to live there. Consequently, my theoretical perspective account that the results from Niterói would not be distinguishable from the cities not exposed to immigration flow. Conversely, the results suggest highly consequential effects in Pacaraima, the city with the highest exposition to the immigration shock. Pacaraima is a smaller city (15,580 habitants in 2018) located on the Brazil-Venezuelan border and, for this reason, received 6,226 Venezuelans in 2018 alone. In the case of Pacaraima, the results indicate that the shock implies a decrease in PT's voting share in the presidential election of 0.5%, a difference that would be enough to change the results of the 2022 election by making Lula, PT's candidate, lose to Bolsonaro.¹⁹ This

¹⁸The table is in the appendix D.

¹⁹These results only account for the Venezuelans that arrived in Brazil in 2018, making it likely that the

difference corroborates the hypothesis linking cities highly exposed to immigration shock to greater change in their voting behavior.

Figure 5: 2SLS Regression Estimates of the impact of Venezuela’s immigrants



Note: *** $p < 0.05$. Confidence intervals for 95%

The results show that PT performed significantly worse in the exposed cities. This result is noteworthy, especially considering the general context of the 2018 elections. The 2018 election was particularly bad for PT, which not only lost the presidential election after four victories in a row but, as well, thirteen deputies and four senators – a reduction of 19% and 33% in the party seats in the lower and higher chamber, respectively. The general reasons for the party’s downfall are a ‘perfect storm’ of subpar economic performance and corruption scandals ([Hunter and Power, 2019](#)).

The findings also corroborate contemporary interpretations of Brazilian political behavior, notably [Samuels and Zucco \(2018\)](#) interpretation of the PT’s centrality in Brazil’s poli-
effects are underestimated since there was a significant influx of Venezuelans already in 2017. This fact and the attenuation bias outlined before make these results considerably conservative.

tics. [Samuels and Zucco \(2018\)](#) argues that Brazilian politics is centered around PT's supporters (*petistas*) and PT antagonists (*antipetistas*). They define *petistas* as the "Brazilians who not only desire social change and believe that democracy can facilitate it [but] also came to believe that the PT was the best vehicle for helping bring such change about." ([Samuels and Zucco, 2018](#), p. 30). Conversely, *antipetistas* include Brazilians who "exhibit relatively less enthusiasm for democracy, less engagement in civil-society activism, and greater support for 'law and order' approaches to politics." ([Samuels and Zucco, 2018](#), p. 30). The public's perception of PT is central to Brazilian voting behavior.

The results indicate that the immigration shock impacted the exposed cities. The Venezuelans' presence seems to exacerbate the PT's poor performance in 2018 by adding another justification to reject the party on the ballot. The results also indicate that the Venezuelan immigration shock has moved the Brazilians in the exposed cities to be *antipetistas* and/or demobilize the *petistas* in those cities. Therefore, the results mainly validate my hypothesis concerning the negative consequence of Venezuelan immigration shock on Brazilians' voting behavior against PT.

The relevance of these results derives from the fact that they provide a relatively unique case in terms of the relationship between immigration and voting behavior. In most cases used in the literature, it is unfeasible to estimate this relationship because political elites mediate it. Consequently, the Brazilian-Venezuela case contributes to our understanding of how immigration affects voting behavior in the absence of any external cues from the political elite. In addition, the results suggest that the political elites in countries where immigration is a salient topic beyond the exposed regions did not create this anti-immigration sentiment. Rather, they took advantage of local animosity, capitalized on it, and eventually amplified it.

Nowadays, the topic of immigration is completely intertwined with parties and partisanship in these countries. In Brazil, this integration between partisanship and immigration has not happened yet and might never happen if the immigration shock subsides in the near future.

The link between immigration and partisanship not being as effective in Brazil as in many democracies is due, as well, to Brazil's weak party system. This weakness limits the results' external validity since most democracies have strong parties. Nevertheless, the PT is a strong party similar to center-left parties in advanced democracies. Like many European social-democratic parties, PT has significant ties with organized labor but has become more like a catch-all party to appeal to a larger set of voters. Hence, the immigration effect on voting behavior against PT is comparable to the effect against many democratic countries, especially social-democratic parties in advanced democracies.

In sum, these results largely validate my hypothesis and provide evidence in favor of my theoretical framework. Furthermore, the results provide significant evidence to understand the political impact of immigration beyond the Brazilian borders. These results also reinforce contemporary interpretations of Brazilian political behavior ([Samuels and Zucco, 2018](#)) and interpretations of the 2018 election ([Hunter and Power, 2019](#)). However, the results have some limitations. They do not allow me to fully understand the mechanisms that motivate Brazilians to penalize PT due to their exposition to Venezuelan immigration. Nevertheless, the results contribute to improving our understanding of the relevance of immigration in politics by showing a country where there is no active anti-immigration party.

