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March 17, 2023

To the Selection Committee:

I am excited to submit my application to the Review of Economics and Statistics Fellowship for NBER Summer Institute. I am an international students or Latino origin and Ph.D. candidate at the University of Maryland, College Park under the supervision of Professors Erich Battistin, Ethan Kaplan, and Cory Smith. I expect to receive my Ph.D. in Agricultural and Resource Economics in May 2023. My research focus on political economy of development, with additional interest in labor, conflict, and institutional economics in developing countries. I am interested in the Summer Institute sessions about Political economy, Development economics, Crime, and Methods lecture.

My current research agenda aims to understand the causes and consequences of civil conflict in developing countries, the voting behavior of voters and candidates, and the individual behavior of agents when exposed to information and to illegal markets. My Job Market Paper, for instance, revisits the question of how migration presence affects voting preference. I use the case of the Venezuelan migration into Colombia just before the 2018 presidential election. Interestingly, in this setting, the political system of the latter country is targeted rather than the migrants themselves. The propaganda during the elections suggested that the election of a candidate with a similar ideology of the Venezuelan government will lead to the same crisis the migrants faced, making their presence a first-hand exposure to the foretold crisis. My findings suggest that the presence of migrants increased the share of votes for the leading right-wing candidate. In contrast with previous literature, I analyze the votes for each candidate and find that the presence of migrants polarized the election between two candidates. I find that the increase in votes for the leading right-wing candidate is at the expense of the votes for the left-wing candidate. Moreover, this result is consistent with the idea that voters reacted negatively to the politically driven migration.

I look forward to the possibility of taking part of the NBER Summer Institute. I am confident that it will provide me with the opportunity to enhance my research skills, expand my professional network, and learn cutting edge research on the fields of political economy and development.

Please let me know if I can provide more information. I look forward hearing from the committee.

Sincerely,



Juan C. Angulo
Ph.D. Candidate, University of Maryland, College Park

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Education

University of Maryland, College Park — College Park, MD
Ph.D. Agricultural and Resource Economics — *Expected 2023*

Universidad del Rosario — Bogotá, Colombia
M.S. Economics — *2016*

Universidad del Rosario — Bogotá, Colombia
B.A. Finance and International Trade — *2014*

Universidad del Rosario — Bogotá, Colombia
B.A. Economics — *2013*

Toulouse School of Economics — Toulouse, France
Student exchange program in Economics — *2011 – 2012*

Dissertation

Title: Essays on Political Economy of Development in Latin America
Committee Members: Prof. Erich Battistin (chair), Prof. Ethan Kaplan, Prof. Cory Smith

Fields of Specialization

Applied microeconomics, Political Economy of Development, Labor Economics.

Job Market Paper

"Cheer or Fear: The 2018 Presidential Election in Colombia"

Are the political preferences of voters molded by the presence of migrants around them? I revisit this question by exploiting the unanticipated inflow to Colombia of Venezuelans fleeing their home country's political crisis in 2016 and the onset of economic collapse. I compare the results of the 2018 presidential campaign in Colombia across municipalities with similar trends in electoral outcomes between 2002 and 2014 but different presence of Venezuelan migrants on the verge of the 2018 campaign. To address the spatial sorting of migrants across these municipalities, I construct an instrumental variable based on the distance from the closest ports of entry. I find that a one percent increase in the presence of migrants in the municipality yielded a polarized voting behavior. Candidates of the main right-wing party (*Centro Democrático*) gained about 6% of voters at the expense of other right-wing movements and, mostly, left-wing candidates. I show that these effects are explained by an increase in the electoral turnout, and that the fondness of voters for Colombia's 2016 Peace Agreement Plebiscite was an important determinant of their behavior which has been overlooked in past empirical work.

Other Research Papers

- Books and Bushes: Schooling Decisions and Coca Production in Colombia
- Congress Composition and Electoral Advantage
- Empowering Women? Evidence from Colombia's local Councils

Teaching Experience

- Teaching Assistant with discussion, Applied Econometrics II (graduate), University of Maryland, Spring 2021, Spring 2022 and Spring 2023
- Teaching Assistant with discussion, Applied Econometrics I (graduate), University of Maryland, Fall 2022
- Teaching Assistant, Natural Resources and Public Policy (undergraduate), University of Maryland, Fall 2021
- Teaching Assistant, World Hunger, Population, and Food Supplies (undergraduate), University of Maryland, Fall 2019, Spring 2020, and Fall 2020
- Teaching Assistant, Impact Evaluation (graduate), Universidad del Rosario, Fall 2017 and Spring 2018
- Principal Instructor, Introduction to Impact Evaluation for Police Intervention, Police Academy for Promotion in Colombia (ESPOL), April 2015
- Principal Instructor, Introduction to Stata Programming (undergraduate), Universidad del Rosario, twice a year, Fall 2015 to Spring 2018

Research and Relevant Work Experience

- Consultant, Poverty and Equity Global Practice, *The World Bank*, Nov. 2022–current
- Research Assistant, Prof. Anna Alberini, *University of Maryland*, Aug. 2018-Aug. 2019 & May. 2021-Aug. 2021
- Research Assistant, Prof. Christopher Blattman and Prof. Santiago Tobón, *Center for the Study of Security and Drugs (CESED)*, Colombia, Aug. 2016-Jul. 2018
- Research Assistant, Prof. Juan F. Vargas, *Universidad del Rosario*, Colombia, Jan. 2014-Jul. 2016

Awards & Fellowships

- Richard F. Davis Memorial Fund Scholarship, 2023
- Grant ($5,000), The Institute for Humane Studies, 2023
- Grant ($2,000), The Institute for Humane Studies, 2022
- Dean's Fellowship, University of Maryland, 2022
- Jacob K. Goldhaber Travel Award, 2022
- Bessie H. DeVault Scholarship for best paper by a third-year student, University of Maryland, 2022
- Graduate Resident, Latin American and Caribbean Studies Center, University of Maryland, 2022
- Graduate Assistanship, University of Maryland, 2018-2023
- Summer School Fellowship, RIDGE-LACEA, 2018
- Fellowship, Ronald Coase Institute and Estonian Business School, 2016
- First place in the *XI For de Economía y Finanzas*, 2013
- Exchange Program Scholarship, Universidad del Rosario and Toulouse School of Economics, 2011-2012
- 50% scholarship to pursue studies in Economics, Universidad del Rosairo, 2007-2013

Conference & Seminar Presentations

- *Midwest Political Science 80th Annual Meeting, Chicago, 2023 (scheduled)*
- *Western Political Science 76th Annual Meeting, San Francisco, 2023 (scheduled)*
- VII Colombian Economy Congress, Bogotá, 2022
- Midwest Political Science 79th Annual Meeting, Chicago, 2022
- International Atlantic Economic Society 92nd Conference (virtual), 2022
- Midwest Political Science 76th Annual Meeting, Chicago, 2018
- Fudan Latin America University Consortium (FLAUC) Annual meeting, Bogotá, 2018

Technical Skills

Languages: Spanish (native), English (fluent), French (conversational and reading), Portugues (basic).
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References

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Cheer or Fear: The 2018 Colombian Presidential Election*

Juan C. Angulo†

November 30, 2022

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Abstract

Are the political preferences of voters molded by the presence of migrants around them? I revisit this question by exploiting the unanticipated inflow to Colombia of Venezuelans fleeing their home country's political crisis in 2016 and the onset of economic collapse. I compare the results of the 2018 presidential campaign in Colombia across municipalities with similar trends in electoral outcomes between 2002 and 2014 but different presence of Venezuelan migrants on the verge of the 2018 campaign. To address the spatial sorting of migrants across these municipalities, I construct an instrumental variable based on the distance from the closest ports of entry. I find that a one percent increase in the presence of migrants in the municipality yielded a polarized voting behavior. Candidates of the main right-wing party (*Centro Democrático*) gained about 6% of voters at the expense of other right-wing movements and, mostly, left-wing candidates. I show that these effects are explained by an increase in the electoral turnout, and that the fondness of voters for Colombia's 2016 Peace Agreement Plebiscite was an important determinant of their behavior which has been overlooked in past empirical work.

Keywords: Political preferences, Media, Immigration, Colombia

JEL: D72, F22, O55, C26

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1 Introduction

Voters' political choices can be molded by the presence of migrants. Who benefits depends on the composition of the migrants arriving to the country. Historically, right-wing parties, and parties with an anti-immigrant agenda, have benefited from their presence by associating the presence of migrants to more insecurity or higher unemployment (Halla et al., 2017). However, when immigrants are important for the prospects of the domestic economy (Edo et al., 2019) or when they have few dissimilarities with natives in terms of language, religion, and race (Mendez and Cutillas, 2014), the presence of migrants affects positively the votes for pro-immigrants or left-wing parties. Most of the empirical evidence to date has focused on South-North migration where migrants relocate looking for a gain in welfare irrespective of the political context of their country of origin. Less attention has been given to migration between developing countries, or South-South migration, that is mostly motivated by ecological disasters or civil conflicts. In some of these instances, the political context of the country of origin plays a role in the decision to migrate.

I study how the exposure to migrants influences the preferences of voters. I consider the case of the 2018 presidential election in Colombia where political campaign of the leading right-wing party, *Centro Democrático* (CD), used the presence of migrants to demonize the agenda of their political contenders. The party suggested that a left-wing government will worsen the socio-economic conditions of the country as the left-wing government in power did in Venezuela. It mobilized voters through the fear that Colombia will turn into a "segunda Venezuela" (second Venezuela) or "estado castrochavista" (castrochavist state) if a left-wing candidate was elected president in Colombia. I build on the idea that this message could have resonated more in areas where there was a larger presence of Venezuelans because of more first-hand exposure of local voters to migrants.

I exploit the unanticipated inflow of Venezuelan migrants into Colombia through the ports along the land border between the two countries. Venezuelans began to migrate to Colombia at a small but stable rate, through both air and land, shortly after Hugo Chavez raised to power in 1999 instating a left-wing government. Migration to Colombia through land was suspended between September 2015 and August 2016 due to a diplomatic crisis. After entry ports reopened, Colombia experiences a sharp and unanticipated increase in the inflow of migrants fleeing from the worsening economic condition in their country. For instance, between 2012 and 2015, the share of migrants that enter through land ports represented around 35% of the total migration. This share increased to more than 75% after 2016 when the number of migrants increase more than five times.

The ideal experiment would compare electoral outcomes in the 2018 elections across municipal-

ities of Colombia with as good as random variation in the inflow of Venezuelan migrants after the ports reopened. I take this idea to the data by seeking exogenous factors that may have triggered such random variation. I construct an instrumental variable using the distance of each municipality to the closest land entry port to instrument for the presence of Venezuelan migrants. I build on the idea that most Venezuelans entered through one of the five border crossings and sorted more disproportionately in municipalities closer to the border.

My identification strategy relies on the assumption that the distance of a municipality to the border predicts the presence of migrants, and it is not correlated directly with the electoral results of the 2018 elections and the political preferences in said municipality. Notice, this is likely to be the case as local support is based on a clientelistic system of political exchange with few differences in the socio-economic origins of supporters of different parties (Fergusson et al., 2021). Nonetheless, I provide some evidence of these political preferences using previous presidential election results.

I use data on electoral results at the municipal level in the 2018 presidential election. I observe the share of votes for each candidate in every municipality and voters' turnout. I classify candidates based on their ideology, or that of the political party endorsing them, based on the methodology proposed by Fergusson et al. (2021). I construct an indicator for the presence of Venezuelan migrants in a municipality by using data from the 2018 Colombian population census. Specifically, I consider those respondents: (i) born in Venezuela, (ii) living in Venezuela in 2013 (five years before the census), and (iii) living in Colombia in 2017 (one year before the census). I show that this measure largely captures the change in Venezuelans as a percentage of the municipality's population between the 2018 and the 2005 population censuses, and therefore it is a good approximation for the inflow of Venezuelans that migrated after 2016.

My empirical findings suggest that a one percent change in the presence of migrants in a municipality raised the share of voters for the CD party by 8 percentage points. Notice, this is a sizable effect as the average share of votes for the CD party was 46.9%. This large coefficient is partly due to the low variability on the measure of the presence of Venezuelan migrants (less than 1% standard deviation). Less restrictive measures present larger variability across municipalities, and the estimated coefficient smaller in magnitude, although sign and significance are not affected. This conclusion is robust to the inclusion of a number of controls and different measures of distance.

