Globalization and Protectionism: AMLO's 2006 Presidential Run

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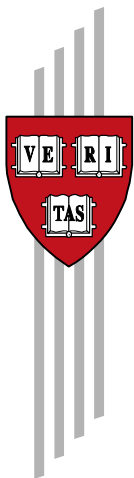
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Globalization and Protectionism: AMLO's 2006 presidential run[*]

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Abstract

We study the effects of local tariff drops for Mexican exports to the US on the local electoral performance of Andrés Manuel López Obrador (AMLO) in Mexico's 2006 presidential election. In an effort to appeal to his rural base, AMLO proposed to unilaterally retain tariff exemptions on imported corn and beans, which were scheduled to drop under NAFTA by the end of 2008. This elevated protectionism in the public agenda during the campaign. We find that local economic gains due to export tariff drops under NAFTA between 1994 and 2001 led to a drop in AMLO's local vote share gains in 2006. These effects are contingent to the 2006 election, as similar effects on local vote for the left are not found in previous or later elections. Results are robust to controls for local grain growing and Chinese competition. We predict that AMLO would have been elected in 2006 had protectionism not been a salient electoral issue. Our findings suggest export access gains due to globalization undermine local political preferences over national protectionist platforms.

Keywords: NAFTA, AMLO, Globalization, Protectionism.

JEL Classification: F13, F55, D72

I   Introduction

While the decision to liberalize bilateral or multilateral trading relationships is usually made at the national level, the degree to which trade restrictions bind economic outcomes is likely to vary geographically. Cities in which economic activity is concentrated in industries facing high tariffs or other barriers to exports or protections from potential import competition are likely to be disproportionately affected by trade integration. The divergent relevance of a common shock given nationally fixed factors can help assess the true effects of trade liberalization on economic, political, and social outcomes. In this paper we study how globalization's local effects play a role on the electoral outcomes of national economic platforms. Specifically, we look at the Mexican presidential election of 2006, and find that Andrés Manuel López Obrador's (AMLO) decision to pursue a protectionist campaign platform was consequential for his narrow electoral loss.

The workhorse models of international trade have well-defined implications of the distributive consequences over trade integration, and hence, for individual preferences over integration (Rodrik, 1995). These predictions have been confirmed in the field's broad empirical literature[1]. Interestingly, more recent evidence suggests that preferences can diverge from the expectations of these same workhorse models. For instance, Blonigen (2011) finds that relationships between US labor market attributes and trade policy preferences are not consistent with leading theories for what drives policy preferences over trade integration. Pavcnik (2017) reviews the recent evidence on how international trade shapes inequality and poverty, discussing the perceptions about international trade in over 40 countries. She finds that the majority of the public in low and high-income countries accept that trade has overall benefits for the economy, even though people in low-income countries view trade as more beneficial for their livelihoods in their own country –in terms of higher wages and job creation– than do people in high-income countries.

In recent years, the literature on economic effects of trade integration has grown notoriously by studying its sub-national dimension, especially by exploiting the industrial composition of local labor markets. Autor et al. (2013) study how China's accession into the WTO affected American localities

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[1]Mayda and Rodrik (2005) illustrate this empirical literature. They find that pro-trade preferences are significantly and robustly correlated with an individual's level of human capital, in the manner predicted by the factor endowments model. Individuals with higher levels of human capital (proxied by educational attainment) oppose trade restrictions, but only in countries that are well endowed with human capital. They also find that preferences over trade are correlated with the trade exposure of the sector in which an individual is employed: individuals in non-traded sectors tend to be the most pro-trade, while individuals in sectors with a revealed comparative disadvantage are the most protectionist. Other relevant papers on these questions are Goldberg and Maggi (1999), Scheve and Slaughter (2001), Mayda (2006), Hainmueller and Hiscox (2007, 2010) and Ottaviano and Peri (2012).

concentrating in industries receiving import-competing pressures. Kovak (2013) study how Brazilian integration into Mercosur affected local labor markets with higher baseline import barriers. Topalova (2007) finds that liberalization in 1991 undermined poverty reduction of Indian municipalities relatively exposed to foreign competition. Chiquiar (2008) shows that Mexico's globalization process results support the presence of Stolper-Samuelson type of responses, since regions more exposed to international markets appear to have exhibited an increase in wage levels, but a decrease in returns to schooling, relative to other regions of the country. Atkin (2016) provides further evidence of Stolper-Samuelson effects exacerbating initial skill differences by raising the return to the abundant skill. He finds that for Mexico during the period 1986 to 2000, the massive expansion of export manufacturing altered the distribution of education. In particular, the influx of new export-manufacturing jobs generated an abundance of new low-skill formal job opportunities which substantially raised the opportunity cost of schooling for youths on the drop-out margin. On the other side of the border, Hakobyan and McLaren (2016) find that trade integration with Mexico led to wage drops for blue-collar workers in US cities most exposed to import competition.

Interestingly, analyses on the local implications of trade liberalization instrumenting by the industrial structure of cities seem to have focused on the negative responses to import competition. To the authors' knowledge, no study has addressed how increasing economic opportunities from export market access for local industries due to trade liberalization impact local economic and political outcomes. This paper addresses this question by studying the effects of tariff reductions for Mexican exports into the US due to the implementation of the North American Free Trade Agreement (NAFTA) in the mid-1990's. Leveraging from the methodology proposed by Kovak (2013), and using data from Feenstra et al. (2002) and from the Mexican Economic Census[2], we observe that the implementation of NAFTA in 1994 led to local export tariff reductions that unevenly represented the industrial composition of different Mexican cities[3] in 1993, and find that municipalities facing higher market access gains had stronger employment growth between 1993 and 2003.

A corresponding literature has addressed the political consequences of the local economic effects of trade liberalization. David Autor et al. (2016) find that additional exposition to import competition from China associates with the election of polarized representatives to the US congress. Feigenbaum and Hall (2015) find that these representatives had more protectionist votes for trade related bills. A

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[2]The Mexican Economic Census captures economic information about industries outside the agriculture sector.

[3]Following Atkin (2016), we define cities as either official metropolitan areas defined by the Mexican government, or groups of municipalities forming commuting zones by using data on workers commuting patterns.

related literature addresses the incumbency effects of trade integration: Margalit (2011) and Jensen et al. (2017) find that higher job losses due to import competition and the presence of sectors intensive on relatively scarce inputs associate with worse electoral outcomes for incumbent presidents in the US.

We hypothesize that economic benefits due to increased export access to the US market undermines the local electoral support of economic platforms that threaten trade integration. We test this hypothesis using the local electoral turnout for Andrés Manuel López Obrador (AMLO) during the 2006's Mexican Presidential Elections. The front-runners in these tightly competed elections were AMLO and Felipe Calderón. Given the high polarization, mobilization of the respective political bases was seen as key. Regarding NAFTA, the 2006 elections were special because the last set of tariff exemptions under the agreement – Mexican imports of corn and beans from the US – were scheduled to be removed by the end of 2008. In an attempt to rally his relatively rural base, AMLO called for unilaterally rescinding the expiration of these tariff exemptions. Calderón's response advocated for rural development policies that did not threaten the NAFTA accords, and attacked AMLO's proposal as radical left-wing protectionism. The imminent expiration of the tariffs protecting Mexico's grain sector made debates over globalization and protectionism specially salient for the 2006 elections.

For all these reasons, the 2006 election provides a proper setting for assessing our main political hypothesis: that market access gains due to globalization undermine local preferences for national protectionist platforms. Consistent with our expectations, our empirical tests suggest that local tariffs drops led to a decrease in AMLO's 2006 local vote share gains relative to the baseline vote for the left in the 1994 presidential elections.

We argue that tariff drops for Mexican exports into the US are exogenous and determined almost entirely by pre-NAFTA tariff protection levels. Still, results could plausibly be driven by factors other than a preference shift towards integration in localities that gained more export access to US markets. For instance, economic gains due to NAFTA tariff drops may undermine AMLO's support through a party incumbency channel, or if improving economic conditions associate with a continuous shift of political preferences towards the right. However, we show that the effects disappear for the left's presidential bid in 2000, and for AMLO's 2012 and 2018 presidential bids. These elections occurred under similar incumbency environments and we continue to find positive economic effects of local tariff drops. However, the fact that the removal of tariff exemptions was either not imminent (for

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the 2000 elections) or had already occurred (for the 2012 and 2018 elections) reduced the salience of NAFTA as a policy issue, and led candidates' debates to focus elsewhere. Observing no effect of NAFTA local tariff drops on local electoral outcomes in elections other than 2006 suggests that our results are not driven by incumbency channels or general political effects of economic growth.

