Buying Votes across Borders?

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Abstract

Although immigrant populations have grown worldwide, their electoral connections with their home countries have been understudied. This study investigated vote-buying in the overseas ballot. Focusing on the 2018 federal elections in Mexico, we assumed that the recent reform of extending voting rights abroad, the lower socioeconomic status of the immigrants, the dubious secret ballot, and the weak oversight mechanisms in overseas ballots provided favorable conditions for buying expatriates’ votes through the cross-border networks. Our list experiment found that approximately 32 percent of Mexican immigrants in the US experienced vote-buying during the electoral campaign. Furthermore, multivariate analysis showed that the most susceptible to vote-buying were those who were female, young, full-time workers, contacted by party activists, supporters of PAN (Partido Acción Nacional) and MORENA (Movimiento Regeneración Nacional), and living where there was a high concentration of Hometown Associations (HTAs).

Keywords: vote-buying, overseas ballot, list experiment, immigration, Mexico, US

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Introduction

Vote-buying is an electoral strategy, which is widely used in new democracies. In the past decades, several studies investigated why and how vote-buying has prevailed. The debate has revolved around the conditions that promote the occurrence of this invisible transaction. First, poverty facilitates vote-buying because the indigent is likely to value inexpensive benefits; thus, politicians can easily buy their support (Stokes 2005; Dixit and Londregan 1996). Second, well-developed networks involving voters, political parties, and brokers encourage vote-buying. Given the difficulty of monitoring voters’ behavior directly at a polling place under the secret ballot, machines’ insertion into community networks allows to identify voters’ preferences and monitor whether they fulfill the promise to vote for the suggested candidate (Stokes 2005). Third, brokers are crucial in monitoring voters’ compliance (Larreguy, Marshall, and Querubín 2016; Larreguy, Montiel Olea, and Querubín 2017; Novas 2018; Stokes 2005; Stokes et al. 2013). Thus, parties attempt to hire brokers who are well connected to the voters’ social networks (Stokes et al. 2013).1

These studies convincingly demonstrated that the low socioeconomic status of the voters, the role of the brokers, and the capacity to infiltrate community networks and monitor voters’ compliance influence the outcome of these invisible transactions. However, their focus is limited to domestic electoral processes, and scant attention has been paid to analyze vote-buying as an electoral strategy directed to expatriates in overseas ballots. This lack of attention is even more surprising, given that immigrant populations have grown in many countries and they hold the rights

1 Larreguy, Marshall, and Querubín (2016) focus on turnout buying rather than vote-buying. The parties also need to monitor the brokers to avoid the moral hazard problem arising from the renege of brokers, who may shirk and, thus, fail to mobilize as many votes as expected (Larreguy, Marshall, and Querubín 2016; Novas 2018). Although parties’ capacity to hire loyal brokers is crucial for vote-buying’s success, this issue is beyond the scope of this study.
of voting for the elections of their home countries. We assume that overseas ballots provide favorable conditions for vote-buying, for the following reasons.

First, in the past decades, new democracies have introduced and extended overseas voting to secure the rights of the citizens living abroad. The political parties may have an incentive to cultivate these votes to survive electoral competition. Furthermore, immigrants’ socioeconomic status is supposedly lower than the average in the host countries, which also may induce politicians to target those voters. Second, whereas for domestic elections polling workers and election observers ensure the correctness of the voting procedure (Buzin, Brondum, and Robertson 2016; Ichino and Schündeln 2012), overseas voting typically uses postal and internet voting, which are less subject to official oversight mechanisms (Hill 2016; Massicotte, Blais, and Yoshinaka 2004). This casts doubt on the assumption of the secret ballot and, thus, facilitates the monitoring of voters’ behavior. Third, expatriates build cross-border networks connecting them with their families, friends, and local politicians (Paalberg 2017a; Córdova and Hiskey 2015; Pérez-Armendáriz and Crow 2015). Migrant associations are typically embedded into these networks. They can monitor migrants’ behavior and act as mediators in vote-buying transactions.

In this study, we test whether vote-buying occurs in overseas ballots, focusing on Mexican immigrants in the US. Approximately one-tenth of Mexico’s population lives abroad. In the country, the practice of vote-buying is widespread (Cantú 2014; Diaz-Cayeros, Magaloni, and Estévez 2016; Serra 2016). Besides, Mexico implemented a reform of overseas voting in 2014, which has enabled Mexican immigrants to obtain a voter registration card and cast a ballot by postal voting. Furthermore, Mexican immigrants in the US tend to establish home town associations (HTAs) and maintain ties to their community of origin through personal and organizational networks.

We conducted a list experiment using an online survey, which was performed between August 17 and September 15, 2018, one and a half months after the federal election on July 1,
2018, the first federal election conducted after the 2014 reform. The list experiment is an appropriate method to estimate the accurate level of politically sensitive questions such as vote buying by dealing with a social desirability bias (Gonzalez-Ocantos et al. 2012). Our analyses found that approximately 32 percent of Mexican immigrants in the US experienced vote-buying and that the most susceptible to vote-buying were those who were female, young, full-time workers, contacted by party activists, supporters of PAN (Partido Acción Nacional) and MORENA (Movimiento Regeneración Nacional), and living where there was a high concentration of Hometown Associations (HTAs).

The rest of the paper is organized as follows. The next section explains the logic of vote-buying across borders. The following two sections describe the context in which Mexican immigrants in the US participate in overseas voting and, then, present the design of the list experiment, the multivariate regression analysis, and the results, respectively. The last section discusses the implications of the study findings for future research.

The Logic of Vote-Buying Across Borders

Previous research identified voters’ low socioeconomic status, the presence of dense social networks, and the availability of brokers embedded into the networks as factors influencing the proliferation of contingent exchanges between particularistic benefits and votes under a secret ballot (Larreguy, Marshall, and Querubín 2016; Larreguy, Montiel Olea, and Querubín 2017; Nichter 2008; Novas 2018; Stokes 2005; Stokes et al. 2013). The logic of vote-buying across borders is an extension of these organizational and behavioral debates to the context of overseas voting. Specifically, we argue that the dubious secret ballot in overseas voting induces vote-buying targeting expatriates, who are likely to have a low socioeconomic status and be embedded in cross-border networks.
The Un-Secret Ballots

The secrecy of the ballots guarantees the core principle of democracy. In particular, a secret ballot assu... without the intervention of other political actors into their choice (Mares 2015). If this principle is violated and voters’ choices are visible, the act of buying votes becomes less costly by merely offering benefits and favors to the voters and then monitoring their actual behavior at the polling station. Under the secret ballot, however, clientelist parties need to elaborate strategies to circumvent the commitment problem that one of the actors involved, either the parties or the voters, do not keep promises after negotiating benefits for votes.