I analyze how the presence of migrants affected the votes for each candidate and find that it polarized the election between two candidates. I find that the increase in votes for *Centro Democrático* is at the expense of the votes for the left-wing candidate, while no other right-wing candidate benefited for the presence of Venezuelan migrants. This last finding marks a difference

with the previous literature which associated increasing share of votes for right-wing parties with higher presence of migrants. Most of the literature has grouped political parties by ideology or by government coalition to analyze the effects of the presence of migrants on their share of votes without accounting for different dynamics across parties. These aggregated results led to conclude that all right-wing candidates benefit from the presence of migrants. However, my results suggest that the presence of migrants has an effect on the votes for right-wing candidates solely through the votes for one of them. On the other hand, consistent with the literature, I find that the increase in presence of migrants is also associated with an increase in the voter turnout.

I examine the potential mechanism driving these effects. I consider whether political preferences may be explained by changes in crime levels caused by the presence of migrants. I do not find a significant effect of robbery or in homicide rates. It is possible that the changes are due to the perception of crime, although I can not test this hypothesis. I also examine the possibility that political preferences may be caused by political preferences at the local level. For this purpose, I examine the effect of the presence of Venezuelan on the share of votes for a right-, center-, or left-wing candidates in the 2015 mayoral election. I find that the presence of migrants affected positively the share of votes for right wing-candidates at the expense of the votes for the center-oriented candidates, contrary to the findings of (Rozo and Vargas, 2021)

I provide some suggesting evidence in favor of the strategic electoral misinformation (Rozo and Vargas, 2021). I use the number of internet searches for the words "castrochavista" and "segunda Venezuela", two of the most common phrases used by right-wing parties to campaign against candidates ideologically aligned with the Venezuela regime. I show that the use of this phrases peak during the election months in the 2018 election while it did not during the previous presidential election but during the peace plebiscite. I examine whether the political preferences were shaped by the attitude towards the plebiscite to ratify the peace agreement between the government and the FARC left-wing guerrilla. I find that the presence of Venezuelan migrants increased the share of votes for the No option.

Finally, I study the relative importance of these mechanisms to explain the political preferences of voters in the 2018 presidential election. I examine these mechanisms together and find that the attitudes toward the peace agreement explain about a third of the effect of the presence of Venezuelan migrants on the political preferences of voters in the 2018 presidential election.

I contribute to the literature on the effects of migration on political outcomes by studying the effect of South-South migration on voting behavior. This migration is not motivated by a welfare increase but rather by social distress or civil conflict. Almost 80% of this migration takes

place between countries with contiguous borders (Ratha and Shaw, 2007) and, therefore, attitudes towards migrants are less clear. For instance, political parties in developing countries differ from those of developed countries as they do not necessarily have a stance on migration. Previous literature has suggested that large inflow of international migrants is related to an increase support for the right-wing parties—including extreme right and right-wing coalitions—at either the local or the national level. They focus on South-North migration and, in particular, migration to European countries (Barone et al., 2016; Dustmann et al., 2018; Edo et al., 2019; Gerdes and Wadensjö, 2010; Halla et al., 2017; Mendez and Cutillas, 2014; Otto and Steinhardt, 2014). One exception for North America is the paper of Mayda et al. (2022) that explores the effect of immigration on the votes for the Republican party in the United States. There are less studies of South-South migration with the notable exception of Rozo and Vargas (2021) who study the effects of migrants on the voting behavior in Colombia.

My set up allow me to differentiate the effects by political party and, thus, I show that not all right-wing parties benefit from the presence of migrants. Most of the previous literature group political parties by factions or by coalitions to follow them over multiple elections. This feature does not allow them to analyze political party individually, although it allows them to control for unobserved political preferences.

This paper adds on the literature that explores the effects of the current Venezuelan humanitarian crisis and its effects in neighboring Colombia. Venezuela socio-economic conditions have been worsening for the last 20 years leading to Venezuelan moving out of their country. Rozo and Vargas (2021) studied the effect of their cumulative presence of the voting behavior over the elections in the last 20 years. However, the more dramatic episode started after 2016, leading to more than 4 million of Venezuelan moving to other countries including neighboring Colombia. Their sudden presence has affected educational outcomes (Rozo and Vargas, 2020), electoral outcomes (Woldemikael, 2022), violent crimes (Knight and Tribin, 2020), and cooperative attitudes (Lebow et al., 2020). It also led to the government of Colombia to crease a large-scale regularization program that allow them to join the labor market. The effects of this program have also been recently studied (Bahar et al., 2021; Lebow, 2022; Santamaria, 2020).

My paper also contributes to the literature that studies the consequences of conflict termination. I show that the attitudes towards the 2016 Colombian peace agreement were an important determinant of the votes for the leading right-wing party. The 2018 presidential election was the first election since the peace plebiscite took place. To the best of my knowledge, this is the only study that includes the peace plebiscite results to explain for political preferences and voting be-

havior. Other papers that study the consequences of conflict termination shows that there is an improvement on educational outcomes (Prem et al., 2022), a change in the presence of illicit crops Prem et al. (2021), and a change in entrepreneurship dynamics (Bernal et al., 2022).

The paper closer to mine is that of Rozo and Vargas (2021) who study the electoral effects of international migration in Colombia. Their results suggests that political participation increases and that voters shift from left- to right-wing ideologies. My paper is a complement, but it is different to theirs in three ways. First, I use data from the Colombian census to locate Venezuelan migrants at the municipal level rather than predicted their presence. Their prediction overestimates the presence of Venezuelan migrants as they use the number of Venezuelan that enter through the entry port but did not differentiate those that transit through the country to go to other nations in South America. A phenomenon called "los caminantes" or the walkers.

Second, my strategy focus on the sharp and sudden increase in the presence of Venezuelan migrants. I show that the Venezuelan migrants located disproportionately in municipalities close to the border between the two countries, whereas their prediction is based on early settlements. Their implicit assumption is that the spatial distribution of migrants is stable over time, thus, these two measures capture two different effects, i.e., proximity to the border and early settlements, respectively.

Finally, my results suggest that only the leading right-wing party benefited from the presence of migrants, thus, my results are not sensitive to the criteria used to classify parties by ideology. The study of Rozo and Vargas (2021) group political parties by ideology, however this aggregation does not allow them to differentiate by party and make their results sensitive to the classification of parties by ideology. My results are consistent with their results, the presence of Venezuelan migrants increase the share of votes for the right-wing parties. However, for the case of the 2018 presidential election, I show that this effect can be explained solely by the change in votes for the *Centro Democrático* party.

The rest of the paper is organized as follows. Section 2 provide some institutional background. Sections 3 and 4 explain the main sources of data and the research design. Section 5 describes the empirical strategy to estimate the effect of the Venezuelan migration on voting preferences and the validity of the strategy. I present the main results in Section 6, while Section 7 presents robustness checks and Section 8 presents additional results. Section 9 presents potential mechanisms and, finally, the last section concludes.

2 Institutional Background

2.1 Colombian Political Context

Colombia is one of the oldest running democracies in Latin America with a multi-party system. The President is elected by direct vote and by majority rule in a run-off election held the same day throughout the country. If no candidate receives more than half of the votes on election day, a run-off election between the two candidates with the most votes in the first round takes place three weeks later. The winning candidate governs for a 4-year period starting August 7th of the same year and for one term only.[1]

The 2018 presidential campaign was polarized between the leading right-wing party, *Centro Democrático*, and the left-wing candidate, Gustavo Petro. One of the key topics of the campaign was the results of the 2016 plebiscite to ratify the peace agreement between the government of Colombia and the FARC, a left-oriented guerrilla group.[2] Despite the unsuccessful results of the plebiscite, after 50.2 percent of the voters voted against the agreement, the government signed a revised peace agreement two months later. It was ratified by the Colombian Congress without conducting a second plebiscite.[3] *Centro Democrático* was the leading party rejecting the peace agreement and they focused their presidential campaign on its adoption. They suggested that, on the one hand, the agreement will instate a left-wing government, and on the other, that this kind of government will create similar conditions to those of Venezuela. The primary message of its campaign was fear of socialism and of left-wing governments by suggesting that Colombia will turn into a "segunda Venezuela" (second Venezuela) or a "castrochavista" state.[4] For this, they used the presence of Venezuelan as an example, pointing out the large number of migrants fleeing the worsening socio-economic conditions of their country. Figure 1 presents some evidence of their campaign strategy using google search trends. It shows how these words were more searched around the 2018 election and peace plebiscite but not in the 2014 election. The campaign end with the election of the former CD senator and party candidate, Iván Duque, as president of Colombia for the 2018-2022 term.

[1] Immediate re-election was allowed until 2014 when Colombia's Congress, under Juan Manuel Santos presidency, approved a constitutional reform banning immediate presidential re-election, established in 2005 under the presidency of Álvaro Uribe.

[2] Weintraub (2015) showed how the 2014 presidential election was marked by the then-ongoing peace negotiation.

[3] There was no law that mandated the peace agreement to be ratified via a plebiscite. The original peace agreement could have been ratified by the Congress without having it submitted to popular vote.

[4] A portmanteau of Fidel Castro and Hugo Chavez. The term was coined and used by the right-oriented political parties to refer to left-oriented ideologies.

2.2 The Venzuelan Crisis

The current political and economic crisis in Venezuela can be tracked back to the election of Hugo Chavez as president in December 1998, although the Venezuelan economy has been declining since the sixties (Bello et al., 2011). His election led to institutional changes including the adoption of the Constitution of the Bolivarian Republic of Venezuela in December 1999 that implemented the so-called 21st century socialism. This political regime is characterized by the implementation of populist, socialist programs, nationalizations, and restrictions on private business (Castillo and Reguant, 2017). The oil boom of the 2000s helped the Venezuelan government to fund these programs by using the profits of the state-owned oil and natural gas company of Venezuela (PDVSA). The oil price plunge of 2014-2016 led to the president of Venezuela, Nicolas Maduro, to declare an economic emergency in January 2016. The decrease in government rents worsened the economic and social crisis, including shortage of food and basic necessities, repression of the opposition,[5] violation of human rights by public authorities (Rozo and Vargas, 2021), and to a sustained inflationary pressure (Knight and Tribin, 2020).

The economic and social situation forced many Venezuelans to migrate out and neighboring Colombia was one of the most picked.[6] Consistent with South-South migration patterns, most of the migration takes place between countries with contiguous border. Particularly, the massive outflow of Venezuelan began in August 2016 when Venezuelan president re-opened the border with Colombia after one-year closure due to a conflict along the border (Knight and Tribin, 2020). Figure 2 presents evidence of this event using quarterly data from the official migration points in Colombia. It shows the number of Venezuelans entering the country from the first quarter of 2012 to the second quarter of 2019. The sustained inflow of individuals entering through land entry ports started after the re-opening of the border in the third quarter of 2016, while that of the air entry ports remain stable. Notice, it includes information of all Venezuelan migrants regardless of the purpose of the visit or the length of their stay. However, this figure resonates with the numbers from the Population division of the Department of Economic and Social Affairs of the United Nations that estimate more

[5] Hsieh et al. (2011) suggests that the Chavez regime was already repressing opposition citizens. They use information from Venezuelans who sign petitions calling for a vote to remove President Chavez from Office in 2003. After Chavez won the recall election in 2004, signers of the petition lost their jobs and experienced a reduction in their earnings.

[6] According to the United Nations, Population division data, in 2019 alone 2,519,780 Venezuelans migrate out of the country from an estimated population of 28 million inhabitants. South America was the recipient of 74 percent of them. The top three recipient countries were Colombia with 41.6 percent; Peru, 23.9 percent; and United States, 10.1 percent. See media coverage from BBC in 2018 and 2019 , and CNN.

than one million Venezuelan entering Colombian in 2018 alone. These Venezuelan migrants located disproportionately in municipalities closer to the border and the land entry ports (see Figure 3a).

3 Data

Electoral data

My main outcomes are the share of votes for each candidate and the turnout rate in the first round of the 2018 presidential election. This data comes from Colombia's electoral agency and has information about the number of votes at the candidate level for each municipality.[7] The first round had 6 candidates running for office[8] and 3 of them averaged around 88% of the total votes. The highest voted candidates were Iván Duque with 39.1 percent of the votes, followed by Gustavo Petro with 25.1 percent and by Sergio Fajardo with 23.7 percent.[9] I classify candidates based on their ideology, or that of the political party endorsing them, based on the methodology proposed by Fergusson et al. (2021): Petro is classified a as left-oriented candidate; Duque, Vargas Lleras, and Trujillo as right-oriented; and Fajardo and de la Calle as non-left, non-right. Abusing the terminology, I will refer to the latter group as center-oriented hereafter.[10]

Measure of Venezuelan presence

I construct an indicator for the presence of Venezuelan migrants using data from the 2018 population census,[11] available from Colombia's Statistics Department (DANE for its Spanish acronym).

[7] The municipality is the smallest administrative unit of Colombia. It is equivalent to the USA county.

[8] Vivian Morales renounce to her candidacy weeks before the election and endorsed Iván Duque. Morales and her VP formula were also on the ballot and got 0.2% of the votes.