Given that AMLO proposed to prevent the expiration of import tariff exemptions on corn and beans, it's important to assess whether the local relevance of grain growing played a role in AMLO's electoral gains in 2006. Nevertheless, we find that our results are robust to controls for local employment and local agro-ecological suitability in these sectors, and that these controls themselves were not relevant independent determinants of AMLO's vote gains in 2006. This result is consistent with voters framing their stance on protectionism according to their past economic experience with trade liberalization: While light manufacturing regions had materially benefited from NAFTA by 2006 and wanted to defend such gains, grain growing regions had been isolated from potential import competing pressures, and were not stimulated by a promise of continued protection against prospective losses.

As NAFTA tariff reductions were being rolled out, China was growing into a manufacturing powerhouse with relevant presence in world markets. The economic effects of the "China Shock" on US and Mexican labor markets have been documented in Autor et al. (2013) and Blyde et al. (2017). Nevertheless, we find that our estimates of the local political effects of NAFTA tariff drops on protectionism are not affected by relevant controls for Chinese competition in the US and Mexico, and by Chinese and Mexican competitiveness gains in non-NAFTA markets. Moreover, we find that these variables do not play an independent role in affecting AMLO's vote gains in 2006.

A key question raised by our study is whether our results are driven by the evolving preferences of voters that link NAFTA to improving economic conditions, or by the response of local organized interests and groups reacting to the threat of protectionism. We partially explore this question in assessing the heterogeneity of the effect of NAFTA on AMLO's 2006 vote gains around the party identity of the local governors and mayors at the time of the election. While we find that the identity of mayors does not affect our results, we also find evidence that these are contingent to states with PAN governors at the time of the election. While the non-randomness and endogeneity in the selection of governors prevent a causal interpretation, we speculate that the effect of local tariff drops on AMLO's vote could have been partially elicited by the actions of PAN governors.

Our findings contribute to the trade, development and political economy literature. To our knowledge, this is the first study to formally document positive sub-national economic effects of local export access gains of local industries due to trade integration, as similar approaches and methodologies have been used in the literature to document negative effects of import competing pressures. We do so for the special case of Mexico, a developing country that entered into a Free-Trade Agreement (FTA) with two developed economies with higher productivity levels across the board. Aggregating these effects to the national level suggests that had NAFTA not been a politically salient issue, AMLO could have obtained an extra 8% of the vote. While the linearity assumption under this projection needs to be considered carefully, its size is so large that, in such a razor-thin election, we are comfortable arguing that it was pivotal in tilting the election in favor of Felipe Calderón. Put differently; in trying to rally his rural base, AMLO's call for maintaining the remaining tariff exemptions led areas of the country benefiting from NAFTA to -pivotally- rally behind Calderón. More generally, these effects highlight that improved access to foreign markets undermines local preferences over protectionist platforms.

The paper continues as follows: Section 2 discusses AMLO's electoral platform and campaign dynamics during his 2006 and later presidential bids. Section 3 presents our hypotheses and empirical strategy. Section 4 describes the data we use and presents descriptive statistics and visualizations. Section 5 presents our regression results, and section 6 concludes.

II   NAFTA and AMLO's 2006, 2012 and 2018 presidential bids

The 2006 Mexican presidential election took place one term after the country's transition from seven decades of one party rule by the Partido Revoluciónario Institucional (PRI). Vicente Fox, the sitting president from the Partido de Acción Nacional (PAN), had pursued liberal economic policies. Despite showing favorable results in terms of economic growth, concerns with regards to sluggish job creation, security and agricultural development undermined his popularity towards the end of his tenure. Importantly, there were growing concerns in the agricultural sector with regards to trade integration, as national production of corn and beans was considered vulnerable to foreign competition in general, and to the subsidized US agricultural sector in particular.[4].

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[4]For a thorough discussion on the effects of NAFTA on Mexico's agricultural sector, see Rosenzweig (2005).

NAFTA was signed in 1992 by PRI's president Carlos Salinas de Gortari, and went into effect on January 1, 1994, immediately eliminating tariffs for over 50% of Mexican exports to the US, and removing all remaining export tariffs within 10 years. The political sensitivity around the issue of agricultural integration with the US played a role in NAFTA negotiations, and led to the establishment of longer tariff face-out periods. The last of these tariff exemptions would account for Mexican imports of corn and beans, to be removed by the end of 2008 - 15 years after the agreement went into effect.

In this context, two main candidates were contesting the country's leadership in the presidential elections; Felipe Calderón, PAN's candidate and former Secretary of Energy, and AMLO, candidate of the Partido de la Revolución Democratica (PRD), former Head of Government of the Federal District and front runner for most of year prior to this election. AMLO ran on a protectionist economic platform. Among his policy proposals, he called for preventing the lift of tariff exemptions for Mexican imports of corn and beans, a protection that was scheduled to end by 2008.[5] Debates over NAFTA became a contentious political issue during the campaign. In a bid to mobilize his rural base in what polls already predicted to be a very narrow election, AMLO pledged not to honor Mexico's commitment to eliminate tariffs on US corn and beans[6]. In response, Calderón's rural development proposal focused on compensating agriculture producers by creating rural protection policies and expanding PROCAMPO –the government's ongoing rural development program– without failing to comply with NAFTA agreements[7]. Unilaterally forcing a break with NAFTA's tariff schedules posed the threat of reciprocity on the manufacturing export front. AMLO's strategy to rally his base in the context of the imminent expiration of tariff exemptions raised the salience of NAFTA as a contentious policy topic during the campaign, and Mexican businesses tended to side with Calderón[8].

Calderón was declared winner by a difference of about 0.6% of the vote. AMLO challenged Calderón's razor-thin victory, leading to massive and protracted protests in Mexico City. The situation escalated to the point that AMLO symbolically sworn himself in as "legitimate president" of Mexico in a protest four months after the elections were held. Such a move was widely rejected by Mexicans and hampered his credibility as protests gradually faded.

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[5]AMLO's 2006 government platform is available at https://bit.ly/2HIv16h. For complementary analysis, see `https://bit.ly/2JKk6K2`

[6]See `https://wapo.st/2HFVzsU`

[7]See `https://youtu.be/9WOvWxLGVBM`

[8]See Méndez Soto (2014) and `http://elcotidianoenlinea.com.mx/pdf/14510.pdf`.

Calderón's 2006-2012 administration was marked by the war on drugs, which led to drastic increases in the levels of violence and insecurity in different parts of the country[9]. AMLO ran as PRD's candidate once more in 2012. His campaign struck a much more conciliatory tone as means to address the public concerns on his figure after the protests of 2006, and as a way to compete with Enrique Peña Nieto, the popular front-runner from PRI[10]. As part of his strategy, AMLO moderated his economic proposals, focusing on job creation, austerity and competition. Chiefly, specific NAFTA revisions were not part of his policy platform, and former concerns with trade integration had subsided after the tariff exceptions expired.

AMLO lost in again 2012. Peña Nieto's term was marked by corrosive corruption scandals and violent events that left the public disappointed with Mexico's political establishment. In this context, AMLO broke with PRD and formed the Movement for the National Regeneration (MORENA), building his 2018 candidacy around justice ideals centered on anti-corruption efforts. President Trump's goal for a NAFTA revision led to a FTA renegotiation towards the end of Peña Nieto's term. While negotiations got derailed after the US imposed tariffs on US metal imports, all candidates were supportive of a new NAFTA deal -AMLO relied on pragmatic economic stances to prevent any game-changing events that could alter his comfortable lead[11].

In his third attempt, AMLO won the 2018 presidential election by a landslide, and Peña Nieto signed the USMCA FTA –a revised NAFTA accord– one day before AMLO was sworn in as Mexico's president. Revisions to the former agreement were limited to labor and environmental provisions; a raise in local content requirements for automobiles; and some changes to the protection of intellectual property rights[12].

III   Hypotheses and empirical strategy

The main hypothesis of this paper is that market access gains due to the globalization of the Mexican economy had, through an economic channel, a direct negative effect in the local voting support of AMLO in 2006, due to his protectionist aggenda by opposing the looming expiration of Mexican import tariffs on corn an beans. While hoping to rally the rural vote with this policy appeal, his proposal

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[9]Dell (2015) documents how the implementation of the Mexican drug war led to increased levels of violence.

[10]Josefina Vásquez Mota was PAN's candidate for the 2012 elections.

[11]See https://www.reuters.com/article/us-mexico-election/in-final-debate-mexican-presidential-favorite-says-a-nafta-fail-not-fatal-idUSKBN1J90B0.

