Gains from globalization and economic nationalism: AMLO v. NAFTA in the 2006 Mexican elections^{*}

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Abstract

Do gains from globalization erode support for economic nationalism? We study how NAFTA-enhanced local access to US-markets affected Mexican demands for protectionist platforms. The left -led by Andrés Manuel López Obrador (AMLO)- under-performed in cities benefiting from export access gains during the 2006 presidential elections. This effect is observed strictly in 2006 -the only post-NAFTA election in which debates over trade integration played a salient role. Our findings are robust to controls for import competing pressures from NAFTA and the China Shock. AMLO's 2006 protectionist platform likely cost him that year's election, and campaign media strategies in 2012 map to this earlier backlash.

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Keywords: Globalization, Protectionism, NAFTA.

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The historical tensions between globalization and isolation (Frieden, 2007) and the ongoing international rise of economic nationalism (Frieden, 2019) highlight the importance of the distributive aspects of globalization. While this literature has traditionally focused on the role of interest groups (Kayser, 2007), there is recent emphasis on how globalization shapes local voter preferences and electoral outcomes. More specifically, a growing body of academic work shows that cities in developed economies facing import-competing pressures from globalization tend to grow supportive of protectionist platforms. Indeed, the US -once a champion for globalizationfaces a domestic backlash against integration driven by those losing from the process (Dorn et al., 2020; Che et al., 2016; Auer, Bonadio and Levchenko, 2018; Feigenbaum and Hall, 2015). However, local economic benefits stemming from globalization may also lock voters against protectionist platforms - especially in smaller developing economies, where the gains from integration are likely greater. We show that this is what happened in Mexican labor markets benefiting from the North American Free Trade Agreement (NAFTA).

This paper studies whether NAFTA-induced market access gains for Mexican cities eroded local support for protectionism. Leveraging from the methodology proposed by Kovak (2013), and using data from Feenstra, Romalis and Schott (2002) and from the Mexican Economic Census, we first observe that cities focused in industries with larger export tariff drops from NAFTA experienced stronger and persistent employment growth. We use the local electoral performance of Andrés Manuel López Obrador (AMLO) during the 2006's Mexican Presidential Elections as our proxy for support for protectionism. This tightly competed election provides a proper setting to tackle our question. As the last set of tariff exemptions under NAFTA – Mexican imports of corn and beans from the US– were set to expire by the end of 2008, AMLO called for unilaterally rescinding on the NAFTA tariff drop schedule in an attempt to rally his rural electoral base. AMLO's main rival (Felipe Calderón from the PAN party) responded with a rural development platform that did not threaten the NAFTA accords, and attacked AMLO's proposal as radical left-wing protectionism, making debates over trade integration especially salient. We find that NAFTA-induced gains led to a decrease in AMLO's 2006 support relative to the baseline vote for the left in earlier elections. Chiefly, we find no such effects for other post-NAFTA presidential elections before or after 2006. While trade integration was only a contentious policy issue in 2006, all other elections occurred under similar incumbency and party-structure environments, while AMLO was also the candidate representing the left in 2012 and 2018. Finding that our results are contingent to the 2006 elections suggests that they are driven by a rejection of AMLO's economic nationalist platform that year, and not by other potential political channels observed in the International Political Economy literature (Margalit, 2011; Jensen, Quinn and Weymouth, 2017).

We argue that tariff reductions for Mexican exports into the US were not subject to influence from interest groups, as they were determined almost entirely by pre-NAFTA tariff protection levels. While NAFTA allowed Mexican producers to export into the US and Canadian markets, it also allowed access for US and Canadian products to compete in Mexico. Our results are robust to controlling for local tariff drops for Mexican imports from the US and Canada, which show no independent effect on voting patterns. We conclude that when taking into account both benefits for exporters and import competing pressures, the net economic effect of NAFTA was positive, explaining the overall electoral backlash against AMLO in 2006. Moreover, China's ascent as a manufacturing powerhouse with relevant presence in world markets led to additional importcompeting pressures -in both the Mexican and US markets- just as NAFTA tariff reductions were being rolled out.¹ Our estimates are robust to different controls for Chinese competition in the US and Mexico, or for Chinese and Mexican competitiveness in non-NAFTA markets. Moreover, these controls have no independent effect on AMLO's electoral outcomes in 2006.