Robustness Check

The validity of the 2SLS results above relies upon the assumption that the distance to the border can only affect Brazilians' voting behavior through IEI. Even though I believe this to be a reasonable assumption, there is a concern about the existence of one or a plethora of unobserved variables that might violate the exclusion restriction assumption or the assumption of the ignorability of the instrument. For this reason, I conduct a sensitivity analysis that measures the risk of invalidating my results given potential violations of either assumption. Overall, these robustness checks provide more confidence in the validity of the results.

I employ [Cinelli and Hazlett's \(2022\)](#) approach for this analysis which uses two separate sensitivity analyses²⁰ on the first stage and reduced-form regressions²¹. The ratio between the coefficients on the effect of the instrument on the treatment and the outcome is the causal impact of interest. The sensitivity analysis tests how strong a hypothetical unknown variable must be to turn the results insignificant. I focus on the reduced form regression because it allows using the 2014 election as a benchmark. This choice derives from the expectation that the 2014 electoral results greatly predict the 2018 electoral results. Hence, using the 2014 election as a benchmark produces a conservative result since it indicates that not even an unobserved covariate as strong as the 2014 electoral results would make IEI statistically insignificant. My results remain relevant even after adding a hypothetical covariate as 'strong' as the 2014 election. These results indicate that a much stronger

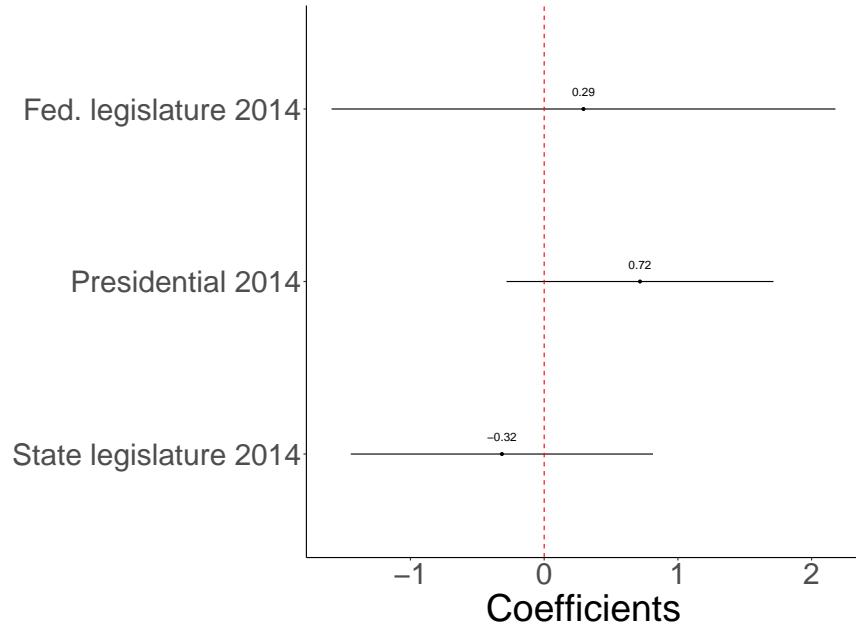
²⁰I perform them using the `sensemakr` R package ([Cinelli, Ferwerda, and Hazlett, 2020](#)).

²¹Although the results are mathematically the same, this approach means two sets of functions different from the 2SLS. In this case, one regresses the outcome variable on the instrumental variable (the reduced form function). The ratio between the coefficients on the effect of the instrument on the treatment and the outcome is the causal impact of interest.

and, in consequence, improbable unobserved covariate would be necessary to invalidate my findings²².

Another possible concern about the validity of this study's results is that the cities with Venezuelan immigrants are cities with a historical anti-PT sentiment. One could argue that Venezuelans went to cities with strong antipetismo due to the notorious link between PT and the Venezuelan regime, resulting in self-selection that would exaggerate the size of the immigration effect. In order to test whether the cities exposed to the immigration shock were already against the PT, instead of using the 2018 election, I used PT's voting share in 2014 as my main outcome of interest – the last election before the Venezuelan immigration shock. Figure 6 shows the results.

Figure 6: 2SLS Regression Estimates of the impact of Venezuela's immigrants in the 2014 election



Note: *** $p < 0.05$. Confidence intervals for 95%

As expected, the results are not significant. Moreover, these results indicate that the cities

²²The figures and tables of the sensitivity analysis can be found in the appendix.

exposed to Venezuelan immigrants were not less favorable to PT than those not exposed to the immigration shock – even if we disregard statistical significance. These empirical results are consistent with the theory of voting behavior outlined in this paper. The exposed cities that, in 2014, were insignificantly more inclined toward petismo than antipetismo changed course four years later. Although Brazilians nationwide changed their mood from the 2014 electoral cycle to the 2018 electoral cycle, the results indicate that the Venezuelan immigration shock further aggravated PT’s poor performance in the exposed cities. These results also eliminate the concern that Venezuelans chose those cities because their citizens were against PT. Consequently, this analysis makes me confident in rejecting an alternative explanation in which the results were due to a prior antipetismo in the exposed cities to Venezuelan immigrants. Therefore, these results reinforce the significant impact of the immigration shock in 2018 as something unparalleled in recent Brazilian political history.