[12]See https://www.ft.com/content/92e9ce0a-c55f-11e8-bc21-54264d1c4647

also threatened US reciprocity on Mexican exporting sectors. Fernandez and Rodrik (1991) provide a theory that helps explain why NAFTA debates were specially salient in 2006; uncertainty on the distribution of gains and losses may drive status quo bias against policy reforms. Analyzing the situation from this perspective, it's easy to see the exceptional nature of the 2006 elections with regards to NAFTA; uncertainty-aversion against the removal of tariff exemptions may have raised potential political support for protectionism in some areas, but challenging NAFTA tariff schedules induced uncertainty on other areas. In this context, AMLO's call to retain tariff exemptions was a bid to rally a rural base that feared losing if tariffs were lifted, but that inadvertently induced uncertainty and alienated voters elsewhere. These uncertainties were all removed from the public agenda after tariffs were effectively lifted, so that trade integration was not a salient issue in later electoral cycles. Similarly, the non-imminence of tariff exemptions in earlier elections would have led candidates to avoid proposing uncertainty-inducing reforms, so that NAFTA revisions were also a low salience issue in the 2000 elections.

We test our hypothesis with the regression specifications below:

$$\text{OLS} \quad : \quad \Delta\text{AMLO}_c = \alpha_0 + \alpha_1 \Delta\text{E}_c + X'\theta_c + \epsilon_c \tag{1}$$

$$\text{First stage} \quad : \quad \Delta\text{E}_c = \beta_0 + \beta_1 \text{LTD}_c + X'Y_c + \eta_c \tag{2}$$

$$\text{Reduced Form} \quad : \quad \Delta\text{AMLO}_c = \gamma_0 + \gamma_1 \text{LTD}_c + X'\Psi_c + \mu_c \tag{3}$$

$$\text{Inst. Variable} \quad : \quad \Delta\text{AMLO}_c = \delta_0 + \delta_1 \Delta\hat{\text{E}}_c + X'\chi_c + \kappa_c \tag{4}$$

where ΔAMLO_c stands for AMLO's vote share in city c in the 2006 election minus PRD's local vote share in previous elections[13]; ΔE_c is the increase in employment since the year before NAFTA's implementation as a share of the population in the initial period; LTD_c stands for a weighted measure of the local tariff drops due to NAFTA between 1993 and 2001 in each city; $\Delta\hat{\text{E}}_c$ is the predicted employment change as a function of local tariff drops in the first stage; X_c includes baseline control variables; and ϵ_c, η_c, μ_c and κ_c stand for error terms uncorrelated with independent variables. The statistical significance of all coefficients is assessed using robust standard errors clustered at the state level. We weight each city by the total votes in the presidential election in order to make estimates representative of the national results.

Given our hypothesis, we expect to observe a positive estimate of β_1 and a negative estimate of γ_1

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[13]We compare the vote in 2006 with respect to PRD's vote share in 1994 and 2000. The idea is to control for the inertia in the vote leaning towards PRD's regardless of the candidate running

and δ_1. That is, we expect cities experiencing higher tariff drops to grow faster as a consequence of export market access gains, and we expect these cities to disproportionately reduce their support for AMLO in the 2006 elections.

We evaluate placebo specifications, assessing the effects of local tariff drops on the presidential electoral outcomes of PRD's Cuauhtémoc Cárdenas in 2000, and of AMLO in 2012 and 2018, relative to the baseline vote for Cardenas in the 1994 presidential elections[14]. PAN held the incumbency for the 2006 and 2012 elections, while PRI did so for the 2000 and 2018 elections. If incumbency drove results, we would expect a prevalent negative effect in all elections. Similarly, given how Cárdenas in 2000 and AMLO thereafter represented the candidacies furthest to the left in the Mexican political landscape, a general rightward shift of preferences in cities growing faster as a result of NAFTA would show up through prevalent negative effects in all the elections. For this reasons, if placebo estimates yield null results and the hypothesized political effects were indeed contingent to the 2006 elections, we would argue that they are most likely driven by NAFTA's effects specifically on preferences over protectionism, and not by incumbency effects or general effects of wealth on political preferences.

One possible challenge against the validity of local tariff drop as an instrument is that interest groups of different regions and economic sectors could have lobbied in favor of better access to the US for their products and, therefore, the local tariff drop instrument would not be exogenous. However, NAFTA lowered the tariffs for Mexican exports to the US almost to zero for the majority of products by 2001, regardless the tariff charged before NAFTA. Support for exogeneity comes from an examination of the nature of the tariff cuts during the liberalization, following the approach of Goldberg and Pavcnik (2005) and Kovak (2013). Figure 1 shows that industries with high tariffs before liberalization experienced the greatest cuts, with the correlation between the pre-liberalization tariff level and change in tariff equaling -0.99. As it can be seen in the figure, there is only a few sectors in which the final tariff was above zero. Since the liberalization policy imposed cuts based on a protective structure that was set decades earlier, it is unlikely that the tariff cuts were manipulated to induce correlation with counterfactual industry performance or with industrial political influence.

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[14]Cuauhtémoc Cárdenas was one of the main figures from the left in Mexican politics between the late 80's and the early 2000's. He ran for the presidency of Mexico in 1988, 1994 and 2000.

Figure 1: Relationship between tariff drop and preliberalization tariff Levels

Notes: Figure shows the relation between pre-liberalization tariff ($log(1 + \text{tariff})$) and the change in tariffs before (year 1993) after NAFTA (year 2001). Tariffs correspond to those charged by the US to Mexican imports following the Harmonized Tariff System (HTS) at 8 digits. The product tariffs used for the figure correspond to the simple average at the 2-digit level. The line shows the fitted line of a regression with coefficient -0.99; standard error: 0.0052, and t-statistic: 190.0.

IV   Data

In order to test the effect of the globalization of the Mexican economy on the electoral results, we collected data from different sources. Since our argument states an explicit link between economic outcomes and electoral outcomes, its important to use an appropriate definition of local economic markets. For this purpose, we group municipalities into commuting zones – which we will refer often to as cities – by combining municipalities in the same Metropolitan Zones (as classified by INEGI) or where a significant number of commuters moved between them, following Atkin (2016).[15]

[15] Atkin (2016) classifies commuting zones as groups of municipalities with more than 10 percent of their working population reported commuting between municipality lines but within the grouped set of localities.

IV.A Employment and demographic data

We use the Economic Census data from INEGI of 1988, 1993, 2003, 2008 and 2013, to assess the employment in each Mexican city and industry following the NAICS classification.[16] We capture baseline socio-demographic variables from INEGI's Population Census. We compute ΔE_c as the difference in production workers between the census of 2003 and 1993, over the population of the city in the initial period, calculated as the average population reported in the Population Censuses of 1990 and 1995. An employment estimate closer to the presidential election of 2006 is unfortunately not available. We conduct robustness checks using employment estimates from the Economic Census of 2008, and obtain similar results.

For the construction of other variables explained below we use estimates of employment at the industry-city level tabulated by INEGI using the micro-data from the Economic Census of each year. These tabulations are similar to what the US Census does with the well known County Business Patterns (CBP).

IV.B Local tariff drops

US import tariffs by product between 1989 and 2001 are obtained from Feenstra et al. (2002). Given the phased roll-out of tariff cuts under NAFTA, we capture the difference between a product's import tariff in 1993 and the NAFTA-determined Mexican import tariffs from 2001.

We transform this data from the Harmonized Tariff System (HTS8) to the US version of the North American Industry Classification System (NAICS 07). The concordance tables used come from Pierce and Schott (2012). These transformations are done by simple averaging of the tariff drops observed by products that share industry classifications. Table 1 shows how the sectors that observed the highest tariff drops concentrate in textiles and light manufacturing.

In order to calculate the relevant local tariff drop for each city we combine the industry specific tariff drops with municipality-industry economic data from the Mexican Economic Censuses. We use data on the distribution of labor across industries in each city before the onset of NAFTA to produce

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[16]The Economic Census data used for this paper was provided by the Ministry of Finance of Mexico. This version of the data contains estimates following the NAICS industry classification of 2002.

our metric of local tariff drop (LTD), calculated as:

$$LTD_c = \sum_i s_{c,i} * \Delta\text{Tariff}_i \tag{5}$$

where $s_{c,i}$ represents the share of labor in industry i in city c.

IV.C   Electoral Data

Electoral data at the municipality level for all presidential elections between 1994 and 2018 was obtained from the Instituto Nacional Electoral (INE). The data provides party specific vote tallies as well as the size of the registry per municipality. The share of AMLO's vote in each municipality is the main dependent variable in our study. It is calculated as the total number of AMLO's votes as a share of all valid votes - that is, voting abstention is not considered. Data on local elections determining the parties of mayors and governors at the time of the 2006 elections was collected from the electoral tribunals of each state[17].