Aggregating our political estimates on the 2006 election to the national level suggests that, had NAFTA not been a politically salient issue, AMLO would have obtained an extra 8 to 9 percent of the vote.² While this linear extrapolation should be considered carefully, we are

¹ While Mexican trade with China was only about 8% of trade with the US in 2006, it had been growing at an average compounded rate of 32% between 1993 and 2000, and at a rate of 41.5% since 2000. Such growth in trade was driven by a 57-fold increase in Mexican imports from China. While many in the Mexican public sphere saw the increasing presence of Chinese products in the Mexican and US markets as threatening, this did not play a prominent role in the 2006 electoral campaign. See Cornejo (2008).

²To obtain this estimate, we assume that the change in employment explained by the tariff reduction would

comfortable arguing that the decision to pursue a protectionist platform cost AMLO the razorthin election of 2006. To further assess the political effects of NAFTA, we study whether the 2006 conflict between AMLO's PRD and Calderón's PAN mapped into media campaign decisions in 2012 along the NAFTA export access dimension. We find that AMLO's media decisions in 2012 were consistent with the backlash against his 2006 campaign, as the prevalence of media ads mentioning "reconciliation" and "forgiveness" was significantly higher in places benefiting most from NAFTA. Interestingly, the prevalence of PAN ads attacking AMLO was also higher in these areas, which show no disproportionate use of negative ads against PRI's 2012 candidate by either AMLO or PAN. These results suggest that the NAFTA-induced backlash against AMLO in 2006 mapped into the political campaign strategies of 2012.

Finally, the Stolper-Samuelson theorem underpinning the workhorse models of international trade would suggests that benefits from integration should accrue to the owners of the relatively abundant input.³ Since Mexico is relatively scarce in human capital in the context of NAFTA, these models suggest that its benefits should concentrate in low-skill activities. We confirm these expectations by showing that the economic effects of NAFTA are restricted to low-skill activities, and that the corresponding political effect is only consistent with our main political result for this same group of industries.

have had no effect on AMLO's vote in 2006 with respect to previous benchmarks for the left.

³ The workhorse models of international trade have well-defined implications of the distributive consequences of globalization, and hence, on the political economy of preferences over trade integration (Rodrik, 1995). Mayda and Rodrik (2005) illustrate the empirical literature on the political economy of trade preferences. 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). Moreover, 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 workers 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. Interestingly, other studies suggest 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.

Our findings contribute to the trade, development, and political economy literature by looking at the economic and political effects of local export-access gains from integration within a developing economy. The literature on the economic effects of trade integration has grown in recent years by studying its sub-national dimension. Autor, Dorn and Hanson (2013) evaluate China's accession into the WTO, and how it affected American localities 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. In the Mexican context, Chiquiar (2008) and Atkin (2016) use different methodologies to document local effects of integration on wages, the skill premium and corresponding schooling decisions. On the US 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. Correspondingly, in a very recent contribution, Choi et al. (2021) confirm that areas suffering negative employment effects from NAFTA-induced import competing pressures produced a pro-Republican political swing.

But while this body of work has found negative local economic and political effects of import competing pressures, the literature on the effects of export access gains remains relatively limited.⁴ Moreover, there are reasons to expect overall effects of integration to be different for developing countries with smaller economies such as Mexico. While Mexico's economic growth since the market-oriented reforms of the late 80's has been modest (especially in comparison to China), estimates suggests that Mexico's benefits from NAFTA were greater than originally expected and gain more than the other partners of the trade agreement.⁵ Kehoe and Ruhl (2010) review different studies analysing Mexico's growth and conclude that Mexico has gained from

 $^{^{4}}$ McCaig and Pavcnik (2018) and Trefler (2004) study the economic effects of Vietnamese and Canadian trade integration with the US, showing meaningful gains from integration.