[9] The first four candidates averaged around 95 percent of all votes. German Vargas Lleras, the fourth highest, averaged around 7 percent of all the votes and even obtain most of the votes in various municipalities in the first round. Vargas Lleras was vice-president during Santos second term and resigned in March 2017 to run for office as mandated by the law. He is associated with right-oriented ideologies.

[10] Political parties in Colombia has not been classified before by other sources. For instance, the Manifesto Project that classifies political parties positions for a variety of countries does not have information for Colombia. Notice, for the purpose of this paper, the classification for the candidates running in the election can be done easily as there are just a handful of them.

[11] The 2018 census information was gathered between January and June in two phases. The first phase allows citizens to fill the census questions on-line and the questionnaire was available from January 9th to March 8th. The second phase consisted of enumerators visiting the dwelling of both the respondents that fill the on-line questionnaire and those who did not. In the former case the enumerators only ask for the confirmation number and in the latter, they conduct the interview. This phase covered a span of 3 months, from April to June.

I count the number of individuals that were (i) born in Venezuela, (ii) living in Venezuela in 2013 (five years before the census), and (iii) living in Colombia in 2017 (one year before the census). I normalize this measure by the Colombian population in that municipality.

This measure captures the individuals that enter Colombia starting in the first semester of 2013 until the first semester of 2017. Figure 3a shows how migrants located in municipalities closer to the border based on this measure. Figure 3b shows that this measure capture the change in Venezuelans as a percentage of the municipality's population between the 2018 and the 2005 population censuses. Reassuringly, the *Encuesta Pulso de la Migración*, a recent survey of the representative of the Venezuelan population, in its first wave shows that only 2% of the respondents claimed to have entered Colombia on or before 2015, while 5% answered 2016, 20% answered 2017, and almost 34% answered 2018. Furthermore, the measure of all the Venezuelan migrants that enter Colombia starting in the first semester 2013 is almost the same as the change of Venezuelan between 2005 and 2018. Taken together, I take this as suggestive evidence that my measure of presence of Venezuelan migrants is a good approximation to the inflow of Venezuelans that migrated after 2016.

This measure of presence of Venezuelan migrants is not free of measurement error. First, my measure leaves out many migrants that arrived within the last year before the census and closer to the election. Since there is an overlap between the dates of the election and the dates that the census was carried, I decided not to include those respondents, so my measure does not include individuals that arrived after the election. Second, the census could undercount the number of Venezuelan migrants in each municipality as they could have not been interviewed. Although this is a concern, I do not expect differences on the probability of being interviewed by location. In section 7, I show that my results are robust to difference measures of presence.

4 Research Design

I am interested on whether the presence of Venezuelan migrants influenced the preferences of voters in the 2018 presidential election. I exploit the unanticipated inflow of Venezuelan migrants into Colombia through the land entry ports after 2016 and their location in municipalities closer to the border. I build on the idea that right-wing political parties could have profited from their presence during the campaign for the presidential election.

The ideal experiment would compare electoral outcomes in the 2018 election across municipalities of Colombia with as good as random variation in the inflow of Venezuelan migrants after the ports re-opened. However, new arriving migrants tend to settle in enclaves established by earlier immigrants,

making their presence correlated with unobserved characteristics (Card, 2001; Jaeger et al., 2018; Rozo and Vargas, 2021). Therefore, a comparison between municipalities that received higher and lower migration is likely to be biased.

I take this idea to the data by seeking exogenous factors that may have triggered such random variation. I construct an instrumental variable using the distance of each municipality to the closes land entry port to instrument for the presence of Venezuelan migrants. In particular, I calculate the minimum distance between the municipality and the five entry ports. After 2016, most Venezuelans entered through one of this five border crossings points located in the shared border between the two countries. Their presence increased throughout the territory covering about 95% of the municipalities but sorted more disproportionately in municipalities closer to the border (see Figure 3).

My identification strategy relies on the assumption that the distance of a municipality to the closest entry port predicts the presence of migrants, and it is not correlated directly with the electoral results of the 2018 elections and the political preferences in said municipality. The distance of a municipality to the closest entry port seems to explain the migration pattern of Venezuelan after 2016. Using information from the last two population censuses, I find that the municipalities closest to the border experienced the largest positive change in presence of Venezuelan migrants (see Figure 3). At the same time, distance to the port is unlikely to have a direct effect on how Colombians voted in the 2018 election. In my setting, I argue that any effect will take place indirectly through the presence of Venezuelan migrants. I formally test these assumptions in section 5.

There are some threats to my identification: (i) the distance of a municipality to the border is correlated with the political preferences in said municipalities, (ii) the preferences for political parties or ideologies can be geographically grouped, (iii) Venezuelan migrants could have chosen more welcoming municipalities as their destination or (iv) decided to migrate to enclaves established by early immigrants.

These concerns are partly alleviated by the political context in Colombia. Local support for political parties is based on a clientelistic system of political exchange that emerged in the 1960's where the two main parties shared power and excluded other political movements (Fergusson et al., 2021). This bipartisan dominance collapsed with the adoption of the 1991 constitution—later modified by the 2003 political reform—that lower entry barriers for new parties, that consolidated after the 2006 elections. Supporters of these new parties blurred any previous geographic concentration of preferences. Nonetheless, to account for potential differences in political preferences, I control for the electoral results of the previous presidential elections and for geographic characteristics.

Furthermore, I control for the presence of migrants from other countries as a proxy for how welcoming the municipality is to for migrants. Finally, in section 7, I show some analysis using early settlements to show whether the preferences of the inhabitants of a given municipality are different due to the long-term exposure to migrants.

5 Empirical Strategy

Empirical specification

The relationship of interest is the following:

$$Votes_m^{2018} = \alpha + \beta Ven_m + \sum_J \delta^j votes_m^j + \delta_g geo_m + \delta_X X_m + \varepsilon_m \tag{1}$$

where $Votes_m^{2018}$ is the share of votes for each one of the ideologies and each one of the candidates in the 2018 presidential election; Ven_m is the migration measure that counts the number of Venezuelan migrants that enter Colombia between 2013 and 2017; $votes_m^j$ are the share of votes for the right- and for the left-wing parties, separately, in election years $J = \{2002, 2006, 2010, 2014\}$; geo_m are geographic controls that include the distance of each municipality to the country capital (Bogotá), the Department's capital, and to the closest principal market, and five dummy variables that take the value of 1 if the municipality share a border with either of the 5 neighboring countries (Brazil, Ecuador, Panama, Peru, or Venezuela); and X_m are municipality characteristics including the area and elevation of the municipality, the population, the share of rural population as proxy of rurality, and the share of migrants that are not from Venezuela—to capture any unobserved heterogeneity related more amenable locations to migrants—using information from the 2005 census. ε_m is an idiosyncratic error term, β is the parameter of interest that captures the relation between the presence of Venezuelans and the preference for each one of the candidates.

I exploit the distance of each municipality to the entry port on the shared border to instrument for the presence of Venezuelan migrants. I take this idea to the data using a Two-Stage Least Squares (2SLS) with the following first-stage regression specification:

$$Ven_m = \psi + \gamma f(distance_m) + \sum_J \theta^j votes_m^j + \theta_g geo_m + \theta_X X_m + \eta_m \tag{2}$$

where $f(distance_m)$ is a spatial decay function of the distance. In particular, I use a logarithmic function of the distance of the municipality to the closest entry port on the shared border between the two countries. To ease interpretation, I standardized the measure to have zero mean and unit

variance. The other variables were defined above and η_m is an idiosyncratic error term. The parameter γ captures the relevance of the instrument which should be positively correlated with the presence of migrants. I present evidence in the next section that my estimates are not driven by the functional form of the decay function.

Validation of the research design

To assess the validity of the instrument, the distance from the municipality to the closest entry port needs to explain the presence of Venezuelan migrants. The parameter γ in equation 2 captures this relation. Table 1 in Column (1) reports the estimates of γ by estimating equation 2 without including the control variables, i.e., imposing $\theta_j = \theta_g = \theta_X = 0$; while in Column (2), I relax the restriction by including the control variables. Columns (3) to (10) report the estimates using different decay functions. Odd columns present estimates that do not include any control variables and even columns those that include the full set of controls. The last four columns use the distance of each municipality to the Simón Bolívar International Bridge, the main entry port located at Cucutá, which could suggest that the entry port is not related to any unobserved characteristic of the municipalities in Colombia instead of to the closest entry port.

Estimates present a positive and significant coefficient for the inverse logarithmic and the inverse linear function, as expected. For a linear decay function, the estimates present a negative and significant relation.[12] In all the cases, the estimated coefficient is around 0.3 percentage points in absolute value. For instance, the coefficient from Column (2) implies that a one standard deviation increase in distance measure increases the presence of Venezuelan migrants by 0.4 percentage points. The F-test for excluded instrument is reported and suggest that the instrument is relevant.

To further assess the validity of the exclusion restriction, I provide some evidence for the the exclusion restriction. That is, the distance from the entry port to the municipality needs to not be correlated with other determinants of the voting behavior in 2018 but only have an effect on it through its relation with the measure of Venezuelan migrants. In other words, there are no unobserved characteristics in the voting preferences in 2018 related to the distance to the Venezuelan frontier. This is likely to be the case as political preferences are not determined by the distance to neighboring countries. Nonetheless, I investigate whether there are underlying political preferences.

I divide my analysis in two parts: first, I use previous election as placebos to test whether my measure of Venezuelan migrants is correlated with political preferences in previous elections. I estimate equation 1 using the share of votes in previous elections as the outcome variable. Note,

[12] I show that my estimates are also robust to the use of an exponential decay function in Appendix A, Figure A.1.

given that I am using $votes^j$ as outcome variables, I impose the restriction that $\theta_j = 0$ for all $j \in J$ but include the other control variables. Second, I investigate whether distance is correlated with electoral outcomes in previous elections.

Figure 4 report the OLS estimates in panel a. They suggest that the presence of Venezuelan migrants is correlated with political preferences. However, notice that in 2006 the right-wing candidate, Alvaro Uribe, was running for re-election and he was elected with more than 60% of the votes. Given his large popularity, it is possible that there is a spurious correlation between the future presence of migrants and his share of votes. Similarly, the estimates for the share of votes for Juan Manuel Santos suffer of a similar problem as he was the appointed successor of Uribe. Santos had around 46% of the total votes and double the second highest voted candidate, Mockus with 21% of the total votes. On the other hand, the reduce form estimates reported in panel b suggest that the distance from each municipality to the closest entry port does not directly explain the political preferences in those municipalities as estimates are not stable from one election to the next.

Taken together, these results suggest that the presence of Venezuelan migrants captures some historical political preferences but they are not driven by my measure. Therefore, my research design relies on controlling for the results of the previous election as there could be some unobserved political preferences that could affect my main estimates. Intuitively, I will be comparing municipalities closer to the border with those further away that have similar political preferences.

6 Results

Main results

My main results are summarized in Figure 5. It shows the estimates of the presence of Venezuelan migrant on the share of votes for every candidate and for every political ideology. Tables 2 and 3 report these same coefficients. Panel A presents the estimates of equation 1 using a 2SLS with the distance of each municipality to the closest migration port as the instrument for the presence of Venezuelan migrants. Panel B present the estimates of equation 1 using OLS, while Panel C present the reduce form results of the instrument on the outcome variable. Panel D present the first-stage estimates from equation 2. Odd columns estimates do not include any control variable and even columns include the full set of controls. My preferred specification includes the full set of controls and reported in Panel A . I present the results for the winning candidate first, Duque, then I complement my analysis including the other candidates and the political ideologies.

My empirical findings suggest that a one percent increase in the presence of Venezuelan migrants

increase the share of votes for the leading right-wing party, *Centro Democrático*, by 8 percentage points (see Column (4) in Table 2). This is a sizable effect as the average share of votes for the party at the municipal level is 46.9%. It is important to highlight that these results must be taken with caution as the estimates are not very precise due to the low variance of the explanatory variable (standard deviation is less than 1%). This lower variance leads to point estimates that are somewhat large. For instance, if I were to take a municipality without presence and input the maximum presence, that is about 7%, then the share of votes for Duque would have increase by 56 percentage points, an unlikely scenario. I explore whether this results is driven by the measure of presence of Venezuelan migrants in section 7.