IV.D   Covariates

Our estimates control for the levels of formal agricultural employment as a share of local formal employment in 2006. These estimates come from the Mexican Atlas of Economic Complexity[18]. We believe this control is important because voters in areas heavily dependent on the production of corn and beans may have been appealed by AMLO's proposal to sustain tariff exemptions. If the local intensities in agriculture and in the sectors that benefited most from tariff drops (concentrating in textiles and light manufacturing) are inversely correlated, then failing to control for agricultural intensity may yield a negative effect of local tariff drops on AMLO's vote due to omitted variable bias.

Finally, we include the baseline population size and area of a city as covariates, which helps us control for demographic determinants of political preferences which may correlate with local tariff drops.

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[17]Data on local elections was collected and prepared by Gorrín et al. (2019).
[18]See https://datos.gob.mx/complejidad/

V Results

V.A The geography of economic and electoral outcomes

There is a large geographical heterogeneity of economic conditions and electoral outcomes. In order to provide a visual illustration of the heterogeneity, Figure 2 shows the map of Mexico colouring commuting zones according the local tariff drop, the employment change between just before the approval of NAFTA and the latest measurement before the election, the share of votes that AMLO got in 2006, and the share of votes as a difference with respect to PRD's vote share in 1994. Figure 2a shows how gains in US market access for local industries and economic gains were more broadly distributed throughout the country than AMLO's vote share, but still relatively concentrated in the north. AMLO's political support in 2006 was much stronger in the south and center of the country, while it was much weaker towards the north of the country. This concentration, however, is not as strong when assessing the growth in AMLO's 2006 vote in comparison to the baseline vote for PRD in the 1994 elections.

Figure 2: The geography of economic and electoral outcomes

(a) Local tariff drops

(b) Employment change

(c) AMLO vote share

(d) Vote share 2006-1994
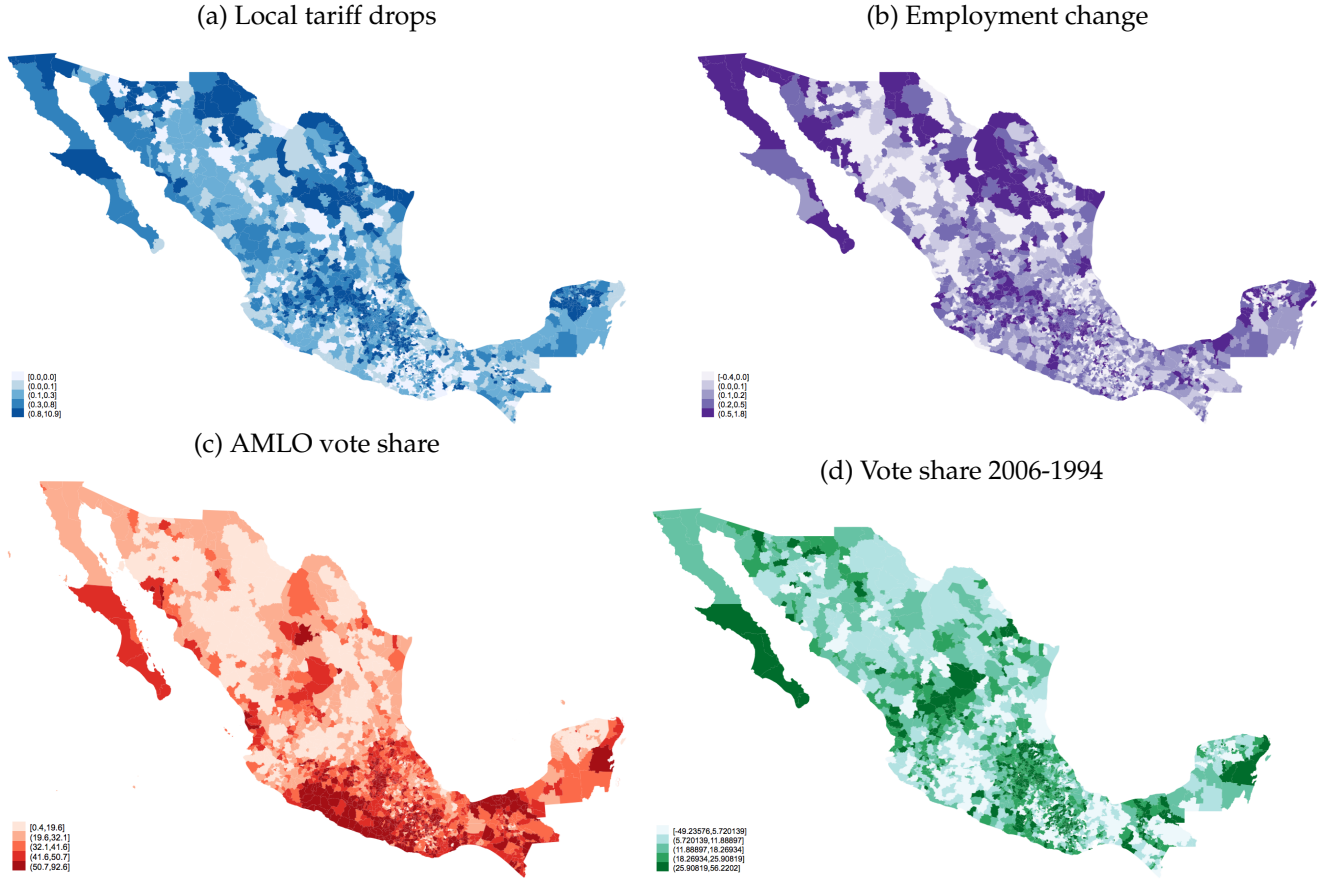
Notes: This figure shows four different versions of the map of Mexico according to outcomes defined in the main text. Panel (a) shows with darker shade of blue commuting zones that had a larger tariff drop from NAFTA to access the US market; panel (b) shows with darker shade of purple commuting zones that experienced a larger increase in annual employment as a share of total population; and panel (c) shows with a darker shade of red commuting zones where AMLO had a higher share of votes; panel (d) shows with a darker shade of green the vote share of AMLO in 2006 minus the share of PRD in 1994.

V.B   Regression estimates

To be precise, our hypothesis is that there is a positive association between local trade integration preferences and (export) market access gains. We use AMLO's vote share increase in 2006 with respect to PRD's 1994 baseline vote share, as our main outcome variable. We take this as a measure of preferences against integration elicited by his NAFTA-threatening proposals after taking into account the vote that would usually lean towarsds left wing candidates[19]. Before discussing the regression results in table 1, it may be helpful to provide a graphical description of our empirical strategy. In

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[19]Tables 7 and 9 show that results using levels and not changes in voting yield significant coefficients for all elections after 2000. This makes sense, as areas benefiting most from NAFTA were concentrated in the north of the country and AMLO's support was stronger in the south. To address this concern, our main specification uses the change in AMLO's vote relative to PRD's 1994 baseline as main variable of interest. As we observed above, this variable is not as geographically concentrated towards the south, suggesting that AMLO's southern dominance was due to baseline left-wing preferences in that region.

figure 3 we show the partial correlation of the instrumental variable estimation of equation (4), following the Frisch-Waugh-Lovell decomposition; panel (a) shows the partial correlation of the first stage regression, while panel (b) shows the partial correlation in the second stage estimation.[20] Our first stage regression confirms our economic hypothesis: panel (a) shows that employment grew more in cities where the local tariff drop was larger. Turning now to the second stage estimator, our political hypothesis is also validated: Panel (b) of figure 3 shows that in cities where employment growth was larger as a consequence of NAFTA, AMLO's vote in 2006 relative to the baseline 1994 vote for the left was smaller.