⁵In a series of articles, Tim Kehoe and co-authors have shown that applied general equilibrium models significantly underestimated Mexican gains from NAFTA (Kehoe, 2005; Kehoe, Pujolas and Rossbach, 2017). Using a general equilibrium model to evaluate NAFTA, Caliendo and Parro (2015) show that Mexico's welfare increases by 1.31%, U.S.'s welfare increases by 0.08%, and Canada's welfare declines by 0.06%. Interestingly, the authors show that welfare effects from tariff reductions are muted when the structure of production does not take into account intermediate goods or input-output linkages.

trade, and by some measures, more so than China. Further evidence suggests that NAFTAinduced competition accounts for part of these benefits. Instead of eroding economic activity, López-Córdova (2003) found relevant productivity increases in incumbent firms facing import competition from the US.

In this paper, we first document positive local economic effects of integration in cities benefiting from larger export access gains for their industries. We do this for Mexico, a developing country that entered into a Free-Trade Agreement (FTA) with two developed economies with higher productivity levels across the board.⁶ We show that local economic gains from exportaccess to the US market are not mirrored by losses from import-competing pressures from either NAFTA or China. Chiefly, export gains from NAFTA led to a political backlash against AMLO's protectionist platform during the 2006 election that was also absent for import-competing pressures. Finally, our finding that the economic effects of export access gains from NAFTA concentrate in low-skill activities - and that our main political estimates seem to be driven by the benefits for low-skill workers- is consistent with the predictions from the Stolper-Samuelson theorem underpinning the workhorse models of international trade, as well as with other empirical findings on the economic effects of NAFTA in Mexico (Hanson and Harrison, 1999; Esquivel and Rodriguez-López, 2003; Robertson, 2004; Chiquiar, 2008; Atkin, 2016). Taken together, these results suggest that the economic effects of NAFTA concentrated in areas gaining export access to the US market, and voters in these areas became less supportive of economic nationalism as a result.

The paper continues as follows: Section 1 discusses AMLO's electoral platform and campaign dynamics during his 2006 and later presidential bids. Section 2 presents our hypotheses and empirical strategy. Section 3 describes the data we use and presents descriptive statistics and visualizations. Section 4 presents our empirical results, and section 5 concludes.

 $^{^6}$ Our work focuses on tariff drops for exports to the US, as it represented 95% of total Mexican trade with the block by the time of its enactment.

I NAFTA and AMLO's presidential bids

During the decade that followed its severe economic crisis of 1982-85, the Mexican government implemented a series of market-oriented reforms that culminated in the implementation of the North American Free Trade Agreement (NAFTA) between Canada, Mexico and the US. 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 70% of Mexican exports to the US, 50% of US exports to Mexico, and removing all remaining tariffs over a period of 15 years (Villarreal and Cid, 2008). 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 phase-out periods. The last of these tariff exemptions –Mexican imports of corn and beans– were to be removed by the end of 2008, 15 years after the agreement went into effect.

The 2006 Mexican presidential election took place one term after the country's transition from seven decades of a 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 regarding 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.⁷

Two candidates were contesting the country's leadership in the 2006 presidential elections; Felipe Calderón, PAN's candidate and former Secretary of Energy, and AMLO, candidate of the Partido de la Revolución Democratica (PRD), and former Head of Government of the Federal District. 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.⁸ In response to AMLO's proposal, Calderón's announced a rural development platform

⁷For a thorough discussion on the effects of NAFTA on Mexico's agricultural sector, see Rosenzweig (2005).