The results of estimating equation 1 using OLS and the full set of controls (Column (4) in Panel B) suggests that an increase of 1 percent in the presence of migrants increase the share of votes for Duque in 1.5 percentage points. Note, IV estimates are larger than those of OLS; i.e. OLS estimates are biased toward zero. The difference in point estimates between these two estimates comes from two potential sources. First, recent migrants may have locate in early Venezuelan settlements and the presence of these early migrants could have affected the long-term political preferences of the inhabitants of the recipient municipality (Jaeger et al., 2018; Rozo and Vargas, 2021). Second, the measure of presence of Venezuelan suffer from measurement error, as explained above. However, both of these sources of bias are solved through the use of instrumental variables as long as the instrument—i.e. the distance to the land entry port—is not correlated with neither the unobserved preferences nor the measurement error term. In section 7, I explore the difference by presence of early settlements.

I analyze how the presence of Venezuelan migrants affected the votes for each candidate and I find that the presence of Venezuelan migrants polarized the election by increasing the votes for the Iván Duque at the expense of the votes of Gustavo Petro (see Figure 5). This resonate with the results at the ideology level by suggesting that the presence of Venezuelan migrants increased the share of votes for the right-wing parties at the expense of the share of votes for the left-wing candidates. This finding is similar to that of Rozo and Vargas (2021) who suggest a shift in the votes from the left- towards the right-oriented candidates. Differently from previous studies, my results also suggest that the increase in the share of votes for the right-wing parties come exclusively from the increase in the share of votes of one party candidate, Iván Duque from the *Centro Democrático* party. This finding marks a difference with the previous literature that has associated the increasing share of votes for right-wing parties with higher presence of migrants (Barone et al., 2016; Dustmann et al., 2018; Edo et al., 2019; Gerdes and Wadensjö, 2010; Halla et al., 2017; Mayda et al., 2022;

Otto and Steinhardt, 2014).

The estimates on turnout explore whether the increase in the share of votes come from more citizens going to vote rather than a change in preferences of existing voters (see Column (10) in Table 2). In this case, the results suggest that the effect come via the two channels as the point estimates is not as large as the one for the share of votes. That is, the presence of Venezuelans had a positive effect on the participation in the election by increasing the number of voters and by shifting the preferences of the voters away from the left-oriented candidates and towards the leading right-oriented candidate.

Estimates for the second round of the presidential election are consistent with those of the first-round. Notice, the run-off election was held between the two candidates with the highest votes in the first round, namely: Iván Duque and Gustavo Petro. This two candidates represent the polar opposites as their platforms have been associated with extreme right position and with left position (Gallego et al., 2019). My estimates for the effect of the presence of Venezuelan migrants in the second round resonate those of the first round and are presented in Table A.3 in Appendix A. The share of votes for the right-wing party candidate, Iván Duque, increases at the expense of the left-wing candidate, Gustavo Petro.

7 Robustness

Migration measure

I explore whether my results are driven my the measure of presence of Venezuelan migrants. My measure of presence of Venezuelan migrants counts the number of Venezuelans that arrive between the first semester of 2013 and the first semester of 2017. I use two alternative measures of presence and report the estimates in Table 4. The first two columns present the main estimates to ease comparison. The next two columns measure the presence of Venezuelan migrants as those who entered the country after the first semester of 2017 or within the last year; while the last two columns measure it as those who entered the country after the first semester of 2013 or within the last five years.

The estimates are robust to different migration measures. In particular, they are larger and less precise when using only those that arrive in the previous year, while the estimates using the larger measure is more precise and about two thirds of the main estimate. Notice, the migration measure using only the individuals that arrive within the last year has lower explanatory variable as it has a small range (min is zero and max is 5%) and low variance (SD=0.5). In contrast, the broader

measure of presence used in the last two columns has double the range (same min and 10.6% max) and a larger variance (SD=1.3) giving it more explanatory power. My preferred measure, the one in the first two columns, is located somewhere in the middle. These features help to explain why the estimates are larger when using more constraint definitions. Nonetheless, it is reassuring that the estimates point in the same direction and do not lose significance, nor the first-stage estimates change in the explanatory power.

Political preferences and Centro Democrático

To further validate my design, I explore whether my results are driven by a preference for the *Centro Democrático* party. Note, I can not extend this analysis to the left-wing candidate, Gustavo Petro, as he run for a party created in 2011 that did not take part in the 2014 presidential election, therefore, I can not capture preferences for his party. I calculate the change in votes for *Centro Democrático* party between presidential election and rule out the possibility of a preference for the party. Notice, similar to the part of Petro, I can only do this with the 2014 presidential election result as the party did not participate before in any election. In addition, I calculate the difference between the share of votes for Duque and the votes for the NO option in the 2016 peace plebiscite as the party was leading the opposition to the adoption of the peace agreement. Table 5 reports the IV estimates using these two alternative outcomes. Note, since I am using information from the 2014 election, I do not control the electoral results of that year (reported in Columns (3) and (4)). These results are very similar to those of the main specification, suggesting that there is no unobserved characteristic related to ideology that is driving the results. However, the estimates for the change with respect the peace agreement plebiscite result are smaller, suggesting that the attitudes towards the peace agreement help explain the electoral results of 2018. I explore this result further in section 9.

Early settlements

I analyze whether municipalities that have been exposed to Venezuelan migrants before react differently from those where migrants are arriving for the first time. I use information on the location of Venezuelan migrants using the 2005 Colombian census. To keep simple the analysis, I split the sample in two groups: those that had a prior presence of Venezuelan migrants in 2005 and those who had not; interestingly, each subsample accounts for roughly half of the municipalities. Table 6 reports the results for these two samples and the totality of the municipalities , to ease comparison. The IV estimates in the municipalities with previous settlements presents a similar

point estimate that for the full sample validating my results. However, the IV estimates for the sample without prior presence is about 3.5 times larger (Column (6)) when compared to those of the full sample. These results suggest that voters that were not exposed in the past reacted more to the presence of the Venezuelan migrants.

8 Additional Results

Labor market

I follow the literature and explore the relationship between presence of migrants and labor market outcomes in Colombia (Bahar et al., 2021; Lebow, 2022; Santamaria, 2020). These studies exploit the large migration wave and work permissions granted to Venezuelan. Their findings suggests that there are negligible effect on labor market outcomes. I use the question on the census that asked about last week activity to approximate the labor market. Figure 7 summarizes the results for the inhabitants of the municipality and only for the Venezuelans. The results present estimates not statistically different from zero, although the share of individuals working decreased and that of studying increased slightly. However, the results must be taken with caution as not all the individuals responded the questionnaire during the same time, making it harder to disentangle the effects from temporal variation or economic cycles.

Education level

Recent literature has studied the role of education and skill level on the heterogeneous effects of immigration (Edo et al., 2019; Mayda et al., 2022). Their results suggest that the support for right-wing candidates tend to be favored by the presence of low educated (skilled) migrants. To explore this channel, I use the questions on the census that ask about gender, whether the respondent knows how to read and write, and the highest education level attained. Figure 8 summarizes the results for the inhabitants of the municipality and for the Venezuelans. The results suggest that there is an increase in the share of respondents that have completed college, and a decrease in the share of individuals that have completed wither middle- or high-school. The estimates for the Venezuelan respondents suggests that this effect does no come from their presence in the municipality. A possible explanation is that migrants decide to locate in the biggest cities and more urban (less rural) areas where there is more demand for college educated individuals.

Furthermore, the estimates for Venezuelan respondents only suggest that there is a significant increase in the number of Venezuelans that have completed only primary school and a negative,

although not significant, for those in higher education levels. This result goes in line with a recent characterization of Venezuelan migrants based on the Colombian households surveys of 2015 and 2016. These surveys suggests that 80 percent of registered migrants have not completed a high school education, at at least half of them are 25 years old or less (OLR, 2017). Moreover, according to Rozo and Vargas (2021) and Knight and Tribin (2020), the recent migrant wave was composed by poor, vulnerable, and poorly educated households.

9 Mechanisms

Violent crime

I analyze whether my results are driven by changes in violent crime. Figure 6a and Figure 6b presents the estimates using person robbery and homicide rates, respectively, from 2011 to 2017. To account for unobserved characteristics, I compute the outcome as the deviation between the robbery (homicide) rate for every year with respect to that of 2010. Each one of the estimates comes from a different IV regression using these outcomes. To account for any underlying relation that my measure could be capturing, I normalize the values for each year by calculating the deviation with respect to the information from 2010. In both cases, the person robbery and the homicides present some fluctuation but are not statistically distinguishable from zero in most of the years. These results suggest that there is no effect on violent crimes, contrary to the findings of Knight and Tribin (2020) who find an increase in homicides in Colombia after the reopening of the border in 2016.

Mayoral elections

I analyze whether my results are driven by the presence of migrants affecting political preferences at the local level. To do so, I explore whether the presence of Venezuelan migrants affected the political preferences in the 2015 local elections. Table 7 presents the effects of the Venezuelan migrants on the votes for the right-, left-, and center-oriented candidates. It is not possible to do this analysis at the party level as at the local level there are many independent candidates (Woldemikael, 2022). To do this, I estimate equation 1 using the share of votes as outcome. I find that there is a positive effect on the share of votes for right-wing candidates at the expense of the votes for the center oriented candidates. This result contradict the findings of Rozo and Vargas (2021) who find that the center-oriented candidates are not affected by the presence of migrants whereas left-wing candidates are.

Peace Plebiscite

The 2018 presidential election was marked by the adoption of the peace agreement. I study whether my results are driven by the preferences over this topic as the *Centro Democrático* party was the major political force opposing its adoption (Gallego et al., 2019). Furthermore, *Centro Democrático* use the example of Venezuela as a failed state during these two electoral processes. Figure 1 provide some evidence of the increasing interest of the term "castrochavista" around the dates of the processes. The last two columns of Table 7 present the estimates. There is a positive effect of the presence of migrants on the share of votes for the No option. Note, this is consistent with the support for the *Centro Democrático* party and because the measure of presence of migrants includes migrants that arrived before the plebiscite took place.

Mediation Analysis

I find that the presence of Venezuelan migrants have an effect on the votes for the local election and the peace plebiscite but not with the violent crimes. To understand how the preferences for presidential candidate are affected by these mediating factors, I introduce them in the model specified in equation 1 in order to create a "full" model (equation 3). Note, these variables could be seen as 'bad controls' as they are also affected by the presence of migrants, their relationship with the voting preference in the presidential election is not clear. Equation 1 is modified as follows:

$$Votes_m^{2018} = \alpha_M + \beta_M Ven_m + \sum_K \mu^k p_m^k + \sum_J \delta_M^j votes_m^j + \delta_{Mg} geo_m + \delta_{MX} X_m + \varepsilon_m \tag{3}$$

where I denote each of the mechanisms as p, i.e., $K = \{$the violent crimes, the votes for the right-oriented candidates in the local election, center-oriented candidates in the local election, votes for the No option in the peace plebiscite$\}$. I do not include the share votes for the left-oriented candidates because it was not significant and because it is collinear with the other shares of votes.

To quantify the importance of these mechanisms, Gelbach (2016) provides a decomposition to explain their relative importance of each one of the mechanisms. Table 8 present the estimates for of each one them: the violent crimes, the votes for the right-oriented candidates in the local election, center-oriented candidates in the local election, votes for the No option in the peace plebiscite. To simplify the analysis, I use as outcome the share of votes for Iván Duque, *Centro Democrático* candidate. The results suggest that the preferences over the peace agreement explain all the difference between the "full" model and the base model from equation 1, and about a third of the total effect of the presence of Venezuelan migrants on the votes for the leading right-wing

party candidate, Duque. This result provide further evidence that the attitudes towards the peace agreement were determinants of the electoral results of the 2018 presidential election.

10 Conclusion

This paper contributes to the literature of migration and, in particular, to the growing literature of the effects of migration inflow of Venezuelans. The case of Colombia allows me to identify the effects of the migration shock of Venezuelan on voting behavior for each candidate. My empirical strategy approximates the shock using data from the last national census and exploits the likeliness of new migrants settling in enclaves established by earlier migrants using data from the previous to last available census.

I find strong evidence suggesting that there is a positive relation between the share of Venezuelan migrants with the voting preference for a right-wing party candidate, Iván Duque from *Centro Democrático*. Contrary to the finding of the literature, I find that not all right-wing parties benefit from such presence. I also find that the presence of Venezuelan migrants polarized the election by increasing the share of votes for Centro Democrático at the expenses of the votes for the left-wing candidate, Gustavo Petro. This results supports the strategic electoral misinformation hypothesis (Rozo and Vargas, 2021) where political parties demonize electoral competitors by associating them with political regimes.