Conclusion

Immigration shocks are an increasingly important social phenomenon. Nevertheless, despite the large interest in the issue, we know little about how immigration directly affects national’s voting behavior. This paper seeks to contribute to filling this gap by proposing an explanation of how voters react to immigration shocks. At the beginning of this paper, I argue that immigration shocks are a type of globalization shock that affects the exposed regions resulting in making more salient anti-immigration as laid out by the group threat theory. These negative perceptions, in turn, translate into voting behavior against the incumbent or the political establishment, who are perceived to be linked to the immigration

shock.

I test this argument by evaluating the impact of the Venezuelan immigration shock on Brazilians' voting behavior for the country's most important party: the Workers' Party (PT). I estimate the Venezuelan immigration shock's causal effect on PT's voting share by using city's distance to the border as an instrumental variable. In addition, I performed two robustness tests that provide confidence in the reliability of these results. I conclude that the Venezuelan diaspora had a detrimental effect on the PT's presidential, federal, and state legislative vote share in the 2018 election in comparison to cities that were not exposed to the immigration shock.

The findings that I have presented suggest that immigration shocks have a political effect even if immigration is not an issue articulated by any political actor. Whereas past research has focused primarily on studying the political impact of immigration in Western Europe and North America ([Hainmueller and Hopkins, 2014](#); [Whitaker and Giersch, 2015](#)) where political elites have been emboldening an anti-immigrant narrative for years or decades ([Ignazi, 1992](#)), I focus on a case where immigration was not on the electoral agenda.

This paper also contributes to underscoring the importance of globalization and its political impacts. These results reinforce works on globalization, notably trade shocks ([Autor, Dorn, and Hanson, 2016](#); [Colantone and Stanig, 2018](#)) that reinforce a general trend that globalization is leading voters against the political establishment and in favor of radicals ([Norris, 2005](#)). These results amount to a diverse set of empirical findings that cast doubt on the political viability of increasing globalization. Even if globalization forces that facilitate the transit of goods, services, communication, and people have a positive result on aggregate, these findings indicate the existence of 'loser' regions where these shocks have a

detrimental effect. These local ‘losers’ can and already are pressuring their political leaders to resist those forces of integration and providing arguments that boost the rise of radical populists.

This research raises important questions about the political viability of supporting immigration and the motivating factors that encourage a national individual to politically engage *in favor* of immigrants before having meaningful contact with them. One potential explanation might be a sympathetic sentiment toward immigrants, especially when the decision to emigrate derives from a major crisis, as the recent cases of Ukrainian refugees or the Venezuelans addressed in this paper exemplify. Future research should investigate these and other possibilities.

References

- Abramson, Scott F., David B. Carter, and Luwei Ying. 2022. “Historical Border Changes, State Building, and Contemporary Trust in Europe.” *American Political Science Review* pp. 1–21.
- Achen, Christopher H, and Larry M Bartels. 2017. “Democracy for realists.” In *Democracy for Realists*. Princeton University Press.
- Achen, Christopher H, and Larry M Bartels. N.d. “Blind Retrospection.” . Forthcoming.
- Alesina, Alberto, and Marco Tabellini. 2022. The Political Effects of Immigration: Culture or Economics? Technical report National Bureau of Economic Research.
- Allport, Gordon Willard, Kenneth Clark, and Thomas Pettigrew. 1954. “The Nature of Prejudice.” .
- Angrist, Joshua David, and Jörn-Steffen Pischke. 2009. *Mostly Harmless Econometrics: An Empiricist’s Companion*. Princeton: Princeton University Press.
- Autor, David, David Dorn, Gordon Hanson, and Kaveh Majlesi. 2016. Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure. Technical Report w22637 National Bureau of Economic Research Cambridge, MA: .
- Autor, David H., David Dorn, and Gordon H. Hanson. 2016. “The China Shock: Learning from Labor-Market Adjustment to Large Changes in Trade.” *Annual Review of Economics* 8(1): 205–240.

Bansak, Kirk, Jens Hainmueller, and Dominik Hangartner. 2016. “How economic, humanitarian, and religious concerns shape European attitudes toward asylum seekers.” *Science* 354(October): 217–222.

Bechtel, Michael M., and Jens Hainmueller. 2011. “How Lasting Is Voter Gratitude? An Analysis of the Short- and Long-Term Electoral Returns to Beneficial Policy.” *American Journal of Political Science* 55(October): 852–868.

Berman, Sheri. 2021. “The Causes of Populism in the West.” *Annual Review of Political Science* 24(1): 71–88.

Blalock, Hubert M. 1967. *Toward a Theory of Minority-Group Relations*. Vol. 325 New York: Wiley.

Bustikova, Lenka. 2014. “Revenge of the Radical Right.” *Comparative Political Studies* 47(October): 1738–1765.

Cinelli, Carlos, and Chad Hazlett. 2022. “An Omitted Variable Bias Framework for Sensitivity Analysis of Instrumental Variables.” *SSRN Electronic Journal* .