⁸See https://wapo.st/2HFVzsU. AMLO's 2006 government platform is available at https://bit.ly/2HIv16h. For complementary analysis on his platform, see https://bit.ly/2JKk6K2

focused on compensating agriculture producers by creating rural protection policies and expanding PROCAMPO –the government's ongoing rural development program– while complying with NAFTA agreements to prevent a likely retaliation on the manufacturing front.⁹ 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 business guilds tended to side with Calderón.¹⁰

Calderón was declared winner by 0.6% of the vote. AMLO challenged Calderón's razor-thin victory, leading to massive protests in Mexico City. The situation escalated to the point that AMLO symbolically sworn himself in as "legitimate president" of Mexico in a public demonstration four months after the elections were held. Protests gradually faded and Calderón was inaugurated. The 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.¹¹ AMLO ran as PRD's candidate once more in 2012, competing against front-runner Enrique Peña Nieto from PRI, and Josefina Vásquez Mota from PAN. AMLO's campaign struck a much more conciliatory tone as means to appease public concerns after the 2006 campaign and protests. AMLO's economic platform became much more moderate and focused on job creation, austerity and competition. Chiefly, specific NAFTA revisions were not part of his policy platform, and concerns with trade integration had subsided after tariff exceptions had already expired.

AMLO was again runner-up in 2012. Peña Nieto's term was marked by corrosive corruption scandals and violent events that left the public disappointed with Mexico's political establishment. AMLO broke with PRD and formed the Movimiento Regeneración Nacional (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 in 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

 $^{^9{\}rm For}$ instance, Calderón makes this proposal explicitly during the nationally televised presidential debate. See <code>https://youtu.be/9WOvWxLGVBM</code>

¹⁰See Méndez Soto (2014) and http://elcotidianoenlinea.com.mx/pdf/14510.pdf.

¹¹Dell (2015) documents how the implementation of the Mexican drug war led to increased levels of violence.

any game-changing events that could alter his comfortable lead in the polls.¹²

In his third attempt AMLO finally won the 2018 presidential election, this time by a landslide, and Peña Nieto signed the USMCA FTA –a revised NAFTA accord pushed by president Trump– 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.¹³

II Empirical strategy

We hypothesize that market access gains due to the globalization of the Mexican economy had a negative effect in the support of AMLO in the 2006 presidential election. This effect was driven by a backlash against AMLO's protectionist platform, which called for preventing the expiration of Mexican import tariffs on corn an beans. While hoping to rally his rural base, this proposal also threatened US reciprocity against Mexican manufacturers, which inadvertently alienated voters in areas benefiting most from access to the US market through NAFTA. Chiefly, we argue that this effect travelled through a local economic channel. To test for this mechanism explicitly, we rely on an IV strategy in which we instrument the growth in local employment by the local benefits from the trade agreement. Different from other papers in this literature, the motivation for our IV strategy is to test for a specific economic channel, and not to solve endogeneity concerns on the relationship between changing economic conditions and other outcomes.¹⁴ In our case, we want to estimate the effect of integration-induced economic gains on local support for nationalist economic platforms. Hence, we rely on our IV strategy to isolate changes to employment outcomes that were driven by the local exposure to the NAFTA accord.

We test our hypothesis with the regression specifications below:

 $[\]label{eq:second} {}^{12} See \quad https://www.reuters.com/article/us-mexico-election/in-final-debate-mexican-presidential-favorite-says-a-nafta-fail-not-fatal-idUSKBN1J90B0.$

 $^{^{13}} See \ https://www.ft.com/content/92e9ce0a-c55f-11e8-bc21-54264d1c4647.$

¹⁴For instance, ?? address potential reverse causality issues between local employment changes and the penetration of Chinese products in the US market by instrumenting the latter by the penetration of Chinese products in other developed economies.

$$OLS \quad \Rightarrow \quad \Delta AMLO_c = \alpha_0 + \alpha_1 \Delta E_c + X' \theta_c + \epsilon_c \tag{1}$$

Reduced Form
$$\Rightarrow \Delta AMLO_c = \gamma_0 + \gamma_1 LTD_c + X'\Psi_c + \mu_c$$
 (2)

First stage
$$\Rightarrow \Delta E_c = \beta_0 + \beta_1 LTD_c + X' \Upsilon_c + \eta_c$$
 (3)

Inst. Variable
$$\Rightarrow \Delta AMLO_c = \delta_0 + \delta_1 \Delta \hat{E}_c + X' \chi_c + \kappa_c$$
 (4)

where $\Delta AMLO_c$ stands for AMLO's vote share in city c in the 2006 election minus PRD's local vote share in previous elections¹⁵; 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; $\Delta \hat{E}_c$ 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 the local tariff drop on employment growth (β_1), a negative estimate of local tariff drop on AMLO's vote share (γ_1), and a negative estimate of (instrumented) employment growth on AMLO's vote share (δ_1). That is, we expect cities experiencing higher tariff drops to grow faster as a consequence of export market access benefits, 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 Cárdenas in the 1994 presidential elections.¹⁶ PAN held the

 $^{^{15}}$ 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.