Figure 3: Graphical representation of the instrumental variables regression

(a) Δ employment vs tariff drop   (b) AMLO vote share vs Δ employment
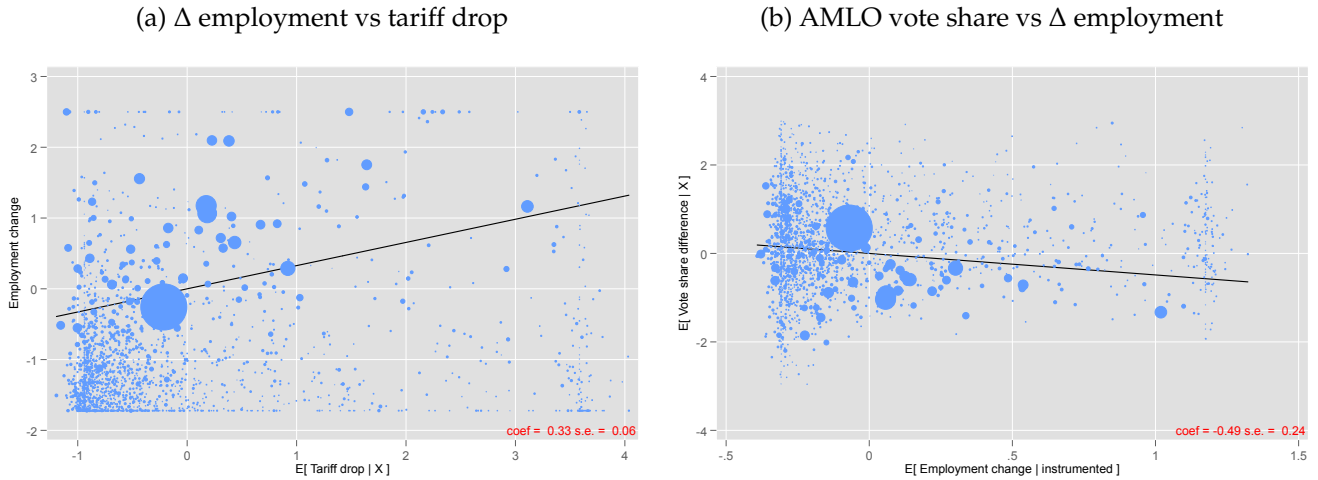
Notes: This figure shows in panel (a) the partial correlation between the change in employment and the local tariff drop, while figure (b) shows the vote share of AMLO in year 2006 minus PRD's vote share in 1994, with respect to the employment change instrumented and after controlling for the covariates use in table 1. Bubbles represent commuting zones and its size is proportional to their share in the total number of votes in 2006's election.

Our main estimates are shown in Table 1. We find that after controlling for baseline agriculture and socio-demographic variables, a one standard deviation increase in the local tariff drop metric associates with about a 0.33 standard deviation increase in local employment (column 1). The reduced form equation, shown in column2, indicates that the same local tariff drop is associated with a 0.16 s.d. drop in AMLO's local vote share in 2006 relative to the left's 1994 baseline. The OLS estimations shown in columns 3 and 6, indicate that a 1 s.d. increase in employment reduced the vote for AMLO by almost 0.3 and 0.22 standard deviations, depending the whether the comparison baseline is 1994 or 2000. The OLS estimates are likely to be biased as approximations of the political effects of NAFTA

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[20]The first stage estimation in panel (a) corresponds to the coefficient shown in column 2 of table 1, while the second stage estimation shown in panel (b) is equivalent to the column 4 of table 1.

induced economic growth. This is likely to be the case as the effects of growth on AMLO's support in areas that did not benefit from NAFTA was probably lower in magnitude. In columns 4 and 7 we show the IV estimates, where employment change is instrumented by the local tariff drop from NAFTA. The point estimates, depending on the comparison baseline used, suggest a between a 0.47 and 0.59 standard deviation drop in AMLO's vote share as a consequence of a 1 standard deviation increase in employment growth. These effects are between 1.6 and 2.6 times bigger than the OLS effects. We test for the statistical inference of whether our IV strategy is valid, using the Kleibergen-Paap LM test and find that we reject the null of underidentification with a p-value of 0.001.

Table 1: AMLO's result in the 2006 election

| | Employment change | Vote share of year 2006 | | | | | |
| | | with respect to 1994 | | | with respect to 2000 | | |
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Employment change			-0.29***	-0.47**		-0.22**	-0.59**
			(0.10)	(0.24)		(0.09)	(0.24)
Local tariff drop	0.33***	-0.16*			-0.20**		
	(0.06)	(0.08)			(0.07)		
Initial pop, log	0.17	0.65***	0.68***	0.73***	0.78***	0.78***	0.88***
	(0.25)	(0.21)	(0.17)	(0.12)	(0.14)	(0.12)	(0.11)
Area, log	0.06	-0.14	-0.12	-0.12	-0.25**	-0.22**	-0.21*
	(0.09)	(0.11)	(0.10)	(0.10)	(0.10)	(0.11)	(0.11)
Agriculture emp. share	-0.04	-0.05	-0.05	-0.07	-0.02	-0.01	-0.04
	(0.05)	(0.04)	(0.04)	(0.05)	(0.05)	(0.05)	(0.05)
Observations	2,132	2,132	2,132	2,132	2,132	2,132	2,132
R-squared	0.21	0.29	0.34	0.31	0.35	0.36	0.24
Method	1S	RF	OLS	IV	RF	OLS	IV
Weights	yes	yes	yes	yes	yes	yes	yes
K-P LM p-value		-	-	.001	-	-	.001

Robust standard errors in parentheses clustered at the state level
*** p<0.01, ** p<0.05, * p<0.1

Notes: The estimates of column 1 correspond to the first stage estimates of the Instrumental Variables estimates of columns 4 and 7.

While the results shown so far are consistent with the hypothesized mechanism, they could plausibly be driven by other factors affecting the preferences for other candidates. For instance, we may expect that municipalities with greater increases in their access to the US market may have done better economically, so that our results are due to a relative increase in PAN's incumbent party support. Moreover, the result may be driven by structural pro-market positions in municipalities that

happened to have gained relative US market access. However, if this was the case, we would expect the political effects to hold for other elections between 2000 and 2018. Thus, the idea is to provide a placebo of the same specification as columns 4 and 7 shown in table 1, where we expect to find that the employment growth explained by tariff drops from NAFTA not to be a significative predictor of electoral outcomes. We explore this in table 2, where the dependent variable is the differential vote share of each election since 2000. In columns 1 to 4 the difference is with respect to PRD's share in 1994, while in columns 5 to 7 we use PRD's share in the election of year 2000. All columns of the table present IV estimates, and the corresponding first stage estimates, which are all valid, are shown in the appendix. We find that variation in local tariff drops, and its respective economic effects, does not associate with the growth in the local voting performance for the left in any election other than in 2006. This implies the NAFTA was relevant only in 2006, playing an important role on AMLO not being elected.

Table 2: AMLO's results in three elections

	Vote share of year:						
	2000	2006	2012	2018	2006	2012	2018
	with respect to 1994				with respect to 2000		
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Employment change 93-03	0.05	-0.47**			-0.59**		
	(0.17)	(0.24)			(0.24)		
Employment change 93-08			-0.08			0.04	
			(0.26)			(0.27)	
Employment change 93-13				-0.09			0.02
				(0.27)			(0.31)
Agriculture emp. share	-0.07	-0.07	-0.01	0.06	-0.04	0.03	0.08
	(0.05)	(0.05)	(0.07)	(0.07)	(0.05)	(0.06)	(0.06)
Initial pop, log	-0.05	0.73***	0.45***	0.08	0.88***	0.53***	0.17
	(0.22)	(0.12)	(0.14)	(0.16)	(0.11)	(0.10)	(0.11)
Area, log	0.13	-0.12	-0.14	-0.02	-0.21*	-0.19**	-0.07
	(0.13)	(0.10)	(0.12)	(0.17)	(0.11)	(0.08)	(0.12)
Observations	2,132	2,132	2,132	2,152	2,135	2,135	2,155
Method	IV	IV	IV	IV	IV	IV	IV
Weights	yes	yes	yes	yes	yes	yes	yes
K-P LM p-value	.001	.001	.001	.009	.001	.001	.009

Robust standard errors in parentheses clustered at the state level
*** p<0.01, ** p<0.05, * p<0.1

Given that the effects disappear outside of the 2006 election, we interpret our results as evidence that preferences shifted away from that year's protectionist platform -not necessarily away from

AMLO as a politician, or from left leaning platforms in general. Doing a back of the envelope calculation using the results in columns 4 and 7 of table 1, we find that AMLO would have about an extra 8% in the national vote for the 2006 Mexican presidential election. While this calculation relies on a linear projection which demands cautious interpretation, we find this effect to be sufficiently high for us to safely assume it was pivotal in a razor-thin election. By appealing to his rural base with a protectionist stance, AMLO alienated voters elsewhere and lost the election as a consequence.

V.C   Local economic relevance of corn and beans

Thus far, we have assessed the negative political effects of AMLO's 2006 protectionist stance on his electoral gains relative to past benchmarks of local support for the left. However, the decision to pursue a protectionist platform hinged on his bet to rally his supposed relatively strong agricultural base. So far, in the two previous tables, we control for the local formal employment share in agriculture in 2006, and find no significant effects on the growth of AMLO's support.

However, there are a number of reasons why this may not be the optimal metric to test for an effect of protectionism in areas that might have benefited from sustaining import tariff exemptions on corn and beans. While these sectors are indeed key to Mexico's agriculture sector, they do not capture the totality of agriculture output in the country. Other salient agriculture products –like avocados, bananas and tomatoes– show strong export performance to the US, and benefited from NAFTA. Consequently, we would like to test for proxies of agriculture production that restrict to the production of corn and beans, which were the only import items being protected by tariff exemptions.