Cinelli, Carlos, Jeremy Ferwerda, and Chad Hazlett. 2020. “Sensemakr: Sensitivity Analysis Tools for OLS in R and Stata.” *SSRN Electronic Journal* .

Clark, William Roberts, Matt Golder, and Sona N. Golder. 2017. “The British Academy Brian Barry Prize Essay: An Exit, Voice and Loyalty Model of Politics.” *British Journal of Political Science* 47(October): 719–748.

Colantone, Italo, and Piero Stanig. 2018. “The Trade Origins of Economic Nationalism: Import Competition and Voting Behavior in Western Europe.” *American Journal of Political Science* 62(October): 936–953.

Conover, Pamela Johnston, and Stanley Feldman. 1989. “Candidate Perception in an Ambiguous World: Campaigns, Cues, and Inference Processes.” *American Journal of Political Science* 33(November): 912.

de Andrade, Hanrikson. 2018. “‘Venezuelano não é mercadoria para ser devolvido’, diz Bolsonaro.”.

Dennison, James, and Andrew Geddes. 2019. “A Rising Tide? The Salience of Immigration and the Rise of Anti-Immigration Political Parties in Western Europe.” *The Political Quarterly* 90(January): 107–116.

Desposato, Scott W. 2006. “Parties for Rent? Ambition, Ideology, and Party Switching in Brazil’s Chamber of Deputies.” *American Journal of Political Science* 50(January): 62–80.

Dustmann, Christian, Kristine Vasiljeva, and Anna Piil Damm. 2019. “Refugee Migration and Electoral Outcomes.” *The Review of Economic Studies* 86(October): 2035–2091.

Finseraas, Henning, and Andreas Kotsadam. 2017. “Does personal contact with ethnic minorities affect anti-immigrant sentiments? Evidence from a field experiment.” *European Journal of Political Research* 56(3): 703–722.

Hainmueller, Jens, and Daniel J. Hopkins. 2014. “Public Attitudes Toward Immigration.” *Annual Review of Political Science* 17(1): 225–249.

Hainmueller, Jens, and Dominik Hangartner. 2013. “Who Gets a Swiss Passport? A Natural Experiment in Immigrant Discrimination.” *American Political Science Review* 107(February): 159–187.

Hainmueller, Jens, and Michael J. Hiscox. 2010. “Attitudes toward Highly Skilled and Low-skilled Immigration: Evidence from a Survey Experiment.” *American Political Science Review* 104(February): 61–84.

Hangartner, Dominik, Elias Dinas, Moritz Marbach, Konstantinos Matakos, and Dimitrios Xefteris. 2019. “Does Exposure to the Refugee Crisis Make Natives More Hostile?” *American Political Science Review* 113(May): 442–455.

Hjorth, Frederik, and Martin Vinæs Larsen. 2022. “When Does Accommodation Work? Electoral Effects of Mainstream Left Position Taking on Immigration.” *British Journal of Political Science* 52(April): 949–957.

Ho, Daniel E., Kosuke Imai, Gary King, and Elizabeth A. Stuart. 2007. “Matching as Nonparametric Preprocessing for Reducing Model Dependence in Parametric Causal Inference.” *Political Analysis* 15(3): 199–236.

Homola, Jonathan, and Margit Tavits. 2018. “Contact Reduces Immigration-Related Fears for Leftist but Not for Rightist Voters.” *Comparative Political Studies* 51(November): 1789–1820.

Human Rights Watch. 2021. “Venezuela: Events of 2021.” In *World Report 2022*.

Hunter, Wendy. 2010. *The transformation of the Workers’ Party in Brazil, 1989-2009*. New York: Cambridge University Press.

- Hunter, Wendy, and Timothy J. Power. 2019. “Bolsonaro and Brazil’s Illiberal Backlash.” *Journal of Democracy* 30(1): 68–82.
- Ignazi, Piero. 1992. “The silent counter-revolution: Hypotheses on the emergence of extreme right-wing parties in Europe.” *European journal of political research* 22(1): 3–34.
- International Organization for Migration. 2022. “Data and Research.”
- Jardina, Ashley. 2019. *White identity politics*. Cambridge, United Kingdom: New York, NY, USA : Cambridge University Press.
- Jusko, Karen L. 2015. “Electoral geography and redistributive politics.” *Journal of Theoretical Politics* 27(April): 269–287.
- King, Gary, and Langche Zeng. 2006. “The Dangers of Extreme Counterfactuals.” *Political Analysis* 14(2): 131–159.
- Klašnja, Marko, and Rocío Titiunik. 2017. “The Incumbency Curse: Weak Parties, Term Limits, and Unfulfilled Accountability.” *American Political Science Review* 111(February): 129–148.
- Levitsky, Steven, and James Loxton. 2013. “Populism and competitive authoritarianism in the Andes.” *Democratization* 20(January): 107–136.
- Lyall, Jason. 2010. “Are Coethnics More Effective Counterinsurgents? Evidence from the Second Chechen War.” *American Political Science Review* 104(February): 1–20.
- Mainwaring, Scott, Timothy J. Power, and Fernando Bizzarro. 2018. “The Uneven Institu-