In overseas voting, the assumption of the secret ballot is dubious, which might induce political parties to engage in vote-buying more blatantly. This doubt stems from the use of postal voting, which is typically used for those who are not in the country of residence or do not live in the country at the time of elections. Voters can receive “voting kits,” fill in their preference and mail their ballots to electoral administrative bodies (Massicotte, Blais, and Yoshinaka 2004, 135). The electoral authorities are faced with the dual task of protecting the secret ballot for postal voting and preventing fraud in the procedure (Massicotte, Blais, and Yoshinaka 2004, 133).  

The secret ballot is also undermined by the lack of official oversight and sanctions over electorate networks (Hill 2016). For instance, British elections introduced the “postal voting on demand” in 2001, in which voters can request a postal ballot without specifying the reason for the application (Hill 2016, 18). This new system undermines the secret ballot. As Eleanor Hill argued, this voting system makes immigrants from Bangladesh and Pakistan vulnerable to vote-buying through a hierarchical kinship network, which is called biraderi and serves as a political machine (Hill 2016). Through this network, elders exercise “undue influence” on young voters’ choice by easily monitoring the process of postal voting (Hill 2016, 19–21).
an inappropriate procedure for overseas voting. For national elections, polling workers and election observers check whether the voting follows a lawful procedure. Recent studies showed that the presence of observers suppressed fraudulent and corrupt behavior during the electoral process (Buzin, Brondum, and Robertson 2016; Ichino and Schündeln 2012). It is highly unlikely, however, that these mechanisms are applied in overseas ballots. In other words, misconducts in overseas voting are beyond the jurisdiction of the home country, both technically and legally.

**The Immigrants’ Socioeconomic Status**

As discussed above, vote-buying means the individualistic transaction between particularistic benefits and votes. Low-income voters become a target of vote-buying because buying off impoverished voters is less costly due to the diminishing marginal utility of income; if the income level of the voters is low, they attach a higher value to such inexpensive benefits compared to voters with higher incomes (Dixit and Londregan 1996; Stokes 2005). The first generation of immigrants tends to occupy lower strata in the host society, although variations are depending on generations and countries of origin (Farley and Alba 2002). The disadvantaged societal positions make newcomers a target of vote-buying by politicians and parties of the country of origin.

**Monitoring Through Cross-Border Networks**

Social networks not only encourage cooperation and the transmission of information among the members of the network but also facilitate clientelist exchanges between political support and particularistic benefits (Cruz 2019). When parties’ machines penetrate these voters’ social networks, their ability to know voters’ preferences and closely monitor voters’ commitment is enhanced (Cruz 2019; Stokes 2005, 315; Szwarcberg 2015). The increasing migration flows help to extend these social networks across borders, generating favorable conditions for vote-buying.

According to Maritsa V. Poros, the recent migration is characterized by “the two-way
flows,” which means that migrants, goods, and ideas travel between their home and destination communities in a bidirectional way (Poros 2008, 45). This migration flow extends and consolidates the cross-border networks. The network building is further enhanced by the governments of the countries of origin and migrant organizations, such as HTAs. Those governments elaborate policies supporting the lives of their fellow citizens outside the country (Rabadán, Rivera-Salgado, and Rodríguez 2011, 49), which may encourage further migration flows. On the other hand, HTAs collect the interests of the migrants and represent them in decision-making processes in the governments of the home countries. Through these mediating roles, HTAs facilitate the building of migrant networks both among immigrants in the destination countries and between those migrants and the communities of origin.

The question is how these cross-border networks and HTAs implement vote-buying. Previous studies argued that these networks mediated by HTAs help transmit democratic values from the destination countries to the citizens in the home countries, encouraging civic participation, which is crucial for the political stability of both countries. HTAs are defined as “voluntary groups based on a shared sense of identity and belonging that arises from strong social networks formed by migrants from the same hometown or region of origin” (Rabadán, Rivera-Salgado, and Rodríguez 2011, 42). Scholarly works on HTAs abound in the literature on the immigration in the US (Fox and Bada 2011; Rivera-Salgado 2008). Similar to the “two-way flow,” the “binational” nature of migrant communities is highlighted by Fox and Bada (2011).

The policies by national and subnational governments of immigrant-sending countries includes “provision of information and legal advice, the management of guest workers’ programs and matching-grant programs linked to local development in the country of origin, the preservation of cultural aspects in their places of destination, and the administration of expatriate political participation” (Rabadán, Rivera-Salgado, and Rodríguez 2011, 49–50).
particularly in local politics (Córdova and Hiskey 2015: Pérez-Armendáriz and Crow 2015). Similarly, though, the cross-border networks might facilitate the transmission of non-democratic practices, such as vote-buying, from home to host countries. Given that the rights of the overseas voters have been expanded recently, the political parties of the home countries may have a greater incentive to use the cross-border networks to influence the political behavior of the expatriates and their families in the home countries (Paarlberg 2017a). The practice of vote-buying is likely to spread to destination countries if it is widely used in home countries. Thus, in the act of buying votes across borders, we expect that HTAs may serve as brokers, mediating between the political interests of the home countries and the immigrants.

Furthermore, HTAs provide social assistance to migrants with a lower socioeconomic status; this is an additional reason to predict that HTAs may induce clientelist exchanges. For instance, in the 1990s, migrants from Mexico and Central America organized an increasing number of HTAs in the US. In addition to organizing various social events, the HTAs started to provide social assistance, helping those who were not protected by official safety nets with the job search (Rabadán, Rivera-Salgado, and Rodríguez 2011, 47). Thus, being deeply involved in the migrant networks and knowing their needs, HTAs might have opportunities to contact them to mobilize their votes and monitor their electoral behavior in overseas ballots. This might be an incentive for the political parties of the home countries to access HTAs and exploit this opportunity.

In short, a lower socioeconomic status, the un-secret ballots, monitoring through cross-border networks, and the intermediary role of HTAs are expected to promote the practice of vote-buying for the immigrants in the US. The next section discusses the case of Mexican immigrants in the US and, based on this case, draws hypotheses to be empirically tested.

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5 The normative question why vote-buying is not democratic is extensively discussed in Stokes (2007).
The Case: Overseas Voting and Mexican Immigrants in the US

In 2015, approximately ten percent of Mexico’s population lived in the US as immigrants.6 This suggests that the votes of Mexican immigrants in the US are not negligible and may have a significant effect on the electoral results. The federal elections conducted on July 1 in 2018 were the first after the reform. As discussed below, the number and profiles of the Mexican immigrants, the cross-border networks connecting the migrants with the community of origin through the HTAs, and the extended rights of overseas voting might have provided fertile ground for vote-buying to proliferate in this pivotal election.