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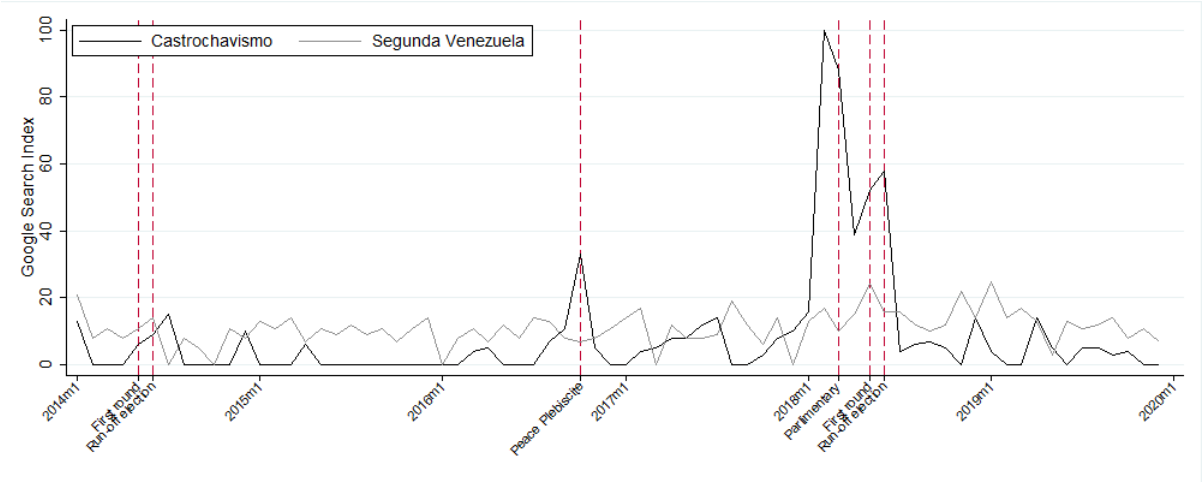
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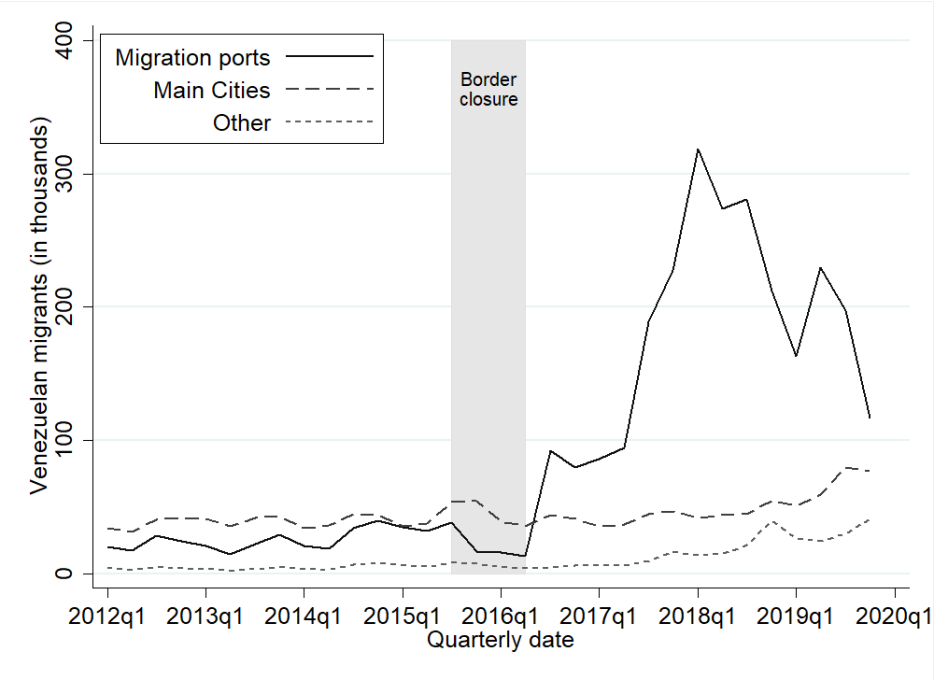
Figure 1: Google search for 'Castrochavismo' and 'Segunda Venezuela' in Colombia



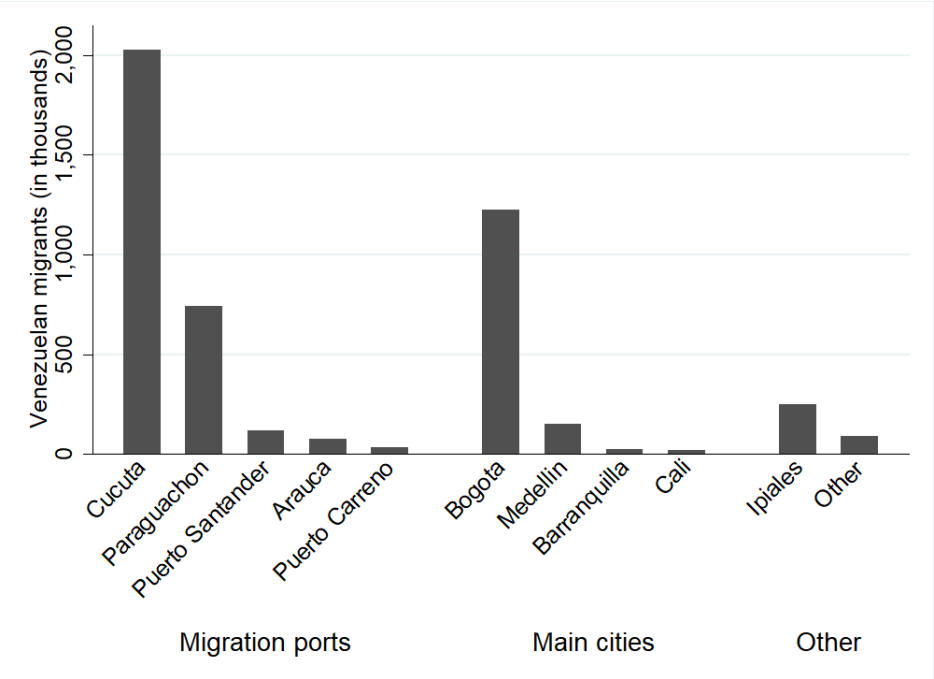
Source: Googe trends. Chart present the number of Google hits for the search terms 'castrochavismo' and 'segunda venezuela' in Colombia between for the years 2016 to 2020. Data is monthly scaled to range from 0 to 100, where 100 is the highest possible amount of searches.

Figure 2: Venezuelan migration to Colombia

(a) Over time

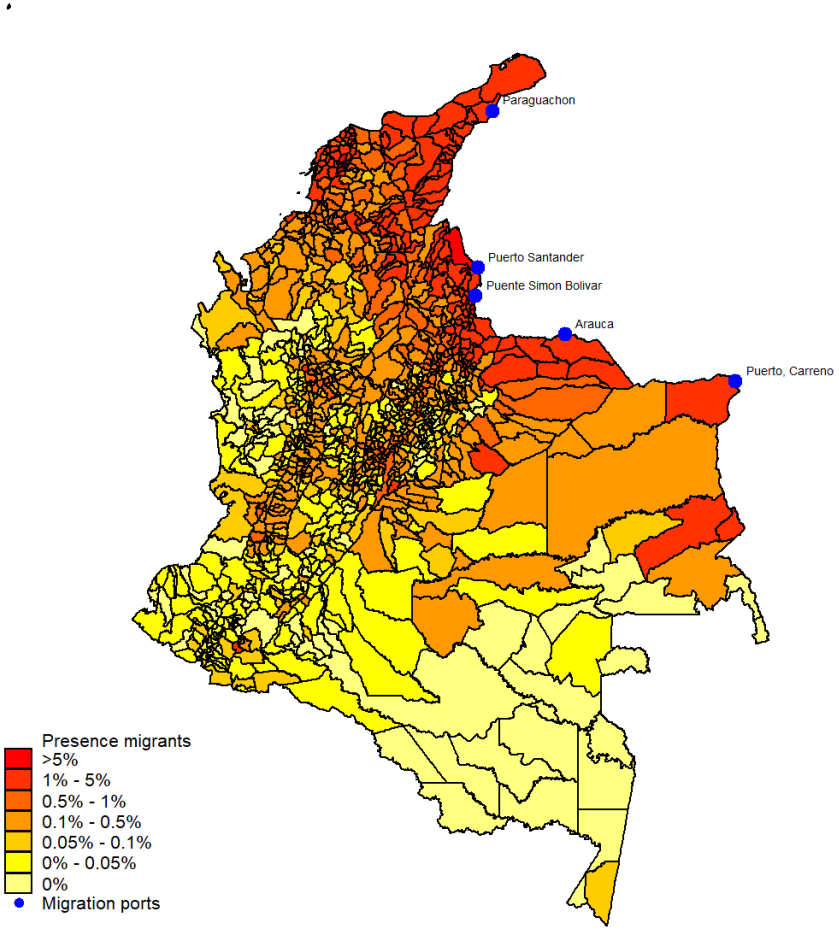


(b) By entry ports

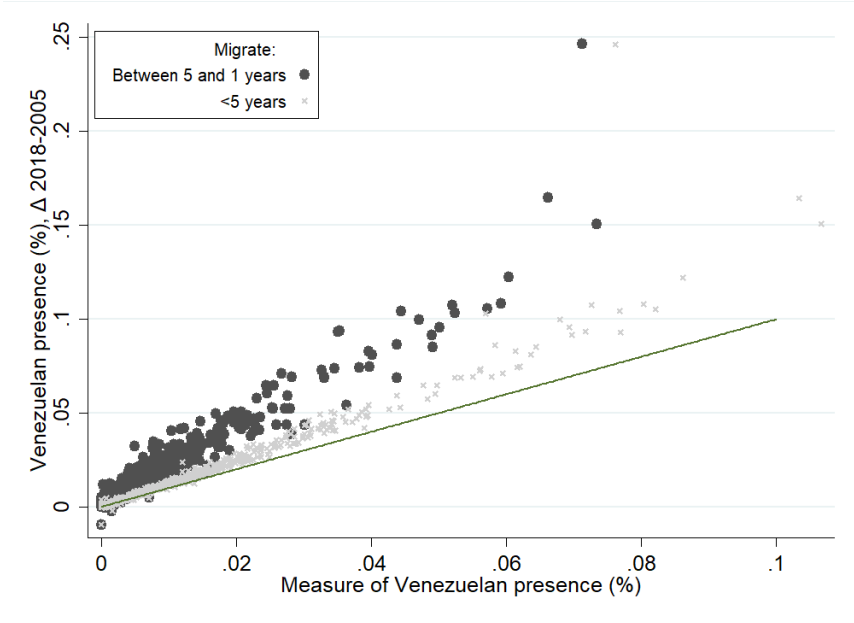


Source: migration office. Lines in panel a represent the number of Venezuelans entering Colombia through different entry ports from the first quarter in 2012 to the second quarter in 2019. The shaded area represents the border closure between August 2015 and August 2016. Panel b presents aggregates by entry port from the first quarter in 2012 to the second quarter in 2019.

Figure 3: Location of Venezuelan migrants in Colombia



(a) Measure of presence

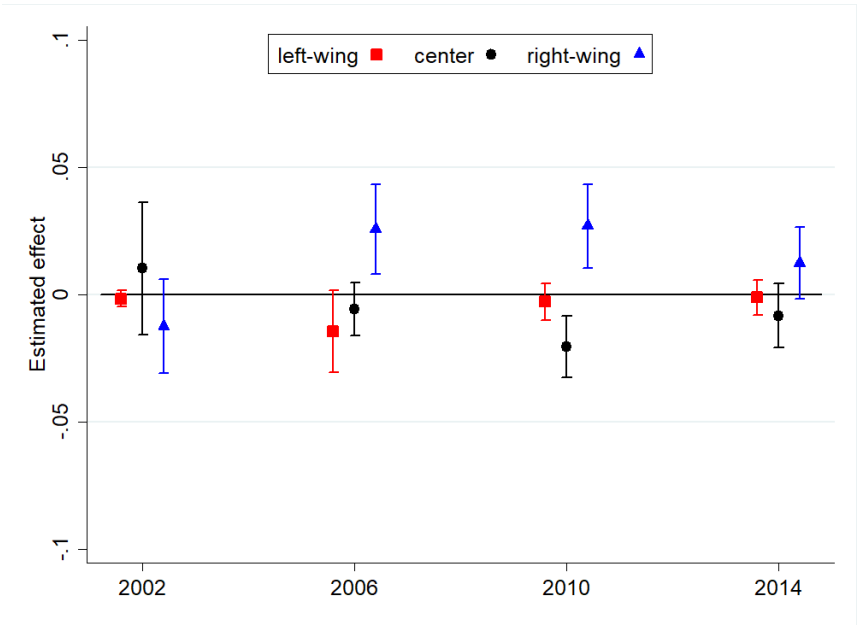


(b) Presence variation 2018-2005

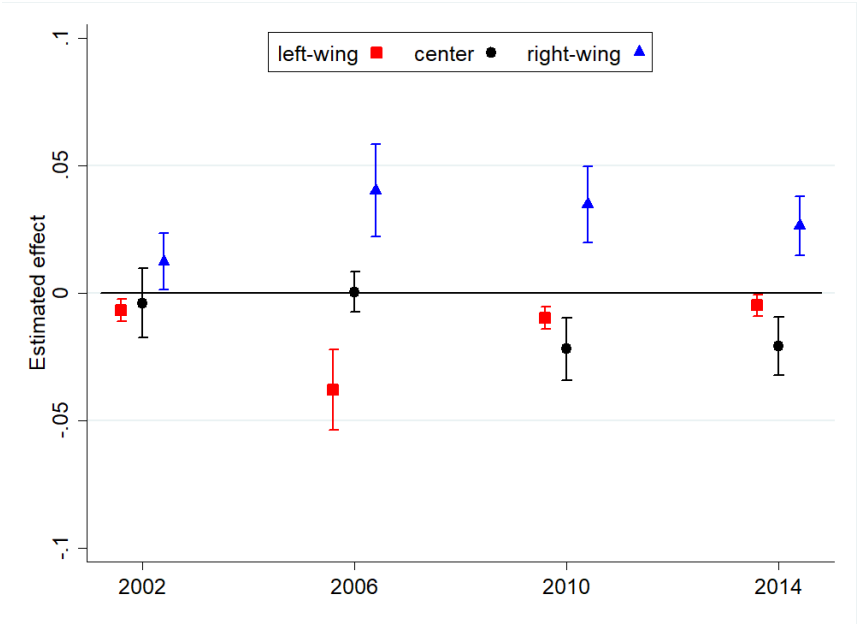
Source: Censuses from the Statistics Department.Panel a presents the measure of presence of Venezuelan migrants in the main analysis. Dots represent the location of the land migration ports. Panel b presents variation in the presence of Venezuelan migrants between 2018 and 2005 using censuses information in the vertial axis. The horizontal axis present the measure of presence of Venezuelan migrans in the main analysis. Solid line is a 45 degree line.