- tionalization of a Party System: Brazil.” In *Party Systems in Latin America*, ed. Scott Mainwaring. 1 ed. Cambridge University Press pp. 164–200.
- Malhotra, Neil, Yotam Margalit, and Cecilia Hyunjung Mo. 2013. “Economic Explanations for Opposition to Immigration: Distinguishing between Prevalence and Conditional Impact.” *American Journal of Political Science* 57(April): 391–410.
- Mayda, Anna Maria, Giovanni Peri, and Walter Steingress. 2022. “The Political Impact of Immigration: Evidence from the United States.” *American Economic Journal: Applied Economics* 14(January): 358–389.
- Norris, Pippa. 2005. *Radical Right: Voters and Parties in the Electoral Market*. Cambridge University Press.
- Novaes, Lucas M. 2018. “Disloyal Brokers and Weak Parties.” *American Journal of Political Science* 62(January): 84–98.
- PT. 2021. “Saudação às eleições gerais venezuelanas de novembro de 2021.” .
- R4V, UN Inter-Agency Coordination Platform for Refugees and Migrants from Venezuela. 2022. “Refugees and Migrants from Venezuela | R4V.” .
- Ramsey, Geoff, and David Smilde. 2020. Beyond the Narcostate Narrative. Technical report WOLA.
- Rozenas, Arturas, and Yuri M. Zhukov. 2019. “Mass Repression and Political Loyalty: Evidence from Stalin’s ‘Terror by Hunger’.” *American Political Science Review* 113(May): 569–583.

Samuels, David, and Cesar Zucco. 2018. *Partisans, anti-partisans and non-partisans: voting behavior in Brazil*. Cambridge, United Kingdom ; New York, NY: Cambridge University Press.

Schlueter, Elmar, and Peer Scheepers. 2010. “The Relationship between Outgroup Size and Anti-Outgroup Attitudes: A Theoretical Synthesis and Empirical Test of Group Threat- and Intergroup Contact Theory.” *Social Science Research* 39(March): 285–295.

Schmidt-Catran, Alexander W., and Christian S. Czymara. 2023. “Political Elite Discourses Polarize Attitudes toward Immigration along Ideological Lines. A Comparative Longitudinal Analysis of Europe in the Twenty-First Century.” *Journal of Ethnic and Migration Studies* 49(January): 85–109.

Snyder, James M., and Michael M. Ting. 2002. “An Informational Rationale for Political Parties.” *American Journal of Political Science* 46(January): 90.

Sovey, Allison J., and Donald P. Green. 2011. “Instrumental Variables Estimation in Political Science: A Readers’ Guide.” *American Journal of Political Science* 55(1): 188–200.

Staffan. I. Lindberg, Nils Düpont, Masaaki Higashijima, Yaman Berker Kavasoglu, Kyle L. Marquardt, Michael Bernhard, Holger Döring, Allen Hicken, Melis Laebens, Juraj Medzihorsky, Anja Neundorf, Ora John Reuter, Saskia Ruth-Lovell, Keith R. Weghorst, Nina Wiesehomeier, Joseph Wright, Nazifa Alizada, Paul Bederke, Lisa Gastaldi, Sandra Grahn, Garry Hindle, Nina Ilchenko, Johannes Von Römer, Steven Wilson, Daniel Pemstein, and Brigitte Seim. 2022. “V-Party Dataset v2.”

Stokes, Leah C. 2016. “Electoral Backlash against Climate Policy: A Natural Experiment

on Retrospective Voting and Local Resistance to Public Policy:” *American Journal of Political Science* 60(October): 958–974.

Theil, Henri, and Renate Finke. 1983. “The distance from the equator as an instrumental variable.” *Economics Letters* 13(4): 357–360.

Van Der Brug, Wouter, Meindert Fennema, and Jean Tillie. 2005. “Why Some Anti-Immigrant Parties Fail and Others Succeed: A Two-Step Model of Aggregate Electoral Support.” *Comparative Political Studies* 38(June): 537–573.

Vavreck, Lynn. 2009. *The message matters: the economy and presidential campaigns*. Princeton, NJ: Princeton Univ. Press.

VEJA. 2018. “Bolsonaro ataca lei de migração e diz que Brasil não sabe o que é ditadura.” .

Vivas, Leonardo, and Tomas Paez. 2017. “The Venezuelan Diaspora, Another Impending Crisis?” .

Wagner, Ulrich, Rolf Dick, Thomas Pettigrew, and Oliver Christ. 2003. “Ethnic Prejudice in East and West Germany: The Explanatory Power of Intergroup Contact.” *Group Processes & Intergroup Relations - GROUP PROCESS INTERGROUP RELA* 6(January): 22–36.

Ward, Dalston G. 2019. “Public Attitudes toward Young Immigrant Men.” *American Political Science Review* 113(February): 264–269.

Waters, Jaret, and Jeanne Batalova. 2022. “Brazilian Immigrants in the United States.” .