¹⁶Cuauhtémoc 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.

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. Finally, if areas benefiting from NAFTA reject AMLO beyond his 2006 economic platform, we would observe similar effects in 2012 and 2018. If the hypothesized political effects are indeed contingent to the 2006 elections and not to other placebo elections, we would conclude that they were driven by NAFTA-induced economic gains and their impact on preferences over protectionism.

One general 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. In such case, local tariff drops as an 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 product tariff levels 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, there is no evidence suggesting that the tariff cuts were manipulated to induce correlation with counterfactual industry performance or with industrial political influence.



Figure 1: Relationship between tariff drop and pre-liberalization tariff Levels

Notes: Figure shows the relation between pre-liberalization tariff (log(1 + 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.

III 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 follow Atkin (2016) and 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.¹⁷

¹⁷ 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.

III.A Employment and demographic data

We use the Economic Census data from INEGI of 1993, 2003, 2008 and 2013, to assess the employment in each Mexican city and industry following the NAICS classification.¹⁸ We capture baseline socio-demographic variables from INEGI's 1990 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.

For the construction of other variables explained below we use estimates of employment at the industry-city level tabulated by INEGI using the 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).

III.B Local tariff drops

US import tariffs by product between 1989 and 2001 are obtained from Feenstra, Romalis and Schott (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.¹⁹

In order to calculate the relevant local tariff drop for each city we combine the industry specific

¹⁸The 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. The Economic Census does not incorporate employment estimates for the agriculture sector. Our results are robust to controlling for the local employment share in agriculture obtained from the Population Census of 1990.

¹⁹Table A.1 in the appendix list as an illustration of the 40 sectors that observed the larger tariff drops (out of 96), which concentrate in textiles and light manufacturing.

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 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* just before the signing of NAFTA. We perform a similar calculation for the local Mexican tariff drop to US and Canadian products under NAFTA, building on Mexican tariffs at the ISIC 3.1 industry/year level come from López-Córdova (2003).

III.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.

III.D Media advertisements in the 2012 elections

In order to assess whether AMLO's strategy to appease voters concerned with his radical platform and actions of 2006 were intensified for areas with NAFTA induced economic gains, we look at the geographical distribution of media campaign ads in the 2012 election. The Mexican electoral authority (INE), started collecting this information as part of the electoral reforms of 2007.²⁰ The data accounts for the use of each ad in each TV and Radio outlet in the country during the 2012 electoral campaign. Leveraging from a mapping of the geographic reach of each outlet's signal, we are able to assess the relative use of different ads in different municipalities during

 $^{^{20}\}mathrm{Sadly},$ this kind of information is not available for the 2006 election.

the campaign. The political aim in each of these ads can be captured from their scripts. In the case of AMLO, there are specific ads that focus on a message of forgiveness and reconciliation, while other ads are negative in nature.²¹ For PAN and PRI, scripts also help detect negative advertisements against either AMLO or eachother, which will help study whether the distribution of negative ads maps to the 2006 conflict between AMLO and PAN.

III.E Covariates

Our main estimates control for the local agro-ecological suitability of the tariff-expiring "grains" (corn and beans) that AMLO's proposal aimed to protect.²² Moreover, these estimates control for the local share of non-tradable employment in the 1990 Population Census, as they were less exposed to globalization in general. Finally, we include the baseline population size (1990 Population Census) and area of a city as covariates, which helps us control for demographic determinants of political preferences which may correlate with local tariff drops.