Mexican Immigrants in the US

Using the official statistics of the US Census Bureau, Zong and Batalova (2018) characterized Mexican immigrants as follows: 86 percent of them belong to economically active ages (18-64 years old), the immigrant populations are concentrated primarily in three states (37 percent in California, 22 percent in Texas, and 6 percent in Illinois), 55 percent of them did not complete the high school degree, 67 percent report that their English proficiency is limited, 47 percent work in the industries of manual labor,7 their average income is lower than the whole foreign-born and the

6 According to the Current Population Survey conducted by the US Census Bureau, the estimated number of Mexican immigrants in the US was 12,211,129 in 2015. The estimated population in Mexico for the year 2015 was 119,938,473 based on the national census conducted by the National Institute of Statistics and Geography (Instituto Nacional de Estadística, Geografía, INEGI) of Mexico.

7 More specifically, this job category includes the industries of natural resources, construction, maintenance, occupations, production, transportation, and material moving (Zong and Batalova 2018).
US-born populations, about 21 percent of the immigrants’ households were poor (Zong and Batalova 2018). These statistics indicate that the living conditions of Mexican immigrants in the US are not favorable and stable, making them an easy target of individualistic transactions between tangible benefits and votes. Specifically, a large number of those immigrants are engaged in manual labor, which is generally associated with lower income and male workers, who are relatively young and work full-time. This leads us to expect that male, young, and full-time workers are subject to vote-buying.

The Cross-Border Networks and HTAs

Mexican immigrants in the US are part of extended communities’ networks and preserve family ties through remittances; the HTAs play an essential role in building and consolidating these cross-border networks (Rivera-Salgado 2006). Since the 1980s, the number of HTAs in the US has been increasing, especially in Los Angeles and Chicago. The members have expanded their activities aiming at improving the living standards of both the immigrants in the US and the communities of origin in Mexico (Rivera-Salgado 2006, 5). Also, their activities gradually extended from supporting regional development projects in the communities of origin to utilizing remittances (Ochoa O'Leary 2013, 330).

While the HTAs took the initiative at building networks of Mexican immigrants both

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8 The figures for the geographic distribution draw on pooled data of the American Community Surveys of the US Census Bureau (2010 to 2016). Other figures come from the same data for the year 2017.

9 According to the occupation statistics, in 2010, 52.7 percent of 4,486,400 Mexican males and 19.1 percent of 2,311,600 females worked in the industries of manual labor (Guitierrez, Batalova, and Terrazas 2012).
across the US and the US-Mexico borders, Mexico’s government also joined the efforts to strengthen the ties with expatriates in the US. During the administration of Vicente Fox (2000-2006) of PAN, some noteworthy public policies have been undertaken. For instance, President Fox introduced the $3 \times 1$ program in 2002. This is a matching grant program, “for every dollar of immigrant remittance for community infrastructure projects, an additional three dollars is matched by combining the contributions for the projects provided from the three levels of the government: the state, federal, and municipal” (Ochoa O’Leary 2014: 330-331). In 2003, the Institute of Mexicans Abroad (Instituto de los Mexicanos en el Exterior, IME) was created to facilitate the immigrants’ network building in the US.

In addition to the HTAs and Mexican government, local governments and municipalities with a broad immigrant population were actively involved in building the cross-border networks. There is evidence that these cross-border networks were exploited to enhance the partisan interests of Mexico’s local governments. After the creation of the $3 \times 1$ program, the municipal authorities and residents governed by PAN became more involved in the creations of HTAs and the selection of specific projects within the program (Duquette-Rury and Bada 2013, 68, 78: Simpser et al. 2016). Furthermore, evidence shows that the $3 \times 1$ program was manipulated to reward PAN municipalities with high-intensity migration (Meseguer and Aparicio 2012), and the timing of expenditure followed the municipal electoral cycles (Simpser et al. 2016). Besides the $3 \times 1$

10 The impact of the program does not necessarily meet the stated objective. For instance, focusing on the case of Sinaloa, Fernando E. Villegas Rivera points out that factors such as the lack of municipal policies, migrants’ interest, and leadership limit the program’s objective to achieve local economic development (Villegas Rivera 2014).

11 Covadonga Meseguer and Francisco Javier Aparicio claimed that the political bias in the $3 \times 1$ program came from local government officials, not from the HTAs (Meseguer and Aparicio 2012).
program, Abel Muños Pedraza demonstrated that for the local election of Michoacán, migrants and their families were offered some benefits in Mexico, and that the migrant organizations of Michoacán were involved in this process of mobilizing votes, in addition to giving them information about the elections (Muños Pedraza 2016, 172–179). These pieces of evidence suggest that the cross-border network may be used to spread the practice of vote-buying to the US, in which the HTAs may serve as intermediaries, facilitating Mexico’s politicians or parties in offering benefits to their expatriates in the US and monitoring the outcome of vote-buying.

**Overseas Voting in Mexico**

The extended voting rights gained by the migrants after the 2014 electoral reform gave Mexican politicians and parties an incentive to seek votes from overseas citizens. It was a long-cherished desire of Mexican immigrants in the US to have the right to vote (Ochoa O’Leary 2014: 331). As discussed above, the first PAN government (2000-2006) deliberately strengthened the institutional ties between Mexico and the migrants living abroad with the creation of the $3 \times 1$ program in 2002 and the IME in 2003. In 2005, the law introducing overseas voting was approved in Mexico.

Although the desire was attained, the turnout was low in the subsequent elections in 2006 and 2012, due to several technical and institutional barriers (*Instituto Federal Electoral* - INE 13)

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12 Based on his original survey of Mexican migrants, who originated from Michoacán, Mexico City, and Chiapas, and were settled in Los Angeles, Muños Pedraza showed that not only personal benefits but also the promise of improving migrant situations were offered to the respondents (Muños Pedraza 2016,178).

13 In the 2006 presidential election, less than 1 percent of eligible Mexican voters participated in the election overseas, whereas in Mexico 59 percent of eligible voters voted (Gutierrez, Batalova, and Terrazas 2012).
2016b). More specifically, voters’ identification cards were issued by the electoral authorities in Mexico. This means that Mexican expatriates who left the country without the card were supposed to go back to Mexico to obtain it. Furthermore, registration and voting procedures required financial costs and time. Before the elections were conducted, the expatriates should have registered for the Registry of Electoral Residents Abroad (*Lista Nominal de Elecciones Residentes en el Extranjero*, LNERE). To apply for the registration and ballot papers, they needed to send a request to the Federal Electoral Institute (IFE) by registered mail. In addition, political parties and candidates were banned from running an electoral campaign outside of Mexico.\(^{14}\) Thus, Mexican expatriates had a limited chance of being informed about the elections.