Table 3 shows IV estimates of the political effect of employment change instrumented by NAFTA tariff drops, controlling for different measures of agriculture intensity. The baseline estimates are provided in columns 1 and 5, which use AMLO's 2006 vote gains with respect to the vote for PRD in 1994 and 2000, respectively. These baseline estimates do not control for agricultural employment. Columns 2 and 6 include the formal share of agricultural employment in 2006 as in regression 4 of table 1. In columns 3 and 7 we introduce a control for the local formal employment share in grain growing[21], while columns 4 and 8 control for a proxy of the suitability of corn and bean crops at the commuting zone level[22]. Our results underscore the robustness of our IV estimates of the economic effects

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[21]This is the employment associated to the NAICS industry class code 1111, "Oilseed, legume and cereal growing".

[22]We take this data from the Global Agro-Ecological Zones program from the FAO, which provide potential agro-climatic yields (kilograms of dry matter per hectare) of maize and phaleous beans. The data is provided in separate rasters of 5 arc-

of NAFTA in both magnitude and significance. Moreover, we find mostly insignificant and negative associations between the exposition to agriculture and grain growing at the time of the election and AMLO's vote gains.

Table 3: AMLO's result, NAFTA and grain growing

| | AMLO vote share | | | | | | | |
| | with respect to 1994 | | | | with respect to 2000 | | | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Employment change	-0.45**	-0.47**	-0.46**	-0.48*	-0.58**	-0.59**	-0.58**	-0.58**
	(0.23)	(0.23)	(0.23)	(0.28)	(0.24)	(0.24)	(0.24)	(0.29)
Agriculture employment share (2006)		-0.06				-0.03		
		(0.05)				(0.04)		
Grains employment share (2006)			-0.09**				-0.01	
			(0.04)				(0.06)	
Grains suitability				-0.04				-0.00
				(0.09)				(0.09)
Area, log	-0.16*	-0.13	-0.13	-0.17*	-0.24**	-0.22**	-0.24**	-0.24**
	(0.09)	(0.10)	(0.09)	(0.09)	(0.10)	(0.11)	(0.11)	(0.11)
Initial pop, log	0.79***	0.75***	0.75***	0.80***	0.92***	0.90***	0.91***	0.92***
	(0.12)	(0.12)	(0.11)	(0.13)	(0.10)	(0.11)	(0.10)	(0.13)
Observations	2,129	2,129	2,129	2,129	2,129	2,129	2,129	2,129
R-squared	0.33	0.33	0.33	0.32	0.25	0.25	0.25	0.25
Method	IV	IV	IV	IV	IV	IV	IV	IV

Robust standard errors in parentheses clustered at the state level
*** p<0.01, ** p<0.05, * p<0.1

Notes: Estimates in all columns show IV estimates for Employment change instrumented by NAFTA tariff drops, along with the coefficient of different metrics of local relevance of corn and beans production.

Considered jointly, these results suggest that while areas benefiting from NAFTA responded negatively to the protectionist outlook, AMLO's bet to elicit additional support and turnout from grain growing regions did not yield the expected results. This is consistent with voters framing their stance on protectionism according to their past economic experience with trade liberalization. While light manufacturing regions had materially benefited from NAFTA and wanted to defend such gains, grain growing regions had been isolated from potential import competing pressures, and were not stimulated by a promise of continued protection against prospective losses.

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minutes and 30 arc-second grid-cells for each crop. We take agro-climatic potentials of rain-fed and intermediate input yields. We use ArcGIS geo-spatial software to produce average yields for the polygon of each city. Finally, we average each city's potential yield for maize and beans into a single score.

V.D Chinese competition

In tandem with NAFTA, Mexico was being affected by an additional globalization shock: China's rise as a manufacturing powerhouse, hastily capturing international markets. The economic effects of the China shock in the US economy and in the Mexican economy have been studied by Autor et al. (2013) and Blyde et al. (2017). These shocks are relevant since they may affect how local labor markets perceive the most salient aspect of globalization in the Mexican political debate (NAFTA), as either beneficial of detrimental for their welfare. Some Mexican regions benefiting from improved access to the US market may have not been able to seize economic gains due to Chinese competition in the US market. Hence, voters in regions more affected by import competing pressures from China could assign the responsibility of such pressures on NAFTA, seeking protection. Finally, an important question is to assess whether the effects of NAFTA tariff drops on AMLO's 2006 gains were driven or not by general productivity improvements in Mexico, which would be observed in the country's export performance to non-NAFTA markets.

Table 4 tackles these questions directly. It shows similar IV estimates as those in table 1 were we analyzed the political effect of employment change instrumented by NAFTA tariff drops, but now controlling for different dimensions of trade competition. Following Autor et al. (2013), the particular expression[23] we use to proxy trade exposure in each city is:

$$\Delta \text{ trade exposure }_c = \sum_i \frac{L_{c,i}}{L_c} \frac{\Delta \text{trade}_{i,m}}{L_i}$$

were $L_{c,i}/L_c$ is the share of industry i in city c, L_i is the total employment of industry i in the country, and $\Delta \text{trade}_{i,m}$ is the change of trade in market m. In our analysis m could refer to the exports of China to the US market, or other non-NAFTA countries, exports from China to Mexico, or Mexican exports to other non-NAFTA countries.[24] Baseline estimates are provided in columns 1 and 6, which use AMLO's 2006 vote gains with respect to the vote for PRD in 1994 and with respect to 2000, respectively. Regressions 2 and 7 control for the local relevance of Chinese product export growth to the US Market, while regressions 3 and 8 control for Chinese exports growth to Mexico. As Autor et al. (2013) explains, these trade shocks may be explained by China's increasing capacity to supply World markets, but also by demand driven factors. In this context, Chinese exports to the US may have also been affected by NAFTA and its effects of Mexican exports to the US. To address this, regressions 4 and 9

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[23]This expression is derived from a trade model with monopolistic competition in which each region is treated as a small open economy. See the appendix in Autor et al. (2013).

[24]We decided not to include Mexican exports to the US, as a control variable, since its already captured and endogenous to the employment change, our main explanatory variable.

consider Chinese product export growth to its top 10 non-NAFTA destinations, which is likely unaffected by NAFTA demand factors and captures China's supply productivity increase over the period. Finally, regressions 5 and 10 control for Mexican product exports growth to non-NAFTA destinations as a way to capture overall Mexican productivity gains in different products. Overall, the estimates of trade shocks do not appear to have a significant impact over the vote of AMLO, since none of the estimates is significant at the conventional 5% confidence level. The result indicates that the economic effect of NAFTA tariff drops on AMLO's 2006 vote gains are robust to controlling for trade shocks included in the analysis. Moreover, we find that these channels show no apparent independent effect on AMLO's 2006 vote gains.

Table 4: AMLO's result, NAFTA and Chinese competition

	AMLO vote share									
	with respect to 1994					with respect to 2000				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Employment change	-0.47**	-0.50*	-0.51*	-0.51*	-0.47*	-0.59**	-0.67**	-0.70**	-0.72**	-0.62**
	(0.24)	(0.29)	(0.30)	(0.31)	(0.26)	(0.24)	(0.30)	(0.29)	(0.30)	(0.25)
China to US		0.04					0.10			
		(0.08)					(0.10)			
China to Mexico			0.05					0.15		
			(0.10)					(0.12)		
China to other				0.05					0.15	
				(0.10)					(0.12)	
Mexico to other					-0.02					0.08*
					(0.06)					(0.05)
Initial pop, log	0.73***	0.75***	0.75***	0.75***	0.73***	0.88***	0.92***	0.93***	0.94***	0.88***
	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)	(0.11)	(0.12)	(0.12)	(0.13)	(0.10)
Area, log	-0.12	-0.13	-0.14	-0.13	-0.12	-0.22*	-0.25**	-0.27**	-0.27**	-0.23**
	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.11)	(0.11)	(0.12)	(0.12)	(0.11)
Agriculture emp. share	-0.06	-0.06	-0.06	-0.06	-0.06	-0.04	-0.04	-0.04	-0.04	-0.03
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.04)	(0.04)	(0.04)	(0.05)	(0.04)
Observations	2,132	2,132	2,132	2,132	2,132	2,132	2,132	2,132	2,132	2,132
R-squared	0.31	0.30	0.30	0.30	0.32	0.24	0.19	0.17	0.16	0.22
Method	IV	IV	IV	IV	IV	IV	IV	IV	IV	IV
Weights	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
K-P LM p-value	.001	.005	.008	.008	.001	.001	.005	.008	.008	.001

Robust standard errors in parentheses clustered at the state level
*** p<0.01, ** p<0.05, * p<0.1

Notes: Estimates in all columns show IV estimates for Employment change instrumented by NAFTA tariff drops, along with the coefficient of different metrics of Chinese competition into the US market, into the Mexican market and into other markets non-NAFTA markets.