Figure 4: Presence of Venezuelan migrants and distance on previous presidential elections

(a) OLS estimates

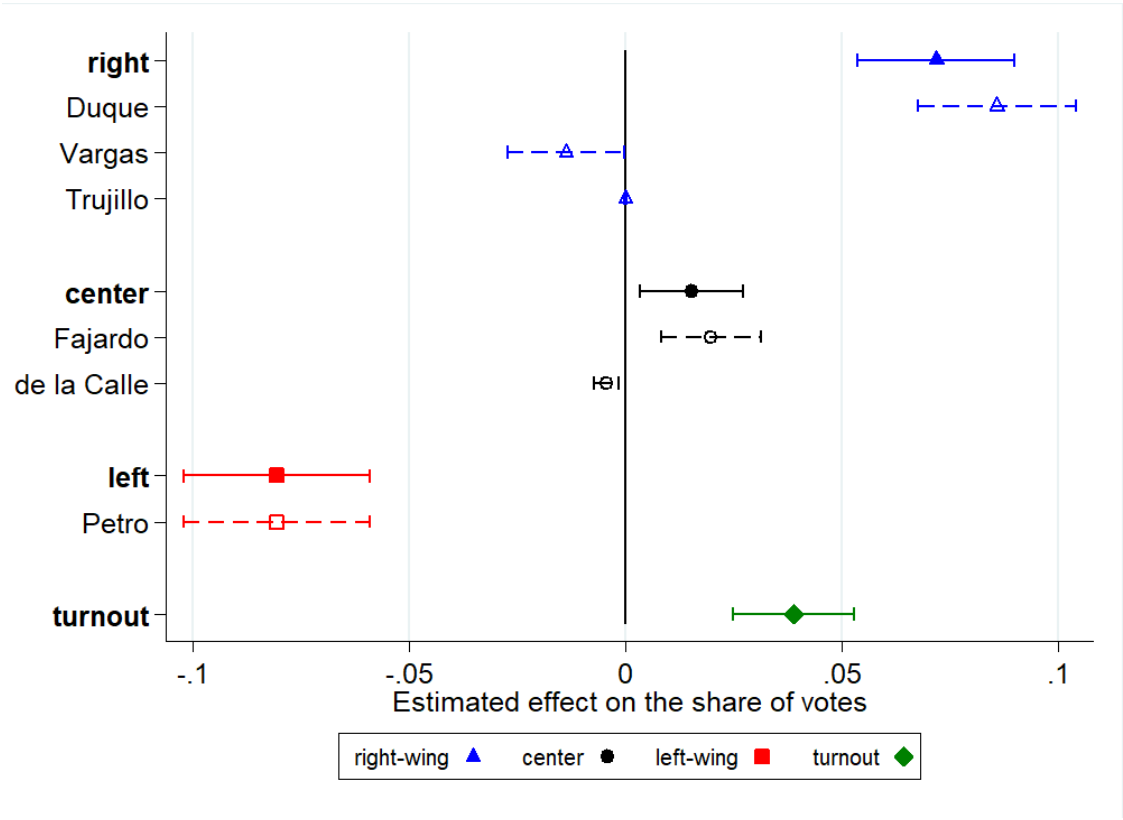


(b) Reduce form



Note: Panel 4a presents the OLS estimate of β in equation 1 using the votes for each ideology in the election year reported in the horizontal axis. Panel 4b presents the reduce form estimates using distance from each municipality to the closest entry port as the explanatory variable. Each point comes from a different regression.

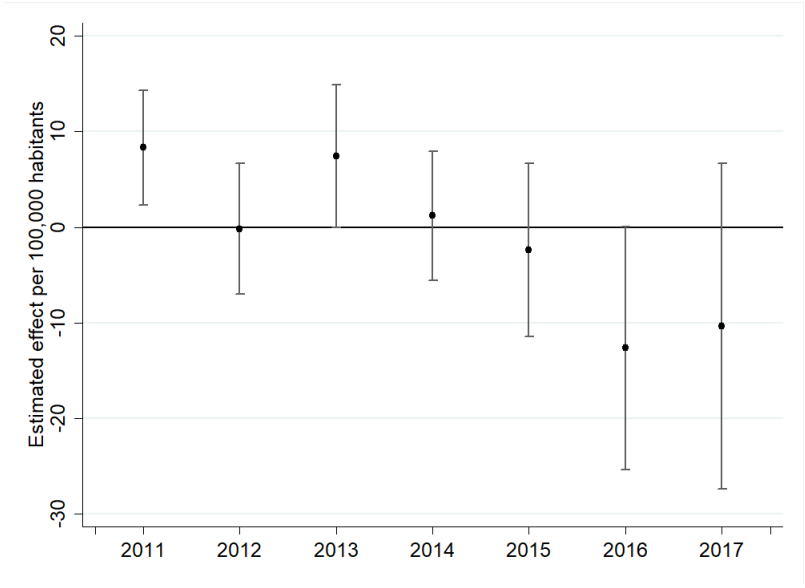
Figure 5: Effects of presence of Venezuelans on the votes of the 2018 presidential election



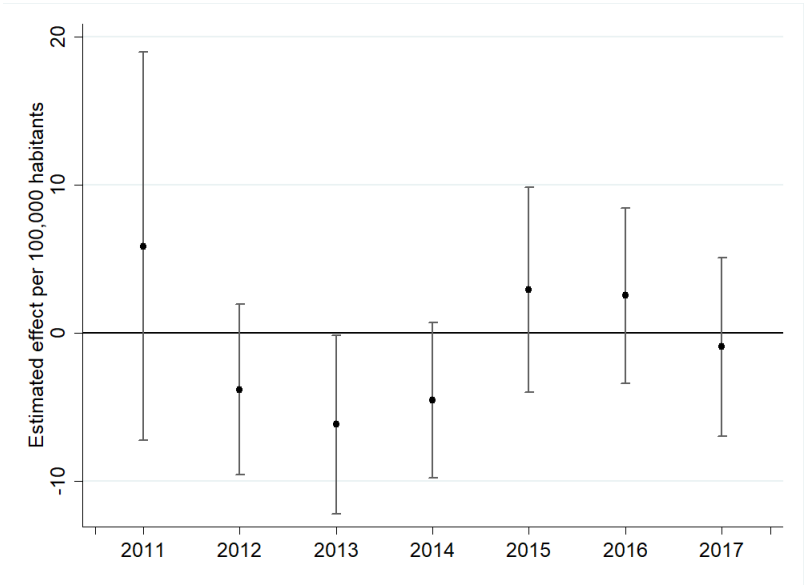
Note: Each point represents the IV estimate of β of equation 1. Estimates in solid symbols represent the aggregated value for each political ideology and for the turnout rate. Estimates in hollow symbols represents individual candiadtes.

Figure 6: Effects of presence of Venezuelan migrants on violent crime

(a) Person robbery

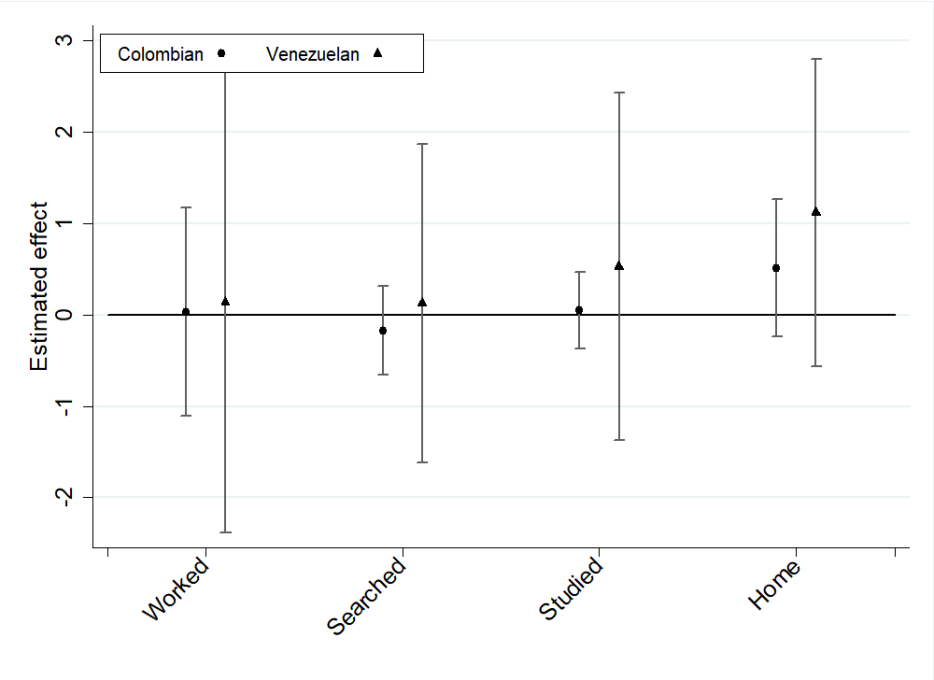


(b) Homicide



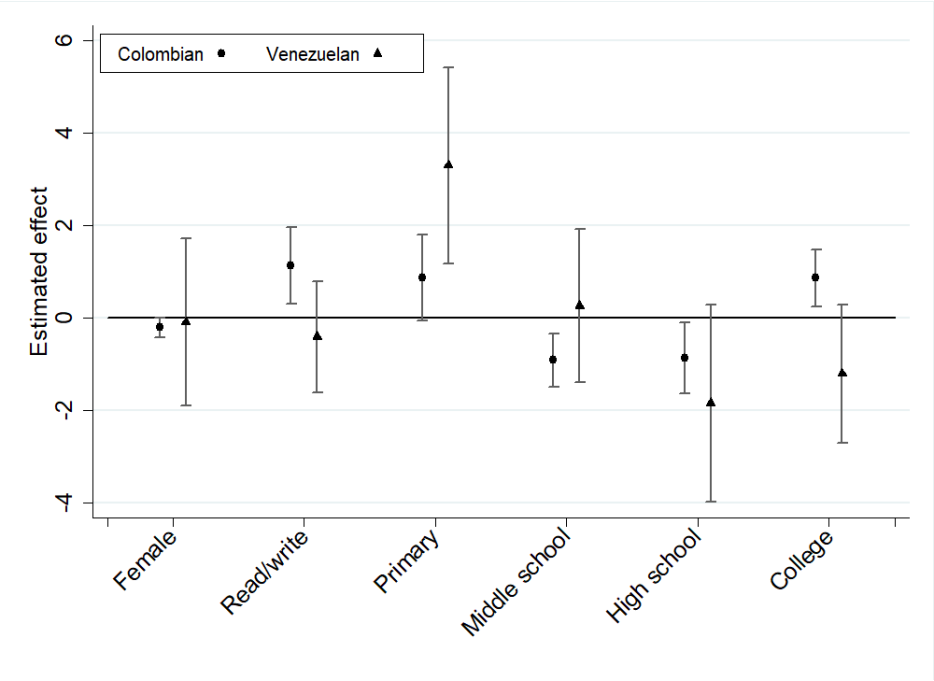
Note: Each point represents the IV estimate of β of equation 1 using violent crimes as outcomes. Panel 6a present the estimates for person robbery, while Panel 6b for homices. Both rates rates are calcualted as deviation from its value in 2010.