To increase the electoral participation of expatriates, the government and civil society in Mexico and migrant leaders and organizations in the US made a joint effort to facilitate overseas voting. After intense legislative debates, the legislatures, supported by all major political parties, approved the reform proposal, and on May 23, 2014, the General Law of Electoral Institutions and Procedures (*Ley General de Instituciones y Procedimientos Electorales*, LEGIPE) was promulgated.

With the new law, Mexican citizens living abroad can mail the registration application to Mexico, apply via the internet, or at the embassies and consulates in the country of residence. The voters’ ID cards can be issued at the embassies and consulates in the country of residence, and the votes can be either mailed to Mexico or submitted to Mexican embassies and consulates in the

\(^{14}\) Although it is prohibited by the electoral law, candidates from Mexico launch electoral campaigns either unofficially or before officially declaring to run for elections (Paarlberg 2017b, ft.1).
country of residence (INE 2016a, 2016b). In the 2018 elections, voters’ registration tripled, and
the participation increased too. More precisely, the registered voters were 40,000 in 2006, 59,000
in 2012, and 180,000 in 2008, whereas the participants were 32,000 in 2006, 40,000 in 2012, and
98,000 in 2018.16

Thus far, we have discussed the empirical implications derived from theories about vote-
buying, based on the Mexican case. The hypotheses to be tested are summarized as follows.

**Hypothesis 1**: Mexican immigrants in the US are subject to vote-buying.

**Hypothesis 2**: Mexican immigrants surrounded by a dense network of HTAs are subject to vote-
buying.

**Hypothesis 3**: Those who obtain electoral information from HTAs are likely to experience vote-
buying.

15 The use of internet voting was considered but then rejected by INE for the 2018 elections
because of budgetary constraints and a lack of time to prepare for the introduction of the new voting
system (Expansión, March 15, 2017). It is relatively safe to say that the secret ballot was not
assured in postal voting. However, qualitative analysis should verify how exactly it could have been
undermined.

16 These are official figures drawn from the National Electoral Institute (Instituto Nacional
Electoral, INE). Calculating the precise turnout of overseas voting is technically difficult because
the exact number of documented and undocumented expatriates is unknown. As a rough estimate,
the turnout of overseas voting in the 2018 presidential elections was about 0.8 percent, which was
calculated by dividing this figure by the number of Mexicans living abroad that were over 18 years
old. This data was compiled by IME. Available at https://www.gob.mx/ime (accessed on May 9,
2019).
Hypothesis 4: Those who are contacted by party activists are likely to experience vote-buying.

Hypothesis 5: PAN supporters are targeted for vote-buying.

Hypothesis 6: Male, young, low-income, and full-time workers are susceptible to vote-buying.

Methods and Results

To assess whether vote-buying occurred during the 2018 federal elections, we conducted a list experiment using an online survey with a sample of Mexican immigrants in the US. The challenge is how to accurately estimate respondents’ experiences for a sensitive question such as vote-buying. When asked whether they were offered gifts or favors in exchange for votes, respondents might underreport what they truly experienced. A social desirability bias might cause the problem of measurement error. A list experiment is a method to reduce a social desirability bias from survey responses; thus, it enabled us to estimate accurately the extent to which vote-buying occurred (Imai 2011; Gonzalez-Ocantos et al. 2012). In the following analysis, after describing the data, we present the design and results of the list experiment to estimate what proportion of respondents experienced vote-buying. Then, we implement a multivariate analysis to identify who experienced vote-buying.

Data from the Online Survey

We conducted an online survey between August 17 and September 5 in 2018, about a month and a half after the federal elections conducted in Mexico on July 1. The sample comprised 1,114 Mexican immigrants, drawn from a panel of people who registered with Survey Sampling International (SSI).¹⁷

¹⁷ The company was renamed Dynata as of January 2019. We left out the following respondents: those who (1) participated in the survey from outside the US or Cheney, Kansas, and (2) gave no answer to questions (Don’t know/ Prefer not to answer). According to the 2010 census, the
The respondents were first asked two screening questions about their eligibility for voting; that is, whether they held Mexican citizenship and were over 18 years old. Then, they could proceed to answer the survey questions, selecting English or Spanish as language.

In addition to the questions on vote-buying experiences for the list experiment (Hypothesis 1), we asked questions about demographic and socioeconomic attributes (age, education, gender, income, job status), partisanship, political attitude, information environment, and vote choice in the past presidential elections. The responses were used to run a multivariate analysis to examine what kinds of respondents experienced vote-buying (Hypotheses 3, 4, 5, and 6). More specifically, we asked respondents about how they received electoral information including HTAs (Hypothesis 3), whether they were contacted by party activists (Hypothesis 4), which parties they felt close to (Hypothesis 5), and a battery of questions on their socioeconomic status (Hypothesis 6).

We also used geographic information on the locations of HTAs to test Hypothesis 2. We hypothesized that the density of HTAs serves to examine the effect of networks on vote-buying because the closer HTAs are to immigrants’ living locations, the more easily they can monitor the voters and assure their compliance with the transaction. It would be ideal for measuring the distance population of Cheney was 2,094, among which only 41 people were Mexican. According to recorded GPS information, however, our original sample disproportionately included 19 Mexican respondents living in Cheney. Due to a concern about overrepresentation, those respondents in Cheney were excluded from our analysis.

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18 See the variable descriptions in the Supporting Information 1 (1-4).

19 The idea that the geographic proximity and the likelihood of vote-buying are associated, as assumed in Hypothesis 6, is derived from Cantú (2019). To estimate the effect of distributed gift cards on the probability of vote-buying, Francisco Cantú used the distance between supermarkets and voters’ living locations. He assumed that the geographic proximity facilitated voters’ shopping
between the living location of each respondent and HTAs representing specific communities of origin to test the effect of cross-border networks on vote-buying directly. Although a list of representatives’ names, addresses, contact information, states, and municipalities in Mexico represented by HTAs (N=2,241) is available on the official website of the IME, the information on the HTAs’ connection to regions in Mexico is not complete. Thus, we used the number of HTAs close to the immigrants’ living locations—the density of HTAs—to test the effect of cross-border networks on vote-buying. We measured the density as follows. First, we extracted information on the latitude and altitude of both the respondents’ living locations (based on the internet survey) and HTAs (based on their address) and computed the distance between them. Afterward, we calculated the number of HTAs within 10 miles away from the respondents’ locations for which the information was available (N=2,107).

at the store using the distributed gift cards, thus affecting “the net valuation of consuming the card” regardless of voters’ party identification and political behavior (Cantú 2019, 791).

20 The data is available at https://asociaciones.sre.gob.mx/ (accessed on September 15, 2019).

21 The assumption underlies this measurement that HTAs are connected to the immigrants in the US regardless of their places of origin in Mexico.