Whitaker, Beth Elise, and Jason Giersch. 2015. “Political Competition and Attitudes towards Immigration in Africa.” *Journal of Ethnic and Migration Studies* 41(August): 1536–1557.

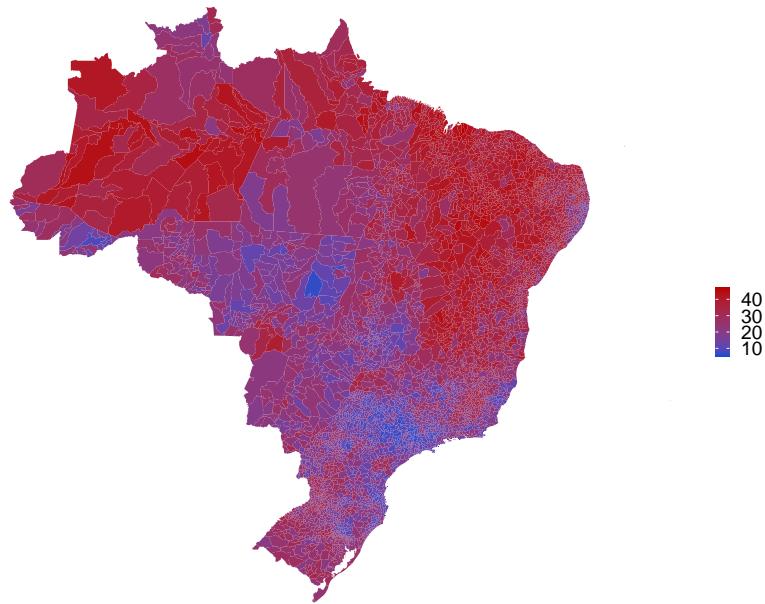
Appemdox A – IEI summary statistics

Table 3: IEI summary statistics

Immigration Exposure Index (<i>IEI</i>)	
Minimum	0.000002
Median	0.000064
Mean	0.002021
Standard deviation	0.018133
Maximum	0.285518

Appendix B – Map of PT's presidential voting share in 2014

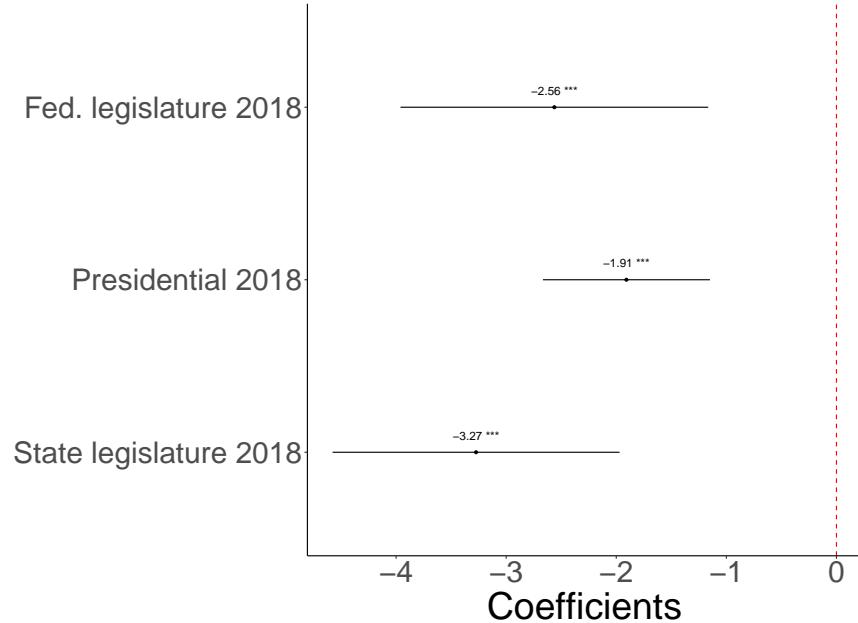
Figure 7: Map of the PT presidential voting in 2014



Note: Variation in percentage.

Appendix C – Model using a random sample

Figure 8: 2SLS Regression Estimates of the impact of Venezuela's immigrants using a random sample



Note: *** $p < 0.05$. Confidence intervals for 95%

Table 4: First stage regression – random sample

Instrument	<i>Dependent variable:</i>		
	Immigration	Exposure Index	
Instrument	-0.011*** (0.001)	-0.011*** (0.001)	-0.011*** 0.039*
MHDI	0.033 (0.021)	0.033 (0.021)	0.039*
Gini index	-0.019* (0.011)	-0.019* (0.011)	-0.018* (0.011)
Rural proportion	0.007* (0.004)	0.007* (0.004)	0.006 (0.004)
Poor proportion	0.0001 (0.0001)	0.0001 (0.0001)	0.0001 (0.0001)
Female proportion	0.107** (0.050)	0.107** (0.050)	0.102** (0.050)
Presidential 2014	-0.008* (0.005)		
State legislature 2014		-0.008* (0.005)	
Fed. legislature 2014			0.002 (0.005)
Constant	0.020 (0.024)	-0.085	0.019
Observations	528	528	528
R ²	0.211	0.211	0.207
Adjusted R ²	0.200	0.200	0.196
Residual Std. Error	0.012 (df = 520)	0.012 (df = 520)	0.012 (df = 520)
F Statistic	19.879*** (df = 7; 520)	19.879*** (df = 7; 520)	19.391*** (df = 7; 520)