Figure 7: Effects of Venezuelan presence on labor market



Note: Each point represents the IV estimate of β of equation 1 using labor outcomes as the dependent variable. Labor market outcomes are calculated using census data for Colombian and Venezuelan separately. Circles represent estimates using outcomes for the Colombian population only and triangles for Venezuelan population only.

Figure 8: Effects of Venezuelan presence on education level



Note: Each point represents the IV estimated coefficient of equation 1 using educational characteristics as the dependent variable. Educational characteristics are calculated using census data for Colombian and Venezuelan separately. Circles represent estimates using outcomes for the Colombian population only and triangles for Venezuelan population only.

Table 1: First-stage: Presence of Venezuelan migrants as a funtion of distance

Distance function:	Minimum distance to 5 entry ports						Distance to Cucuta			
	Inverse Logarithmic		Inversee Linear		Linear		Inverse Logarithmic		Linear	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Distance function	0.005***	0.004***	0.004**	0.002**	-0.004***	-0.003***	0.004***	0.003***	-0.003***	-0.003***
	(0.001)	(0.001)	(0.002)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
F-test (excluded instruments)	69.880	41.078	6.545	4.649	190.197	141.939	122.850	105.264	150.085	151.617
Observations	1,122.000	1,094.000	1,122.000	1,094.000	1,122.000	1,094.000	1,122.000	1,094.000	1,122.000	1,094.000
Border controls		✓		✓		✓		✓		✓
Distance controls		✓		✓		✓		✓		✓
Administrative controls		✓		✓		✓		✓		✓
Electoral controls		✓		✓		✓		✓		✓

Notes: Each column represents the estimate of γ in equation 2. Dependent variable is the presence of Venezuelan migrants. Independent variables is a decay function of the distance of each municipality to the a entry port. Functional form and entry port are reported in the column header. Odd Columns do not include any control and even columns include all the control variables. Robust standard errors presented in parenthesis. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

Table 2: Effects of presence of Venezuelans on the votes of the 2018 presidential election

Dependent variable:	Votes for right		Right candidates: Votes for Duque		Votes for Vargas		Votes for Trujillo		Total votes	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A: 2SLS IV regression (second-stage)										
Presence Venezuelan migrants	0.105***	0.063***	0.102***	0.079***	0.003	-0.016**	-0.000	-0.000	0.019**	0.040***
	(0.013)	(0.008)	(0.014)	(0.013)	(0.004)	(0.008)	(0.000)	(0.000)	(0.008)	(0.014)
Panel B: OLS regression										
Presence Venezuelan migrants	0.026***	0.023***	0.007	0.015***	0.019***	0.009*	0.000	-0.000***	-0.000	0.021***
	(0.007)	(0.004)	(0.007)	(0.005)	(0.005)	(0.005)	(0.000)	(0.000)	(0.003)	(0.005)
Panel C: Reduced form										
Distance function	0.056***	0.024***	0.055***	0.030***	0.001	-0.006*	-0.000	-0.000	0.010**	0.015**
	(0.010)	(0.005)	(0.011)	(0.008)	(0.002)	(0.004)	(0.000)	(0.000)	(0.005)	(0.007)
Panel D: 2SLS first-stage regression										
Distance function	0.005***	0.004***	0.005***	0.004***	0.005***	0.004***	0.005***	0.004***	0.005***	0.004***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
F-test (excluded instruments)	69.88	41.08	69.88	41.08	69.88	41.08	69.88	41.08	69.88	41.08
Observations	1,122	1,094	1,122	1,094	1,122	1,094	1,122	1,094	1,122	1,094
Border controls		✓		✓		✓		✓		✓
Distance controls		✓		✓		✓		✓		✓
Administrative controls		✓		✓		✓		✓		✓
Electoral controls		✓		✓		✓		✓		✓

Notes: Each entry is estimated separately. Panel A and B present estiamtes of equation 1 and panel D of equation 2. Dependent variable is reported in the column header. First-stage estimtes uses an inverse logarithmic decay function of the distance to the closest entry port. Odd Columns do not include any control and even columns include all the control variables. Robust standard errors presented in parenthesis. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

Table 3: Effects of presence of Venezuelans on the votes of the 2018 presidential election (continued)

Dependent variable:	Votes for center		Center candidates: Votes for Fajardo		Center candidates: Votes for de la Calle		Votes for left		Left candidates: Votes for Petro	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A: 2SLS IV regression (second-stage)										
Presence Venezuelan migrants	-0.011***	0.006	-0.006	0.012	-0.005***	-0.005***	-0.088***	-0.062***	-0.088***	-0.062***
	(0.004)	(0.007)	(0.004)	(0.008)	(0.001)	(0.001)	(0.013)	(0.012)	(0.013)	(0.012)
Panel B: OLS regression										
Presence Venezuelan migrants	-0.016***	0.004	-0.015***	0.004*	-0.001	-0.001	-0.006	-0.024***	-0.006	-0.024***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.006)	(0.004)	(0.006)	(0.004)
Panel C: Reduced form										
Distance function	-0.006***	0.002	-0.003*	0.004	-0.003***	-0.002***	-0.047***	-0.024***	-0.047***	-0.024***
	(0.002)	(0.003)	(0.002)	(0.003)	(0.001)	(0.001)	(0.010)	(0.008)	(0.010)	(0.008)
Panel D: 2SLS first-stage regression										
Distance function	0.005***	0.004***	0.005***	0.004***	0.005***	0.004***	0.005***	0.004***	0.005***	0.004***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
F-test (excluded instruments)	69.88	41.08	69.88	41.08	69.88	41.08	69.88	41.08	69.88	41.08
Observations	1,122	1,094	1,122	1,094	1,122	1,094	1,122	1,094	1,122	1,094
Border controls		✓		✓		✓		✓		✓
Distance controls		✓		✓		✓		✓		✓
Administrative controls		✓		✓		✓		✓		✓
Electoral controls		✓		✓		✓		✓		✓

Notes: Each entry is estimated separately. Panel A and B present estiamtes of equation 1 and panel D of equation 2. Dependent variable is reported in the column header. First-stage estimtes uses an inverse logarithmic decay function of the distance to the closest entry port. Odd Columns do not include any control and even columns include all the control variables. Robust standard errors presented in parenthesis. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

Table 4: Effects of Venezuelan presence using different migration measures

Dependent variable: Votes for Duque	Migration measure		Migrate <1 year		Migrate <5 years	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: 2SLS IV regression (second-stage)						
Presence Venezuelan migrants	0.102***	0.079***	0.209***	0.175***	0.069***	0.055***
	(0.014)	(0.013)	(0.028)	(0.031)	(0.008)	(0.006)
Panel B: OLS regression						
Presence Venezuelan migrants	0.007	0.015***	0.005	0.017***	0.004	0.010***
	(0.007)	(0.005)	(0.011)	(0.006)	(0.005)	(0.003)
Panel C: Reduced form						
Distance function	0.055***	0.030***	0.055***	0.030***	0.055***	0.030***
	(0.011)	(0.008)	(0.011)	(0.008)	(0.011)	(0.008)
Panel D: 2SLS first-stage regression						
Distance function	0.005***	0.004***	0.003***	0.002**	0.008***	0.006***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
F-test (excluded instruments)	69.88	41.08	17.81	6.55	42.69	20.16
Observations	1,122	1,094	1,122	1,094	1,122	1,094
Border controls		✓		✓		✓
Distance controls		✓		✓		✓
Administrative controls		✓		✓		✓
Electoral controls		✓		✓		✓

Notes: Each entry is estimated separately. Panel A and B present estiamtes of equation 1 and panel D of equation 2. Dependent variable is the share of votes for Iván Duque. Independent variable is reported in the column header. First-stage estimtes uses an inverse logarithmic decay function of the distance to the closest entry port. Odd Columns do not include any control and even columns include all the control variables. Robust standard errors presented in parenthesis. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

Table 5: Effects of Venezuelan presence on votes for Centro Democratico

Dependent variable:	Votes for CD/Duque		Δ CD = Duque - Zuluaga		Δ CD = Duque - NO	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: 2SLS IV regression (second-stage)						
Presence Venezuelan migrants	0.102***	0.079***	0.064***	0.075***	0.038***	0.014*
	(0.014)	(0.013)	(0.009)	(0.013)	(0.009)	(0.008)
Panel B: OLS regression						
Presence Venezuelan migrants	0.007	0.015***	0.018***	0.016***	0.010***	0.005
	(0.007)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)
Panel C: Reduced form						
Distance function	0.055***	0.030***	0.035***	0.029***	0.021***	0.005
	(0.011)	(0.008)	(0.007)	(0.008)	(0.006)	(0.004)
Panel D: 2SLS first-stage regression						
Distance function	0.005***	0.004***	0.005***	0.004***	0.005***	0.004***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
F-test (excluded instruments)	69.88	41.08	69.88	41.43	69.88	41.08
Observations	1,122	1,094	1,122	1,094	1,122	1,094
Border controls		✓		✓		✓
Distance controls		✓		✓		✓
Administrative controls		✓		✓		✓
Electoral controls		✓		✓		✓

Notes: Each entry is estimated separately. Panel A and B present estiamtes of equation 1 and panel D of equation 2. Dependent variable is reported in the column header. First-stage estimtes uses an inverse logarithmic decay function of the distance to the closest entry port. Odd Columns do not include any control and even columns include all the control variables. Robust standard errors presented in parenthesis. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

Table 6: Effects of Venezuelan presence by presence of early settlements

Dependent variable: Votes for Duque	Full sample		Previous migration		No previous migration	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: 2SLS IV regression (second-stage)						
Presence Venezuelan migrants	0.101***	0.079***	0.086***	0.078***	0.872***	0.280***
	(0.014)	(0.013)	(0.013)	(0.014)	(0.179)	(0.071)
Panel B: OLS regression						
Presence Venezuelan migrants	0.006	0.015***	0.004	0.014***	0.030	0.003
	(0.007)	(0.005)	(0.008)	(0.005)	(0.034)	(0.016)
Panel C: Reduced form						
Distance function	0.054***	0.030***	0.044***	0.027***	0.181***	0.061***
	(0.011)	(0.008)	(0.010)	(0.008)	(0.018)	(0.010)
Panel D: 2SLS first-stage regression						
Distance function	0.005***	0.004***	0.005***	0.003***	0.002***	0.002***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)
F-test (excluded instruments)	69.72	41.08	45.99	25.65	44.39	28.44
Observations	1,113	1,094	555	551	558	543
Border controls		✓		✓		✓
Distance controls		✓		✓		✓
Administrative controls		✓		✓		✓
Electoral controls		✓		✓		✓

Notes: Each entry is estimated separately. Panel A and B present estiamtes of equation 1 and panel D of equation 2. Dependent variable is the share of votes for Iván Duque. First-stage estimtes uses an inverse logarithmic decay function of the distance to the closest entry port. Odd Columns do not include any control and even columns include all the control variables. Subsample reported in column header. Robust standard errors presented in parenthesis. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

Table 7: Effects of presence of Venezuelan migrants on previos electoral cycles

Dependent variable:	2015 mayoral election								Plebiscite	
	Votes for right		Votes for center		Votes for left		Total votes		NO option	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A: 2SLS IV regression (second-stage)										
Presence Venezuelan migrants	0.038***	0.050***	-0.007	-0.054**	-0.024*	0.002	0.070***	0.039**	0.064***	0.066***
	(0.013)	(0.018)	(0.015)	(0.021)	(0.012)	(0.015)	(0.016)	(0.016)	(0.009)	(0.011)
Panel B: OLS regression										
Presence Venezuelan migrants	0.008	0.018*	-0.008	-0.030**	-0.001	0.003	0.027***	0.013	-0.003	0.010*
	(0.008)	(0.011)	(0.010)	(0.013)	(0.008)	(0.009)	(0.008)	(0.010)	(0.007)	(0.006)
Panel C: Reduced form										
Distance function	0.023***	0.023***	-0.004	-0.025**	-0.014**	0.001	0.042***	0.018**	0.035***	0.025***
	(0.007)	(0.008)	(0.009)	(0.010)	(0.007)	(0.007)	(0.009)	(0.007)	(0.006)	(0.006)
Panel D: 2SLS first-stage regression										
Distance function	0.006***	0.005***	0.006***	0.005***	0.006***	0.005***	0.006***	0.005***	0.005***	0.004***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)
F-test (excluded instruments)	163.91	126.35	163.91	126.35	163.91	126.35	163.91	126.35	69.88	41.08
Observations	1,035	1,020	1,035	1,020	1,035	1,020	1,035	1,020	1,122	1,094
Border controls		✓		✓		✓		✓		✓
Distance controls		✓		✓		✓		✓		✓
Administrative controls		✓		✓		✓		✓		✓
Electoral controls		✓		✓		✓		✓		✓