22 The information about the latitude and longitude of the respondents’ living locations is an approximate measure of where they live, but does not pinpoint the exact address. We confirmed that there was a significant overlap between the location of respondents and HTAs. The geographic distributions of survey respondents and HTAs are visualized in the maps in the Supporting Information 2 and 3 (5).
The List Experiment: Proportion of Respondents Who Experienced Vote-Buying

Design

We followed the procedure of the list experiment conducted by Gonzalez-Ocantos et al. (2012). First, the respondents were randomly assigned to three groups: the control group, treatment group, and direct-question group. For the list experiment, the control and treatment groups were asked how many activities they performed during the election campaign. The respondents did not have to specify which activities. This indirect assessment provided respondents with “a high degree of anonymity,” which induced them to honestly report their experience of vote-buying, thus reducing the social desirability bias in the survey responses (Gonzalez-Ocantos 2012, 205). More precisely, the respondents in the control group had to report how many activities they performed out of a list of four items.23 They were shown the following statements:

Now we are going to show you four activities that some people may experience during the electoral campaign. After you read all four, just answer HOW MANY activities you experienced during the last electoral campaign. (We do NOT want to know which ones, just how many.)

- I saw public debates between candidates for presidential elections on TV.
- I saw official websites/blogs of politicians and candidates.
- My family/friends told me about the election.
- Candidates or political activists threatened me to vote for a candidate.

23 The question items for our list experiment are created based on Gonzalez-Ocantos et al. (2012) and modified in a way that better applies to the context of Mexican immigrants in the US.
The respondents in the treatment group were asked the same question, but the list of items also included the following sensitive vote-buying item:

- Campaign activists gave any monetary benefits or did a favor to me or my family in Mexico.\(^{24}\)

The respondents in the direct-question group were provided the same list of five items as the treatment group but were asked to indicate which activities, rather than how many, they experienced during the election campaign, as described below.

Now we are going to show you five activities that some people may experience during the electoral campaign. After you read all five, please answer which activities you experienced during the last electoral campaign. Please choose AS MANY ITEMS AS necessary.

\(^{24}\) Although this item may be interpreted as concerning vote-buying directed to immigrants’ relatives in Mexico, there is a convincing reason to consider it an appropriate way of assessing immigrants’ own experience of vote-buying involving their relatives in Mexico “in” overseas ballot. Evidence suggests that political parties from El Salvador, Dominican Republic, and Mexico tailor electoral campaigns to the diaspora communities in the US aiming at indirectly influencing the political behavior of their relatives in home countries (Paarlberg 2017a). According to Michael Ahn Paarlberg, this is the reason why political parties travel to the diaspora communities abroad, even if their electoral participation is very low in overseas ballot and the cost of campaigning is disproportionately high (Paarlberg 2017a). More directly, the survey of Abel Muños Pedraza found that migrants from the state of Michoacán were offered support (apoyo) for their families in their hometown in Mexico (Muños Pedraza 2016).
Results

The difference in the means of the number of chosen items is calculated to estimate the proportion of respondents who experienced vote-buying. Before that, we examined whether two conditions were met; that is, the absence of a design effect and balance between the control, treatment, and direct-question groups. For the former, we conducted a statistical test with the null hypothesis that there was no design effect in our list experiment. The validity of a list experiment depends on the assumption that the responses to a treatment item and control items are independent of each other (Blair and Imai 2012). The \( p \)-value from the statistical test proposed in Blair and Imai (2012) is about 1.0 in our list experiment, which leads to the non-rejection of the null hypothesis. Thus, we confirm that the list experiment is free from a design effect. As for the latter, we compare the descriptive statistics of the direct-question group, the control group, and the treatment group (Table 1). All the mean values of covariates are numerically similar among these groups with \( p > 0.05 \), which indicates that the respondents were randomly assigned to each group. Hence, the average treatment effect measured by the difference in means estimators would be unbiased.
### Table 1. Descriptive Statistics

<table>
<thead>
<tr>
<th>Covariates</th>
<th>Direct</th>
<th>Control</th>
<th>Treatment</th>
<th>Mean</th>
<th>SD</th>
<th>Mean</th>
<th>SD</th>
<th>Mean</th>
<th>SD</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Counts</td>
<td>1.654</td>
<td>0.966</td>
<td>1.606</td>
<td>1.930</td>
<td>1.285</td>
<td>&lt; 0.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Items 1</td>
<td>0.412</td>
<td>0.439</td>
<td>0.343</td>
<td>0.482</td>
<td>0.494</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Items 2</td>
<td>0.343</td>
<td>0.475</td>
<td>0.482</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Items 3</td>
<td>0.119</td>
<td>0.325</td>
<td>0.198</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensitive Item</td>
<td>0.198</td>
<td>0.399</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>0.623</td>
<td>0.485</td>
<td>0.606</td>
<td>0.605</td>
<td>0.490</td>
<td>0.878</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age/10 (Centered)</td>
<td>0.147</td>
<td>0.978</td>
<td>0.254</td>
<td>0.180</td>
<td>1.060</td>
<td>0.393</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dual Citizenship</td>
<td>0.242</td>
<td>0.429</td>
<td>0.300</td>
<td>0.280</td>
<td>0.450</td>
<td>0.259</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education (Centered)</td>
<td>0.406</td>
<td>1.367</td>
<td>0.280</td>
<td>0.271</td>
<td>1.432</td>
<td>0.398</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Marriage</td>
<td>0.547</td>
<td>0.499</td>
<td>0.586</td>
<td>0.583</td>
<td>0.494</td>
<td>0.548</td>
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<tr>
<td>Income (Centered)</td>
<td>0.189</td>
<td>1.855</td>
<td>0.104</td>
<td>0.220</td>
<td>1.859</td>
<td>0.727</td>
<td></td>
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<tr>
<td>Full-time Employed</td>
<td>0.494</td>
<td>0.501</td>
<td>0.410</td>
<td>0.446</td>
<td>0.498</td>
<td>0.110</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>How Long Lives (Centered)</td>
<td>0.333</td>
<td>1.470</td>
<td>0.117</td>
<td>0.188</td>
<td>1.523</td>
<td>0.197</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informed from Politicians</td>
<td>0.274</td>
<td>0.447</td>
<td>0.235</td>
<td>0.233</td>
<td>0.423</td>
<td>0.403</td>
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</tr>
<tr>
<td>Informed From HTA</td>
<td>0.113</td>
<td>0.317</td>
<td>0.111</td>
<td>0.143</td>
<td>0.351</td>
<td>0.385</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informed Enough</td>
<td>0.815</td>
<td>0.389</td>
<td>0.756</td>
<td>0.742</td>
<td>0.438</td>
<td>0.071</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact from Activists</td>
<td>0.425</td>
<td>0.495</td>
<td>0.407</td>
<td>0.405</td>
<td>0.492</td>
<td>0.857</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support: PRI</td>
<td>0.053</td>
<td>0.225</td>
<td>0.042</td>
<td>0.045</td>
<td>0.207</td>
<td>0.785</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support: PAN</td>
<td>0.088</td>
<td>0.284</td>
<td>0.059</td>
<td>0.089</td>
<td>0.285</td>
<td>0.279</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support: PRD</td>
<td>0.129</td>
<td>0.336</td>
<td>0.140</td>
<td>0.127</td>
<td>0.334</td>
<td>0.879</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support: MORENA</td>
<td>0.075</td>
<td>0.265</td>
<td>0.094</td>
<td>0.064</td>
<td>0.245</td>
<td>0.353</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># of HTAs Within 10mi.</td>
<td>24.632</td>
<td>45.960</td>
<td>21.886</td>
<td>40.494</td>
<td>48.115</td>
<td>0.270</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>N</td>
<td>318</td>
<td>307</td>
<td>314</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: p-values are calculated using Oneway ANOVA.
Figure 1 shows the difference in means estimators between the list experiment and the direct-question group. The difference in means estimators reflects whether the respondents in the treatment group responded to the sensitive item honestly. The mean of the number of chosen items in the treatment group is 1.930, which is 0.324 points higher than the control group, with $p < 0.001$. This indicates that 32.4% of respondents in our sample responded to the sensitive item, or about one-third of respondents or their family members received monetary benefits or favors, which supports Hypothesis 1 that Mexican immigrants in the US are subject to vote-buying.