Note:

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

Table 5: Second stage regression – random sample

	<i>Dependent variable:</i>		
	Presidential 2018	State legislature 2018	Fed. legislature 2018
Immigration Exposure Index	−1.908*** (0.448)	−3.274*** (0.686)	−2.562*** (0.768)
Presidential 2014	0.299*** (0.019)		
State legislature 2014		0.497*** (0.034)	
Fed. legislature 2014			0.505*** (0.032)
Constant	0.380*** (0.088)	−0.086 (0.154)	−0.358** (0.154)
Observations	517	517	517
R ²	0.839	0.393	0.418
Adjusted R ²	0.837	0.385	0.410
socio-economic controls	YES	YES	YES
Robust Standard errors	YES	YES	YES
Residual Std. Error	0.042 (df = 509)	0.073 (df = 509)	0.074 (df = 509)
F Statistic	379.961*** (df = 7; 509)	47.090*** (df = 7; 509)	52.273*** (df = 7; 509)

Note:

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

Appendix D – Second stage regression

Table 6: Second stage regression

	<i>Dependent variable:</i>		
	Presidential 2018	State legislature 2018	Fed. legislature 2018
Immigration Exposure Index	-1.855*** (0.448)	-2.084*** (0.686)	-1.515*** (0.768)
Presidential 2014	0.308*** (0.016)		
State legislature 2014		0.461*** (0.026)	
Fed. legislature 2014			0.381*** (0.025)
Constant	0.149*** (0.094)	-0.486 (0.140)	-0.456** (0.141)
Observations	522	522	517
R ²	0.809	0.440	0.372
Adjusted R ²	0.806	0.432	0.364
socio-economic controls	YES	YES	YES
Robust Standard errors	YES	YES	YES
Residual Std. Error	0.035 (df = 514)	0.051 (df = 514)	0.052 (df = 514)
F Statistic	311.102*** (df = 7; 514)	57.630*** (df = 7; 514)	43.557*** (df = 7; 514)

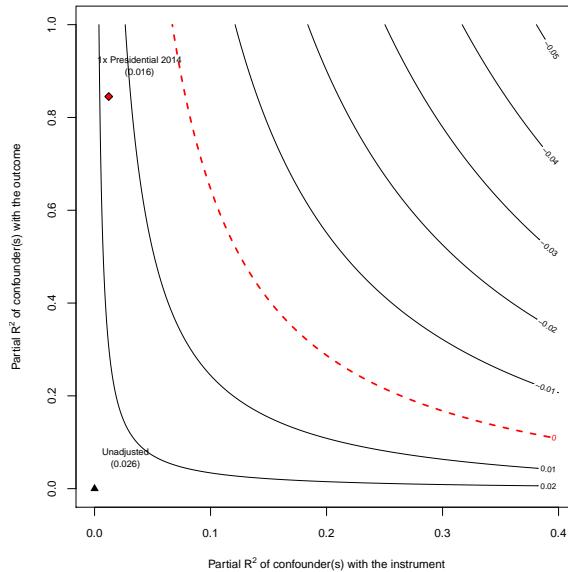
Note:

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

Appendix E – Sensitivity analysis table

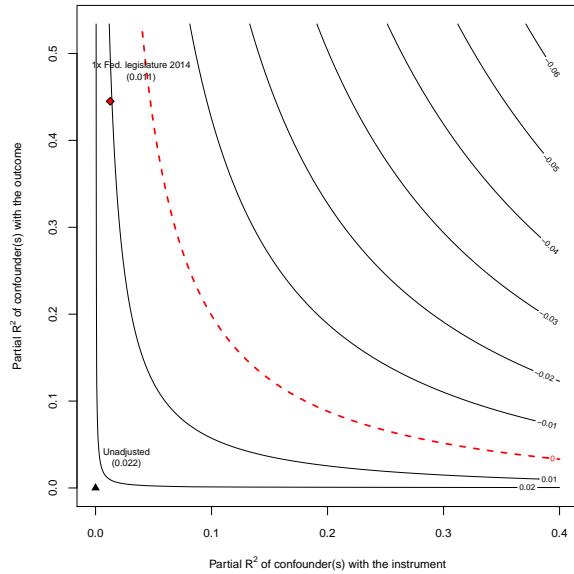
The graphs' axes show the partial R^2 of the confounder with the instrument and with the 2018 PT's voting share. The red dashed line indicates the critical threshold where the impact of the cofounder would make the estimate equal to zero (the null hypothesis). The black triangle is the estimate without any unobserved covariate, and the red diamonds are the value of the estimate if we “add” to the regression function a covariate with prediction power equal to the 2014 election. “Adding” a strong confounder to the regression, the results – for all elections – remain statistically different from zero. Consequently, these analyses indicate that a much stronger and, in consequence, improbable unobserved covariate would be necessary to invalidate the results.