V.E   Political alignment of governors and mayors

The observed effects of export access gains on the support for protectionism may be driven by the evolving preferences of voters that recognize globalization as a determinant of their improving economic welfare. An alternative view would point towards the agency and behavior of local elites (authorities, politicians, firms, unions, media, guilds, etc.) in bolstering local support for pro-globalization platforms and eroding that of protectionist ones. For example, the negative effect of local tariff drops on AMLO's vote gains may have been determined by the actions of governors or mayors from PAN, who were trying to get Felipe Calderón elected.

Table 5 shows the reduced form effect of a municipality's local tariff drop on AMLO's vote gain relative to PRD's 1994 benchmark[25]. Regression 1 provides a baseline estimate for all municipalities, while regression 2 and 3 condition for municipalities that had a PAN or a Non-PAN governor at the time of the election in 2006. Regression 4 operates on all municipalities and includes a binary term for PAN governors and an interaction term between the PAN governor indicator and the local tariff drop.

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[25]In this section, we work with data at the municipality level and not at the city level because some cities cross state lines and have mayors from different parties for the different municipalities that shape them. We also provide reduced form effects of the local tariff drops and not IV effects of the instrumented change in employment so as to interpret the relevant interaction terms most intuitively.

Table 5: AMLO's result, NAFTA and PAN Governors

	(1)	(2)	(3)	(4)
	AMLO's vote share of year 2006			
	with respect to 1994			
	(1)	(2)	(3)	(4)
Local Tariff Drop	-0.09*	-0.09**	-0.01	0.02
	(0.05)	(0.04)	(0.05)	(0.06)
PAN Governor				-0.45**
				(0.18)
PAN Governor * LTD				-0.15*
				(0.08)
Observations	2,395	439	1,956	2,395
R-squared	0.24	0.13	0.27	0.28
Governors	All	PAN	Non-PAN	All

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

Notes: Estimates in all columns show reduced form estimates of the effect of the local NAFTA tariff drop at the municipality level on AMLO's vote gains relative to 1994. Regression 1 provides the baseline estimate. Regression 2 conditions for municipalities under a PAN governor, and regression 3 conditions for the rest of the municipalities. Regression 4 provides estimates for the effect of the local tariff drop, the event of a PAN governor and their interaction. All regressions control for initial population, area and agricultural employment. Standard errors are clustered at the city level.

A first result worth noting is that the reduced form estimate of regression 1 is substantially lower than the estimate from regression 2 in Table 1. We attribute this change to attenuation bias due to noisier measurement of local tariff drops when working at the municipality level. More importantly, results in table 5 suggest that the connection between improvements in export market access and protectionism in 2006 were contingent to states under PAN governors at the time of the election. This means that differences in local tariff drops between municipalities seem to only make a difference for AMLO's vote gains under the rule of pro-Calderón governors.

It is difficult to interpret this finding causally, as the chance of having a PAN governor is not randomly assigned and is likely endogenous to local economic events such as the improvement in export market access for local industries. Still, the heterogeneity along this dimension allows us to speculate that part of the political effects documented in the study may have been induced by the actions of governors.

Similarly, table 6 addresses the question of how the effect of local tariff drops on AMLO's 2006 vote gains is affected by the party alignment of a municipality's Mayor with Felipe Calder'on's PAN.

Again, regression 1 provides a reference estimate, while regressions 2 and 3 provide estimates conditioning to PAN and Non-PAN mayors respectively. Regression 4 provides an estimate with all municipalities, controlling for an indicator for a PAN mayor and its interaction with the local tariff drop. Regressions 5 - 7 condition to municipalities with mayors elected in close local elections – that is, where the mayor was elected with an electoral difference under 5 percentage points. Regression 5 only controls by the local tariff drop, while regression 6 provides a linear regression discontinuity estimate of the effect of a marginal PAN mayor on AMLO's vote gains in 2006[26]. Finally, regression 7 provides the same regression discontinuity setting, and includes the local tariff drop and its interaction with a marginally elected PAN mayor.

Table 6: AMLO's result, NAFTA and PAN Mayors

| | AMLO's vote share of year 2006 with respect to 1994 | | | | | | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Local Tariff Drop	-0.09*	-0.03	-0.08*	-0.05	-0.11**		-0.14*
	(0.05)	(0.06)	(0.05)	(0.05)	(0.05)		(0.08)
PAN mayor				-0.64***		-0.13	-0.16
				(0.15)		(0.16)	(0.16)
PAN mayor * LTD				-0.03			0.09
				(0.07)			(0.10)
Observations	2,395	559	1,421	1,980	356	356	356
R-squared	0.24	0.15	0.31	0.33	0.08	0.07	0.10
Mayors	All	PAN	Non-PAN	All	All	All	All
Bandwidth	Full	Full	Full	Full	5pp	5pp	5pp
RD	No	No	No	No	No	Linear	Linear

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

Notes: Estimates in all columns show reduced form estimates of the effect of the local NAFTA tariff drop at the municipality level on AMLO's vote gains relative to 1994. Regression 1 provides the baseline estimate. Regression 2 conditions for municipalities under a PAN mayor, and regression 3 conditions for the rest of the municipalities. Regression 4 provides estimates for the effect of the local tariff drop, the event of a PAN mayor and their interaction. Regressions 5 provides a baseline estimate for a sub-sample of municipalities with mayors at the time of the 2006 presidential elections that were elected with relatively narrow margins (5 percentage point difference with the runner-up in the local election). Regression 6 provides a linear regression discontinuity estimate of the effect of a close PAN mayor - coefficients of the linear controls around the discontinuity are omitted. Regression 7 provides the same specification, adding the effect of the local tariff drop and its interaction with the event of a marginal PAN mayor. All regressions control for initial population, area and agricultural employment. Standard errors are clustered at the city level.

While the results from regressions 2 and 3 would suggest that the observed effect of LTD on AMLO's 2006 vote gains are contingent to municipalities with Non-PAN mayors, regression 4 does not yield clear estimates of this heterogeneity. Now again, as was the case with PAN governors, we cannot clearly interpret these results because of the non-randomness and endogeneity of PAN

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[26]The effect of linear controls around the electoral discontinuity are omitted

mayors. The regression discontinuity approach helps identify plausibly exogenous variation in the political alignment of mayors. Regression 5 confirms that the effect of local tariff drops is robust to the subsample of municipalities with mayors elected in close elections. Regression 6 suggests that, by itself, a marginally elected PAN mayor did not meaningfully affect AMLO's vote gains. Finally, regression 7 finds that the effect of the local tariff drop is robust to the inclusion of regression discontinuity controls and its interaction with the indicator for a marginally elected PAN mayor, but that the effects of this interaction are not significant. Overall, these results suggest that the main effects in the study are not determined by mayors' party alignment.

VI   Conclusions and next steps

The goal of this paper was to study the sub-national political effects of export tariff reductions on local economic outcomes and political preferences over trade integration. The question is innovative in both economic and political grounds.

Economically, we find that regions with higher export tariff drops faced faster employment growth. The result is innovative given how the standing literature instrumenting the local relevance of national trade agreements by the industrial structure of labor markets focuses on the effects of import-competing pressures from globalization. These positive economic effects of integration are consistent with McCaig and Pavcnik (2018) and Trefler (2004), which employ alternative methodologies to assess the export effects of trade integration of Vietnam and Canada with the US.

More importantly, our political results suggest material negative effects of NAFTA-induced economic gains on AMLO's 2006's presidential bid, but not for other elections between 2000 and 2018. Given the special salience of NAFTA in the 2006 elections, we interpret this result as suggesting that export market access gains undermine preferences for protectionism, while not generally undermining non-incumbent candidacies, left-wing candidacies, or AMLO's other candidacies. The overall effect of our estimates on the 2006 election were large, and most likely pivotal for the election's final result. Our findings suggest that local polities do tend to vote rationally in defending policies that have materially benefited them in the past. This is opposed, for instance, to Blonigen (2011)'s finding that US voters tend to set preferences on trade policies in manners that are inconsistent with theories of international trade, such as the Stolper-Samuelson theorem[27].

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[27]The workhorse models of international trade have well-defined implications for the distributive consequences of trade and hence for individual preferences (Rodrik, 1995). Under the factor-endowments model, which assumes costless intersectoral

We extend our analysis in three directions. First, we assess the relevance of local corn and bean growing – the main sectors protected by the expiring tariff exemptions. We find that our results are robust to controls for local employment and local agro-ecological suitability in these sectors, and that these controls themselves were not relevant determinants of AMLO's vote gains. Second, we assess the relevance of Chinese competition in US and Mexican markets, and of Chinese and Mexican general competitiveness gains, and find that these do not affect the effects of NAFTA tariff drops on AMLO's vote gains, and that they did not induce independent political effects. Finally, we studied whether the effect was heterogenous along the party identity of the governor or the mayor at the time of the election, finding evidence that reduced form effects are contingent to municipalities in states that had PAN governors in July, 2006.