![Figure 1. The Mean of Item Counts between Groups. Values above the lines are Tukey HSD $p$-values.](image)

Moreover, the mean of the number of chosen items in the treatment group is 0.276 points higher than in the direct-question group, with $p < 0.006$, while there is no significant difference in the means between the control and direct-question groups ($p = 0.852$). This suggests that a social desirability bias affects whether the respondents report any vote-buying experience. Specifically,
the estimated proportion of respondents who experienced vote-buying (32.4%) is much higher than the proportion of those who reported vote-buying in the direct-question group (19.8%, see Table 2), which suggests that the list experiment provides a more accurate estimate of the proportion of Mexican immigrants who experienced vote-buying.

Table 2. Comparing the Estimated Proportion of Vote-Buying

<table>
<thead>
<tr>
<th></th>
<th>List Experiment</th>
<th>Direct Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control (N=307)</td>
<td>1.606</td>
<td></td>
</tr>
<tr>
<td>Treatment (N=314)</td>
<td>1.930</td>
<td></td>
</tr>
<tr>
<td>Estimated % of vote-buying</td>
<td>32.407 (9.540)</td>
<td>19.811 (2.239)</td>
</tr>
<tr>
<td>N</td>
<td>621</td>
<td>318</td>
</tr>
</tbody>
</table>

Note: Standard errors are in parentheses. The standard errors in the list experiment column are from two independent sample t-tests, and those in the direct items column are from one-sample t-test.

Multivariate Analysis: Features of the Immigrants Who Experienced Vote-Buying

Model

Table 3 presents the coefficients and standard errors from the regression models proposed by Imai (2011). We conducted multivariate analyses to examine what specific respondents' attributes influenced the probability of responding positively to the question concerning vote-buying. The response variables of the two models were whether the respondents checked the sensitive item and item counts, respectively. We estimated the coefficients using logistic regression analysis for the direct items group and maximum likelihood algorithm for the treatment group. Although it is

25 The percentage 19.8% seems large. However, this proportion includes not only the respondents but also their families who received monetary benefits or favors. Gonzalez-Ocantos et al. (2012) similarly reported that the proportion of respondents’ neighborhood that had received gifts or favors was approximately 17.84%.
difficult to compare the estimates between these two models directly, the tendency is mostly consistent.

Results

The results for the treatment group revealed that statistically significant covariates included gender ("Female"), employment status ("Fully employed"), being contacted from party activists ("Contact from Activists"), supporting PRI and PAN, and the number of HTAs within 10 miles from the respondents’ locations. Specifically, respondents who were females, fully employed, contacted from party activists, supporters of PRI or PAN, or residing in a neighborhood with a high density of HTAs showed a higher probability of experiencing vote-buying. Similarly, the results for the direct-question group showed that statistically significant covariates included gender ("Female"), and having been contacted by party activists ("Contact from Activists"). The positive signs of the coefficients imply that female respondents who were contacted by party activists tended to experience vote-buying.
<table>
<thead>
<tr>
<th>Covariates</th>
<th>Direct Items</th>
<th></th>
<th>Sensitive Item</th>
<th></th>
<th>Control Items</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Est.</td>
<td>SE</td>
<td>Est.</td>
<td>SE</td>
<td>Est.</td>
<td>SE</td>
</tr>
<tr>
<td>Intercept</td>
<td>-3.443</td>
<td>0.611</td>
<td>-11.493</td>
<td>3.918</td>
<td>-1.101</td>
<td>0.143</td>
</tr>
<tr>
<td>Demography</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>0.776</td>
<td>0.337</td>
<td>5.256</td>
<td>1.782</td>
<td>0.150</td>
<td>0.095</td>
</tr>
<tr>
<td>Age</td>
<td>-0.090</td>
<td>0.189</td>
<td>-1.295</td>
<td>0.840</td>
<td>-0.139</td>
<td>0.051</td>
</tr>
<tr>
<td>Dual Citizenship</td>
<td>0.110</td>
<td>0.400</td>
<td>0.927</td>
<td>1.284</td>
<td>-0.149</td>
<td>0.108</td>
</tr>
<tr>
<td>Education</td>
<td>0.127</td>
<td>0.132</td>
<td>-0.692</td>
<td>0.551</td>
<td>0.072</td>
<td>0.040</td>
</tr>
<tr>
<td>Marriage</td>
<td>0.391</td>
<td>0.336</td>
<td>0.455</td>
<td>1.084</td>
<td>-0.001</td>
<td>0.100</td>
</tr>
<tr>
<td>Income</td>
<td>-0.142</td>
<td>0.102</td>
<td>0.318</td>
<td>0.316</td>
<td>0.064</td>
<td>0.031</td>
</tr>
<tr>
<td>Full-time Employed</td>
<td>0.409</td>
<td>0.354</td>
<td>6.290</td>
<td>2.070</td>
<td>0.005</td>
<td>0.101</td>
</tr>
<tr>
<td>How Long Lives</td>
<td>-0.076</td>
<td>0.119</td>
<td>-0.601</td>
<td>0.367</td>
<td>0.023</td>
<td>0.032</td>
</tr>
<tr>
<td>Information Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informed from Politicians</td>
<td>0.186</td>
<td>0.338</td>
<td>0.802</td>
<td>1.156</td>
<td>0.167</td>
<td>0.111</td>
</tr>
<tr>
<td>Informed From HTA</td>
<td>0.353</td>
<td>0.459</td>
<td>2.252</td>
<td>1.704</td>
<td>-0.201</td>
<td>0.152</td>
</tr>
<tr>
<td>Informed Enough</td>
<td>0.233</td>
<td>0.453</td>
<td>-0.800</td>
<td>1.095</td>
<td>0.680</td>
<td>0.117</td>
</tr>
<tr>
<td>Contact from Activists</td>
<td>1.431</td>
<td>0.354</td>
<td>4.424</td>
<td>1.639</td>
<td>0.167</td>
<td>0.099</td>
</tr>
<tr>
<td>Partisanship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support: PRI</td>
<td>-0.390</td>
<td>0.710</td>
<td>-5.347</td>
<td>2.678</td>
<td>0.418</td>
<td>0.209</td>
</tr>
<tr>
<td>Support: PAN</td>
<td>-0.054</td>
<td>0.552</td>
<td>7.047</td>
<td>2.627</td>
<td>-0.483</td>
<td>0.187</td>
</tr>
<tr>
<td>Support: PRD</td>
<td>0.587</td>
<td>0.437</td>
<td>-3.722</td>
<td>2.015</td>
<td>0.034</td>
<td>0.132</td>
</tr>
<tr>
<td>Support: MORENA</td>
<td>-1.677</td>
<td>1.071</td>
<td>3.154</td>
<td>1.791</td>
<td>0.393</td>
<td>0.164</td>
</tr>
<tr>
<td>Region</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># of HTAs within 10 mi.</td>
<td>0.001</td>
<td>0.003</td>
<td>0.025</td>
<td>0.011</td>
<td>0.001</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Note: Highlighted cells represent statistical significance with \( \alpha = 0.05 \).
However, the findings from the treatment group do not necessarily involve that these covariates influence vote-buying significantly because there is no guarantee that they explain the difference in the means of the chosen items between the treatment and control groups. For example, if the coefficient of “Contact from Activists” is significant and positive not only in the treatment group but also in the control group, the effect of this covariate might be overestimated, implying that “Contact from Activists” factor may not have a statistically significant effect on vote-buying. Conversely, if the coefficient of “Age” is not significant and negative in the treatment group and is significant and negative in the control group, the treatment effect of “Age” might be underestimated.