Figure 9: Sensitivity analysis on the presidential results



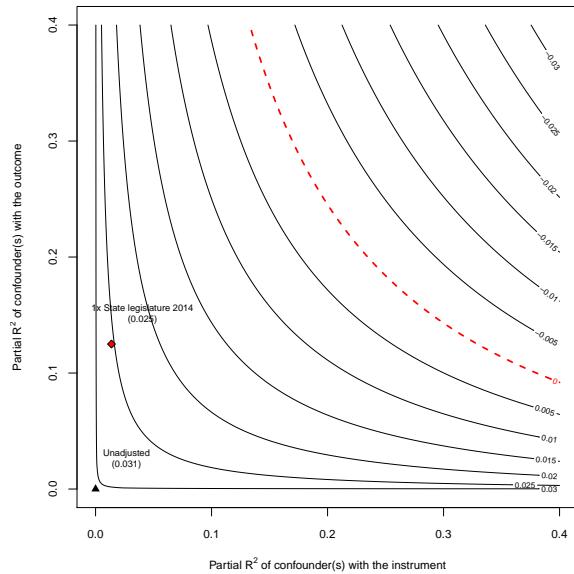
Note: *** $p < 0.05$. Confidence intervals for 95%

Figure 10: Sensitivity analysis on the Fed. legislature results



Note: *** $p < 0.05$. Confidence intervals for 95%

Figure 11: Sensitivity analysis on the state legislature results



Note: *** $p < 0.05$. Confidence intervals for 95%

Outcome: *treat*

Treatment:	Est.	S.E.	t-value	$R^2_{Y \sim D \mathbf{X}}$	$RV_{q=1}$	$RV_{q=1, \alpha=0.05}$	
<i>index</i>	-0.014	0.001	-10.055	16.3%	35.4%	29.7%	
df = 520				<i>Bound</i> (4x ‘Presidential 2014’): $R^2_{Y \sim Z \mathbf{X}, D} = 1.5\%$, $R^2_{D \sim Z \mathbf{X}} = 6.2\%$			

Outcome: *Presidential 2018*

Treatment:	Est.	S.E.	t-value	$R^2_{Y \sim D \mathbf{X}}$	$RV_{q=1}$	$RV_{q=1, \alpha=0.05}$	
<i>index</i>	0.026	0.004	6.076	6.7%	23.4%	16.6%	
df = 514				<i>Bound</i> (1x ‘Presidential 2014’): $R^2_{Y \sim Z \mathbf{X}, D} = 84.5\%$, $R^2_{D \sim Z \mathbf{X}} = 1.2\%$			

Outcome: *treat*

Treatment:	Est.	S.E.	t-value	$R^2_{Y \sim D \mathbf{X}}$	$RV_{q=1}$	$RV_{q=1, \alpha=0.05}$	
<i>index</i>	-0.014	0.001	-10.254	16.8%	36%	30.3%	
df = 520				<i>Bound</i> (4x ‘Fed. legislature 2014’): $R^2_{Y \sim Z \mathbf{X}, D} = 0\%$, $R^2_{D \sim Z \mathbf{X}} = 4.1\%$			

Outcome: *Fed. legislature 2018*

Treatment:	Est.	S.E.	t-value	$R^2_{Y \sim D \mathbf{X}}$	$RV_{q=1}$	$RV_{q=1, \alpha=0.05}$	
<i>index</i>	0.022	0.006	3.367	2.2%	13.8%	6%	
df = 514				<i>Bound</i> (1x ‘Fed. legislature 2014’): $R^2_{Y \sim Z \mathbf{X}, D} = 44.5\%$, $R^2_{D \sim Z \mathbf{X}} = 1.3\%$			

Outcome: *treat*

Treatment:	Est.	S.E.	t-value	$R^2_{Y \sim D \mathbf{X}}$	$RV_{q=1}$	$RV_{q=1, \alpha=0.05}$	
<i>index</i>	-0.014	0.001	-10.224	16.7%	35.9%	30.2%	
df = 520				<i>Bound</i> (4x ‘State legislature 2014’): $R^2_{Y \sim Z \mathbf{X}, D} = 0\%$, $R^2_{D \sim Z \mathbf{X}} = 6.3\%$			

Outcome: *Presidential 2018*

Treatment:	Est.	S.E.	t-value	$R^2_{Y \sim D \mathbf{X}}$	$RV_{q=1}$	$RV_{q=1, \alpha=0.05}$	
<i>index</i>	0.031	0.005	5.614	5.8%	21.9%	14.8%	
df = 514				<i>Bound</i> (1x ‘State legislature 2014’): $R^2_{Y \sim Z \mathbf{X}, D} = 12.5\%$, $R^2_{D \sim Z \mathbf{X}} = 1.4\%$			