Our agenda to extend this paper includes the exploration of additional mechanisms connecting export market access gains from NAFTA with electoral preferences on trade integration. We expect to further explore how elite responses may affect our estimates. We hope to collect explicit measures of local elite support –such as campaign contributions, media endorsements or union statements– for the different parties, and assess if higher local tariff drops associate with more support for Felipe Calderón's campaign. Finally, we expect to extend our analysis to assess the flip-side of NAFTA, evaluating how dropping tariffs for Mexican imports from the US affected AMLO's electoral performance in 2006.

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mobility of productive factors, the Stolper-Samuelson theorem states that trade benefits individuals who own the factors with which the economy is relatively well endowed, and hurts the others. Under the specific-factors model, trade benefits individuals who are employed in the export-oriented sectors and hurts those who are employed in the import competing sectors.

A Appendix

A.A Alternative table: Vote shares in levels

Table 7 shows results equivalent to those of table 1 used in the main text, but using the AMLO's vote share in 2006 in columns 2 to 4. The results in the table indicate that a 1 standard deviation of employment change decrease the vote against AMLO by 0.49 standard deviations, when using OLS (column 3). When performing the estimation using the IV strategy, we find that the size of the effect more than doubles; a one standard deviation of change in employment leads to a 1.19 st. deviation drop in AMLO's vote share. This result confirm the results of table 1 discussed in the main text.

Table 7: AMLO's result in the 2006 election

VARIABLES	Employment change (1)	Vote share of year 2006 (2)	(3)	(4)
Employment change			-0.49***	-1.19***
			(0.10)	(0.28)
Local tariff drop	0.33***	-0.39***		
	(0.06)	(0.07)		
Initial pop, log	0.17	0.58**	0.59***	0.79***
	(0.25)	(0.23)	(0.16)	(0.13)
Area, log	0.06	-0.23**	-0.18	-0.16
	(0.09)	(0.11)	(0.11)	(0.11)
Agriculture emp. share	-0.04	-0.12**	-0.11**	-0.16**
	(0.05)	(0.06)	(0.05)	(0.06)
Observations	2,132	2,132	2,132	2,132
R-squared	0.21	0.28	0.36	-0.08
Method	1S	RF	OLS	IV
Weights	yes	yes	yes	yes
K-P LM p-value		-	-	.001

Robust standard errors in parentheses clustered at the state level.
*** p<0.01, ** p<0.05, * p<0.1

A.B First Stage estimates for table 2

In this section we present the first stage estimations used for the IV estimates shown in Table 2 in the main text. In table 2 below, the estimates of column 1 correspond to the first stage used for columns 1, 2 and 5 in table 2, while column 2 correspond to the estimates used for columns 3 and 6 in table 2.

Finally, the estimates of column 3 correspond to the estimates used for columns 4 and 7 in table 2.

Table 8: First stage estimations for table 2

| VARIABLES | Employment change | | |
| | 1993-2003 | 1993-2008 | 1993-2013 |
	(1)	(2)	(3)
Local tariff drop	0.33***	0.30***	0.32***
	(0.06)	(0.05)	(0.08)
Agriculture employment share	-0.04	-0.04	0.04
	(0.05)	(0.04)	(0.06)
Initial pop, log	0.17	0.31	-0.21
	(0.25)	(0.22)	(0.29)
Area, log	0.06	-0.03	0.18*
	(0.09)	(0.07)	(0.09)
Observations	2,132	2,132	2,152
R-squared	0.21	0.24	0.10

Robust standard errors in parentheses clustered at the state level.
*** p<0.01, ** p<0.05, * p<0.1

Table 9: PRD's and AMLO's vote levels

	vote share in year:			
	2000	2006	2012	2018
	(1)	(2)	(3)	(4)
Employment change 93-03	-1.12***	-1.19***		
	(0.22)	(0.28)		
Employment change 93-08			-1.09***	
			(0.34)	
Employment change 93-13				-0.94***
				(0.33)
Agriculture employment share	-0.19***	-0.16**	-0.19**	-0.04
	(0.07)	(0.06)	(0.08)	(0.11)
Initial population, log	0.35***	0.79***	1.01***	0.12
	(0.11)	(0.13)	(0.18)	(0.25)
Area, log	-0.05	-0.16	-0.36***	-0.04
	(0.09)	(0.11)	(0.10)	(0.15)
Observations	2,132	2,132	2,132	2,152
Method	IV	IV	IV	IV
Weights	yes	yes	yes	yes
K-P LM p-value	.001	.001	.001	.009

Robust standard errors in parentheses clustered at the state level.
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

A.C Equivalent to table 1 for other elections

Table 10: Result in the 2000 election

	Employment change (1)	Vote share of year 2000 with respect to 1994		
		(2)	(3)	(4)
Employment change			-0.17**	0.05
			(0.07)	(0.17)
Local tariff drop	0.34***	0.02		
	(0.06)	(0.06)		
Initial pop, log	0.19	-0.04	0.02	-0.05
	(0.24)	(0.19)	(0.17)	(0.22)
Area, log	0.05	0.13	0.13	0.13
	(0.09)	(0.13)	(0.12)	(0.13)
Agriculture emp. share	-0.03	-0.07	-0.08	-0.06
	(0.05)	(0.05)	(0.05)	(0.05)
Observations	2,132	2,132	2,132	2,132
R-squared	0.22	0.01	0.04	-0.00
Method	OLS	OLS	OLS	IV
Weights	yes	yes	yes	yes
K-P LM p-value		-	-	.001

Robust standard errors in parentheses clustered at the state level.
*** p<0.01, ** p<0.05, * p<0.1

Table 11: Result in the 2012 election

VARIABLES	Employment change (1)	Vote share of year 2012					
		with respect to 1994			with respect to 2000		
		(2)	(3)	(4)	(5)	(6)	(7)
Employment change			0.05	-0.05		0.17**	0.07
			(0.10)	(0.28)		(0.06)	(0.28)
Local tariff drop	0.28***	-0.01			0.02		
	(0.05)	(0.08)			(0.08)		
Initial pop, log	0.29	0.37**	0.34*	0.38**	0.47***	0.41***	0.45***
	(0.19)	(0.17)	(0.20)	(0.17)	(0.09)	(0.12)	(0.12)
Area, log	0.06	-0.10	-0.10	-0.10	-0.14	-0.15	-0.14
	(0.09)	(0.13)	(0.13)	(0.13)	(0.09)	(0.09)	(0.09)
Agriculture emp. share	-0.02	0.00	0.01	0.00	0.02	0.02	0.02
	(0.04)	(0.06)	(0.06)	(0.06)	(0.04)	(0.05)	(0.05)
Observations	2,132	2,132	2,132	2,132	2,132	2,132	2,132
R-squared	0.27	0.09	0.09	0.08	0.14	0.16	0.16
Method	OLS	OLS	OLS	IV	OLS	OLS	IV
Weights	yes	yes	yes	yes	yes	yes	yes
K-P LM p-value		-	-	.002	-	-	.002

Robust standard errors in parentheses clustered at the state level.

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

Table 12: Result in the 2018 election

VARIABLES	Employment change (1)	Vote share of year 2018					
		with respect to 1994			with respect to 2000		
		(2)	(3)	(4)	(5)	(6)	(7)
Employment change			0.18*	-0.09		0.26***	0.02
			(0.09)	(0.32)		(0.07)	(0.35)
Local tariff drop	0.28***	-0.02			0.01		
	(0.06)	(0.09)			(0.10)		
Initial pop, log	0.26	0.07	-0.01	0.09	0.12	0.03	0.12
	(0.19)	(0.15)	(0.16)	(0.16)	(0.12)	(0.10)	(0.18)
Area, log	0.07	-0.02	-0.03	-0.01	-0.04	-0.06	-0.04
	(0.08)	(0.15)	(0.16)	(0.15)	(0.10)	(0.11)	(0.11)
Agriculture emp. share	-0.03	0.06	0.07	0.05	0.06	0.08	0.06
	(0.04)	(0.06)	(0.06)	(0.06)	(0.05)	(0.05)	(0.05)
Observations	2,132	2,132	2,132	2,132	2,132	2,132	2,132
R-squared	0.25	0.00	0.03	-0.03	0.01	0.07	0.02
Method	OLS	OLS	OLS	IV	OLS	OLS	IV
Weights	yes	yes	yes	yes	yes	yes	yes
K-P LM p-value		-	-	.002	-	-	.002

Robust standard errors in parentheses clustered at the state level.

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

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