In order to address this issue, we calculated the effect size of all covariates (Figure 2). Each panel presents the estimated proportions of respondents by the individual characteristics, who have experienced the scenario described in the sensitive item for the direct-question and treatment groups, and the difference between these groups. More specifically, the left and middle points in each panel are the estimated proportions of respondents who experienced vote-buying when the respondents’ characteristics take the minimum and maximum values respectively. For example, the left and middle points on the left-top panel are the estimated proportions of male (Female = 0) and female (Female = 1) respondents. The right points (shaded parts) are the difference between the two estimated proportions, which means the effect size of the respondents’ characteristics. The circle and triangle dots represent the estimated proportions from the direct items (first and second columns in Table 3) and list experiments (third to sixth columns in Table 3), respectively. The solid lines are 95% confidence intervals. The results are averaged over the sample distribution of covariates. If the solid lines do not cross the value of zero, the effect is statistically significant.

Following these explanations, the covariates that have a statistically significant effect include gender; age; employment status; being contacted by party activists; supporting PRI, PAN, PRD or MORENA; and the number of HTAs within 10 miles from the respondents’ living locations.
Education level and the length of residence in the US also have a relatively large effect but are not statistically significant.

Figure 2. The Effect Size of All Covariates
In light of our hypotheses, Figure 2 (triangle dots) shows the following main findings. First, the number of HTAs within 10 miles from the respondents’ locations has a statistically significant effect. Its estimated effect size of 0.381 indicates that the respondents who live in an area with the highest concentration of HTAs (the maximum number is 221) within 10 miles of their location are 38.1% point more likely to experience vote-buying than those with the minimum value (0) of HTAs, which supports Hypothesis 2.

Second, information acquisition from HTAs may not be a critical predictor of vote-buying because the effect size of 0.159 is modest and not statistically significant. This does not provide strong support for Hypothesis 3.

Third, the effect of being contacted by party activists is statistically significant. The effect size of 0.295 means that the respondents who have been contacted from party activists are 29.5% point more likely to experience vote-buying than those who have not been contacted, which is consistent with Hypothesis 4.

Fourth, the predictor with the most significant effect size is being PAN’s supporters. The effect size of 0.50 suggests that PAN supporters are 50% points more likely to experience vote-buying than those who do not support any party, which provides evidence for Hypothesis 5. It should be mentioned that supporting MORENA also has a significant and positive effect on vote-buying, but the effect size (0.216) is much smaller than that for PAN.

Finally, the effects of being young and being fully employed are significantly positive, as expected. Contrary to our expectations, however, the female gender is significantly positively associated with the vote-buying experience. Furthermore, the effect size of low-income respondents is relatively small and statistically insignificant. Thus, we have mixed findings to support Hypotheses 6.

In contrast, the results concerning the direct-question group (circle dots) show that the effects of most covariates are statistically insignificant. Among the covariates of our interest, only
having been contacted by party activists is statistically significant. The sign of the effect is consistent with the result of the list experiment groups, but the effect size is smaller. This discrepancy between the two models implies that the direct-question format suffers measurement errors caused by a social desirability bias.

**Discussion and Conclusions**

The results of our empirical analysis show that cross-border networks induce vote-buying across borders. The most important finding from the list experiment is that approximately 32% of expatriate voters were exposed to vote-buying during the last Mexican presidential election (Hypothesis 1). This also allows us to confirm that a traditional observational survey includes 12% points of measurement error, implying that a list experiment is an appropriate method to deal with the social desirability bias and estimate the level of vote-buying more accurately.

We also confirmed that well-developed cross-border networks embedding immigrants, the communities of origin, and HTAs increased the chance of immigrants being targeted for vote-buying. More specifically, for the respondents who lived near a dense network of HTAs, the chances of experiencing vote-buying were approximately 38.1% points higher than those who did not (Hypothesis 2). Likewise, the factor that represented the strength of the link between the respondents and their communities—“Contact from Activists” —was associated with a possibility of vote-buying 29.5% points higher (Hypothesis 4). These findings jointly demonstrate that party activists attempted to monitor and target Mexican immigrants through HTAs, which served as broker-like intermediaries. Given this potential role of HTAs in facilitating the proliferation of vote-buying, it is puzzling that obtaining electoral information from HTAs did not have a significant effect on vote-buying (Hypothesis 3). We assumed that the association between information from HTAs and vote-buying is spurious, thus explaining this result. Instead, the proximity to HTAs explains both the amount of information obtained from HTAs and the chances
of being a target of vote-buying.