Notes: Each entry is estimated separately. Panel A and B present estiamtes of equation 1 and panel D of equation 2. First-stage estimtes uses an inverse logarithmic decay function of the distance to the closest entry port. Odd Columns do not include any control and even columns include all the control variables. Dependent variable in Columns (1) to (8) are from the 2015 mayoral election and in Columns (9) and (10) are from the 2016 peace agreemebt plebiscite, reported in the column header. Robust standard errors presented in parenthesis. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the

Table 8: Relative importance of control variables and the peace plebiscite results

Mediator	Coefficient (1)	Standard Error (2)
Peace Plebiscite	0.024***	0.004
Homicides	-0.000	0.000
Robbery	0.000	0.000
Right-wing mayor	-0.000	0.000
Left-wing mayor	-0.001	0.001
Total Explained	0.023***	0.004

Notes: Gelbach (2016) decomposition of the role of the various mechanisms for explaining the votes for the *Centro Democrático* candidate, Iván Duque. "Total Explained" represents the difference in the estimate of the variable "Venezuelan migrants" between the full and the base models. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

Appendix

A Data and additional results

Summary statistics – Table A.1 presents the summary statistics of the main variables used in the analysis. Panel A presents the main outcomes, Panel B the migration measure and the main instrument measure before standardizing. Panel C thorugh Panel E presents the statistics for the control variables grouping them as presented in the main tables. Table A.2 presents the summary statistics for the additional variables used in the analysis. Panel A summarizes the different decay functions; Panel B, the migration measures; Panel C, the election results from the second round of the 2018 presidential election; Panel D, the first round election results for each candidate in the 2018 presidential election; Panel E, the results of the 2014 presidential election aggregated by ideology; and Panel F, the two outcomes based that summarizes the political preferences for the Centro Democratico party.

First stage results – Figure A.1 presents the IV estimates using different exponential decay functions. Figure A.1a present the estimates of equation 1 or the second stage, while Figure A.1b presents estimates of equation 2. The exponential decay function takes the form

$$f(distance) = \exp\left\{-\frac{1}{\lambda} distance\right\}$$

where λ is a scaling parameter. Note, when $\lambda = 1$ the decay function takes values close to zero as the distance increses. In particular, the *distance* variable takes values between 3 and 1135 with mean equal to 414.6; this translate into a decay function with mean equal 0.0000271 and values ranging from 0 to 0.0304. Given the lower values, I use different values for the sacling parameters and show that the results are not driven by the value chosen of λ. First-stage estiamtes are robust to the value of the scaling parameter, although all of them present lower values than that of my main specification; while second-stage estimates are more sensible to this value, yet there are around the estimated parameter from my main specification.

Second round results – Table A.3 presents the IV estimates of equation 1 using the election results of the second round of the 2018 presidential election, along with the OLS estimates, the reduce form, and the first-stage from equation 2. The two candidates are classified as in the first-round following Fergusson et al. (2021) criteria. Ivan Duque is a right-wing candidate and Gustavo Petro is a left-wing candidate, therefore the results at the candidate level are the same as those for

Table A.1: Descriptive statistics for the main variables

	Obs.	Mean	Std. Dev.	Min	Max
	(1)	(2)	(3)	(4)	(5)
Panel A: Election outcomes in 2018 first-round					
Votes for Duque	1,122	0.469	0.185	0.000	0.871
Votes for right	1,122	0.576	0.175	0.064	0.924
Votes for center	1,122	0.150	0.097	0.012	0.535
Votes for left	1,122	0.237	0.184	0.011	0.879
Turnout	1,122	0.499	0.100	0.066	0.753
Panel B: Venezuelan presence and instrument					
Shock Venezuelan migrants	1,122	0.474	0.862	0.000	7.335
Inverse logaritmic distance to 5 entry ports	1,122	0.155	0.022	0.129	0.509
Panel C: Border controls					
Border with brasil	1,122	0.010	0.099	0.000	1.000
Border with ecuador	1,122	0.009	0.094	0.000	1.000
Border with panama	1,122	0.004	0.060	0.000	1.000
Border with peru	1,122	0.006	0.079	0.000	1.000
Border with venezuela	1,122	0.037	0.188	0.000	1.000
Panel D: Distance controls					
Distance to Bogota	1,122	321.6	194.6	0.0	1,270.9
Distance to Department's capital	1,122	81.5	60.6	0.0	493.1
Distance to closest principal market	1,122	130.0	111.6	0.0	926.5
Panel E: Administrative controls					
Area (km2)	1,122	1,018	3,201	15	65,674
Elevation (MASL)	1,122	1,140	1,156	2	25,221
Population census (2005)	1,113	36,983	230,425	4	6,740,859
Rurality index (2005)	1,118	0.589	0.241	0.002	1.000
Migrant population (2018)	1,122	0.129	0.249	0.000	4.426
Panel F: Mayoral election and peace plebiscite controls					
Votes for NO option	1,122	0.460	0.167	0.000	0.821
Votes for center	1,035	0.597	0.255	0.000	0.992
Votes for left	1,035	0.085	0.158	0.000	0.985
Votes for right	1,035	0.241	0.223	0.000	0.987
Left-wing mayor	1,035	0.060	0.237	0.000	1.000
Right-wing mayor	1,035	0.213	0.409	0.000	1.000
Center-wing mayor	1,035	0.726	0.446	0.000	1.000

Notes: The table present the summary statistics for the main control variables by its classification. The observations are at the municipal level.

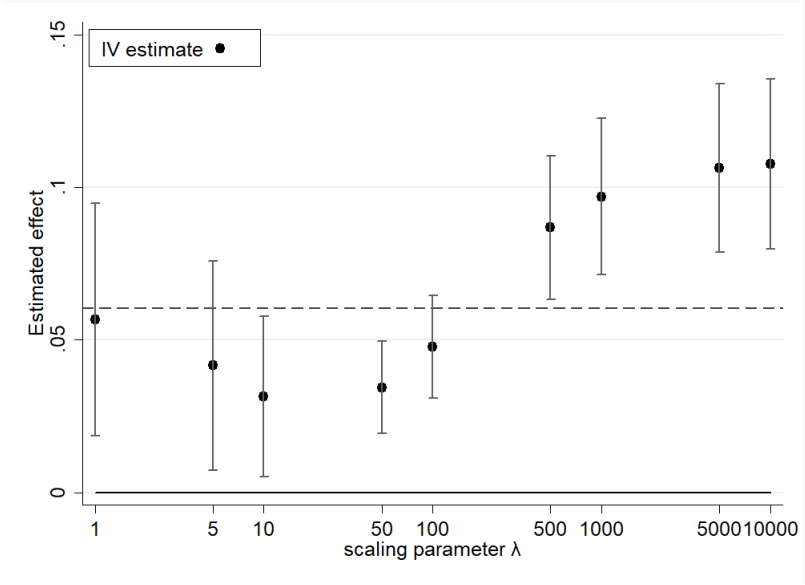
Table A.2: Descriptive statistics for the additional variables

	Obs.	Mean	Std. Dev.	Min	Max
	(1)	(2)	(3)	(4)	(5)
Panel A: Decay functions					
Inverse logaritmic distance to 5 entry ports	1,122	0.155	0.022	0.129	0.509
Inverse linear distance to 5 entry ports	1,122	0.004	0.010	0.001	0.286
Min. distance to 5 entry points	1,122	414.7	229.6	3.5	1,135.2
Inverse logaritmic distance to Cucuta	1,122	0.153	0.018	0.127	0.318
Distance to Cucuta entry port	1,122	432.3	228.0	11.6	1,285.1
Panel B: Migration measures					
Presence Venezuelan migrants	1,122	0.474	0.862	0.000	7.335
Presence Venezuelan migrants <1 year	1,122	0.370	0.546	0.000	4.171
Presence Venezuelan migrants <5 years	1,122	0.843	1.335	0.000	10.660
Panel C: Election outcomes in 2018 second-round					
Votes for right	1,122	0.610	0.198	0.046	0.944
Votes for left	1,122	0.346	0.201	0.029	0.941
Turnout	1,122	0.520	0.095	0.076	0.742
Panel D: Election outcomes in 2018 first-round					
Votes for Duque	1,122	0.469	0.185	0.000	0.871
Votes for Petro	1,122	0.237	0.184	0.011	0.879
Votes for Fajardo	1,122	0.130	0.095	0.000	0.492
Votes for de la Calle	1,122	0.020	0.020	0.000	0.276
Votes for Vargas	1,122	0.101	0.089	0.000	0.633
Votes for Trujillo	1,122	0.003	0.002	0.000	0.034
Panel E: Election outcomes in 2014 first-round					
Votes for right	1,122	0.337	0.164	0.000	0.812
Votes for center	1,122	0.498	0.158	0.000	1.000
Votes for left	1,122	0.097	0.068	0.000	0.616
Panel F: Variation with previous elections					
Var. votes CD (1st round)	1,122	0.132	0.099	-0.228	0.499
Var. votes peace plebiscite	1,122	0.009	0.128	-0.424	0.506

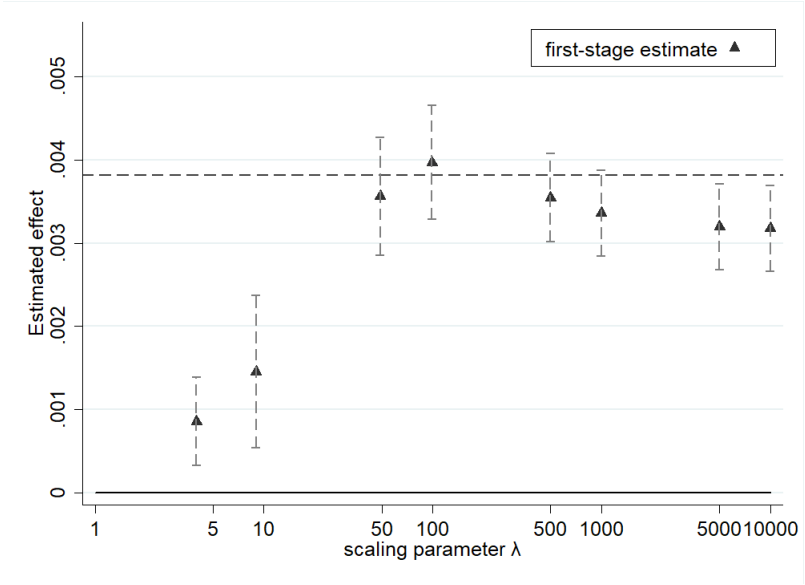
Notes: The table present the summary statistics for the main control variables by its classification. The observations are at the municipal level.

Figure A.1: Effects of Venezuelan presence using different exponential decay functions

(a) Second-stage



(b) First-stage



the political preferences. The results mimic those of the first round, i.e. presence of Venezuelans shift votes from the left-wing candidate towards the right-wing candidate while the turnout increases.

Table A.3: Effects of presence of Venezuelan migrants on presidential election (second-round)

Dependent variable:	Votes for right		Votes for left		Total votes	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: 2SLS IV regression (second-stage)						
Presence Venezuelan migrants	0.142***	0.059***	-0.143***	-0.059***	0.051***	0.037***
	(0.016)	(0.009)	(0.016)	(0.009)	(0.009)	(0.008)
Panel B: OLS regression						
Presence Venezuelan migrants	0.034***	0.023***	-0.032***	-0.021***	0.020***	0.019***
	(0.008)	(0.006)	(0.007)	(0.005)	(0.004)	(0.004)
Panel C: Reduced form						
Distance function	0.064***	0.028***	-0.064***	-0.027***	0.023***	0.017***
	(0.007)	(0.005)	(0.007)	(0.005)	(0.004)	(0.004)
Panel D: 2SLS first-stage regression						
Distance function	0.449***	0.467***	0.449***	0.467***	0.449***	0.467***
	(0.038)	(0.038)	(0.038)	(0.038)	(0.038)	(0.038)
F-test (excluded instruments)	139.88	151.87	139.88	151.87	139.88	151.87
Observations	1,035	1,035	1,035	1,035	1,035	1,035
Peace plebiscite		✓		✓		✓
Border controls	✓	✓	✓	✓	✓	✓
Distance controls	✓	✓	✓	✓	✓	✓
Administrative controls	✓	✓	✓	✓	✓	✓
Mayor election controls	✓	✓	✓	✓	✓	✓