As for the vote sellers’ profile, our analysis shows that PAN supporters are subject to vote-buying to a greater extent (50.4% points) than non-PAN supporters (Hypotheses 5). This result also corroborates the effect of the cross-border network on vote-buying. As discussed in the previous section, PAN municipalities actively promoted the creation of HTAs in the US to strengthen the ties between their expatriates’ communities in US and home communities. Supporters of MORENA also experienced vote-buying but with a smaller effect (21.6%). Given that André Manuel López Obrador from MORENA obtained 64.86% of the votes cast by Mexicans living abroad, some supporters’ votes may have been traded for some favors or benefits, although the mechanism mediating between MORENA and vote-buying is unknown.26

Furthermore, the results show that females, young, and full-time workers are susceptible to vote-buying, which also merits special attention. Previous studies argued that due to the diminished marginal utility of income, low-income voters tend to be attracted to inexpensive benefits. According to the official statistics presented above, a significant part of Mexican immigrants in the US live in low-income households and engage in manual labor (Zong and Batalova 2018). Given that the number of male workers in this job category is much higher than females, those who experienced vote-buying were supposed to be males. However, our results suggest that females experienced vote-buying to a greater extent. This suggests the possibility that females more actively engage in the activities promoted by HTAs. This issue requires further investigation. Furthermore, income does not have a significant effect on the vote-buying experience. These pieces of evidence suggest that in vote-buying abroad, the diminishing marginal

26 According to local informants, MORENA is a movement-based party and it is highly unlikely that activists tried to mobilize electoral support through vote-buying. Exploring the mechanism of vote-buying involving MORENA, if any, is a future research topic.
utility of income does not apply, which is typically assumed in the literature of vote-buying.

The main contribution of this study lies in expanding the literature on vote-buying, as previous studies focused only on domestic electoral processes, ignoring the possibility that the practice of vote-buying also occurs abroad. By showing that vote-buying occurs in overseas ballot, this study has important implications for other new democracies, in which a significant portion of the population lives abroad, such as Italy, South Korea, and the Philippines.27

Despite these contributions, several caveats should be mentioned. First, the primary purpose of our study was to examine whether vote-buying occurred in overseas ballots. However, it did not attempt to explain how it happened. Nevertheless, the results of multivariate analysis are informative as they reveal the features of the voters who experienced vote-buying. Second, we did not ask in the survey whether the voters actually received the gift or favor that vote-buyers had promised. If the voters are unsure about having received the promised reward, vote-buying is unlikely to continue (Stokes 2005). Third, we did not assess the vote-buying performance, e.g., how many votes were actually acquired by each party through vote-buying. Fourth, our focus was limited to voters’ experience of vote-buying. The electoral strategy of the political parties and candidates (Paarlberg 2017b) for mobilizing the expatriates is only partially discussed.28

However, these shortcomings do not reduce the importance of this study as the first systematic attempt to test vote-buying in overseas ballots. Tackling these remaining questions will help uncover the understudied electoral connections between immigrants and their home countries, 27 Cesi Cruz highlighted the role of the voters’ social networks, demonstrating that voters who are embedded in large networks tend to be a target of vote-buying in the case of the Philippines (Cruz 2019).

28 The types of party organizations are expected to influence the electoral campaign and the effectiveness of vote mobilization.
which brings significant political consequences in the era of global migration.
References


<Supporting Information>

1. Variable Descriptions

The following variables are used for the list experiment and multivariate analysis in this paper. Data for these variables are drawn from the online survey conducted by the authors using the Qualtrics. The variable descriptions correspond to the survey questionnaires.

ID Respondent ID (Qualtrics)

Treat Experimental Group
   Direct Direct question group
   Control Control group
   Treat Treatment group

Y Item counts (outcome variable)

Y_D1 Item: I saw public debates between candidates for presidential elections on TV.
   0 No
   1 Yes

Y_D2 Item: I saw official websites/blogs of politicians and candidates.
   0 No
   1 Yes

Y_D3 Item: My family/friends told me about the election.
   0 No
   1 Yes

Y_D4 Item: Candidates or political activists threatened me to vote for a candidate.
   0 No
   1 Yes
Y_D5 Item: Campaign activists gave any monetary benefits or did a favor to me or my family in Mexico.

  0 No
  1 Yes

Female To which gender identity do you most identify?

  0 Male
  1 Female

Age What is your age?

  • Numeric value (mean centered and divided by 10)

Dual Do you have Mexican citizenship?

  0 No
  1 Yes

Educ What is the highest level of education you have completed?

  -3 Elementary school
  -2 Middle school
  -1 High school
  0 Vocational school
  1 Bachelor’s degree
  2 Master’s degree
  3 Doctorate

Married What is your marital status?

  0 Married, or in a domestic partnership
  1 Single / Widowed / Divorced or Separated
**Income** What was the total income in 2017 of all your family members living here? This figure should include income from all sources, including salaries, wages, pensions, Social Security, dividends, interest, and all other income. YOUR BEST GUESS IS FINE.

-3 Less than $10,000
-2 $10,000 to $19,999
-1 $20,000 to $34,999
0 $35,000 to $49,999
1 $50,000 to $74,999
2 $75,000 to $99,999
3 Over $100,000

**Full** What is your current employment status?

- 0 Employed part-time (up to 39 hours per week) / Unemployed / Student / Retired / Homemaker / Self-employed / Other
- 1 Employed full time (40 or more hours per week)

**Live** How long have you been living in the United States?

-3 Less than 1 year
-2 1 year to less than 5 years
-1 5 years to less than 10 years
0 10 years to less than 15 years
1 15 years to less than 20 years
2 20 years or more

**PRI** Which party do you feel closest to?: PRI

- 0 No
- 1 Yes
**PAN** Which party do you feel closest to?: PAN

0 No
1 Yes

**PRD** Which party do you feel closest to?: PRD

0 No
1 Yes

**MORENA** Which party do you feel closest to?: MORENA

0 No
1 Yes

**Info_Pol** How did you get information about the 2018 election in Mexico? Please choose AS MANY ITEMS AS necessary.: Politicians

0 No
1 Yes

**Info_HTA** How did you get information about the 2018 election in Mexico? Please choose AS MANY ITEMS AS necessary.: HTA

0 No
1 Yes

**Informed** Do you think you could get sufficient information about the candidates/parties?

0 No
1 Yes

**Contact** Did any politicians or political activists contact you before the elections?

0 No
1 Yes

**HTA 10min.** Number of HTAs within 10 miles from a respondent

- Numeric value
2. The Geographic Distribution of Survey Respondents

3. The Geographic Distribution of Home Town Associations (HTAs)