IV Results

IV.A The geography of economic and electoral outcomes

There is substantial geographic 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

 $^{^{21}\}mathrm{Ads}$ http://pautas.ife.org.mx/transparencia/proceso_2012/camp/. can be downloaded from mediaThe use of each ad ineach outlet during the campaign can be found at http://pautas.ife.org.mx/transparencia/ot/pef_2012/index.html. The geographic reach of each Radio and TV station can be found at

https://portalanterior.ine.mx/archivos3/portal/historico/contenido/Mapa_de_Coberturas_de_Radio_Television/. These data sources were prepared and integrated for Larreguy, Marshall and Snyder (2014) and Larreguy, Marshall and Snyder Jr (2018). We are very thankful to Horacio Larreguy for sharing this data with us.

²²We 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-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.



Figure 2: The geography of economic and electoral outcomes

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.

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.

IV.B Regression estimates

We hypothesize a negative effect of local economic benefits due to enhanced export market access and local demand for protectionist policies. We use AMLO's vote share increase in 2006 with respect to PRD's vote share in previous elections –to account for the usual vote towards left wing candidates– as our main measure of local preference for protectionism.²³ In figure 3 we show a preview of our empirical analysis, plotting 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.²⁴ 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.

Our main estimates are shown in Table 1. All regressions control for initial population, area, grain suitability and non-tradable employment share, and weight observations by the local electoral turnout of 2006. We find that a one standard deviation increase in the local tariff drop is associated with about a 0.29 standard deviation increase in local employment (column 1). In the next columns we show results with vote share as dependent variable. In columns 2 to 4 the vote share in 2006 is measured with respect to the left share in 1994, while columns 5 to 7 is measure with respect to the left share in 2000. The reduced form equation, shown in column 2, indicates that the same local tariff drop is associated with a 0.15 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

²³Tables A.2 and A.3 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 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.

 $^{^{24}}$ The first stage estimation in panel (a) corresponds to the coefficient shown in column 1 of table 1, while the second stage estimation shown in panel (b) is equivalent to the column 4 of table 1.



Figure 3: Graphical representation of the instrumental variables regression

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 indicate commuting zones and size is proportional to voting shares in the in 2006's election.

and 6, indicate that a one s.d. increase in employment reduced the vote for AMLO in between 0.31 and 0.24 standard deviations, depending on whether the comparison baseline is 1994 or 2000. The OLS estimates are likely influenced by economic factors other than trade integration, so we turn to IV estimates in which we isolate the effect of NAFTA-induced economic gains on the vote for AMLO in 2006. In columns 4 and 7 we show estimates where employment change is instrumented by the local export tariff drop from NAFTA. Depending on the comparison baseline used, the point estimates suggest a drop in AMLO's vote share between 0.51 and 0.59 s.d. as a consequence of a one standard deviation increase in employment growth. These effects are between 1.7 and 2.5 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.

While the results shown so far are consistent with lower demands for protectionism in areas benefiting from NAFTA, they could plausibly be driven by other political factors (incumbency, right-ward shift in preferences, backlash against AMLO, etc.). As we discussed above, if other factors were at play, in such case the observed political effects should also hold for other elec-

		Vote share of year 2006						
	Employment change	with r	espect to	o 1994	with r	espect to	o 2000	
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Employment change			-0.31 (0.10)	-0.51 (0.27)		-0.24 (0.10)	-0.59 (0.28)	
Local tariff drop	0.29	-0.15	()	()	-0.17	()	()	
-	(0.06)	(0.08)			(0.08)			
Initial pop, log	-0.04	0.71	0.67	0.69	0.72	0.66	0.70	
	(0.23)	(0.25)	(0.20)	(0.16)	(0.18)	(0.14)	(0.09)	
Area, log	-0.09	-0.13	-0.14	-0.18	-0.17	-0.16	-0.22	
	(0.09)	(0.11)	(0.11)	(0.10)	(0.10)	(0.10)	(0.11)	
Grains suitability	-0.21	0.08	0.03	-0.03	0.14	0.11	0.01	
	(0.06)	(0.06)	(0.06)	(0.07)	(0.04)	(0.05)	(0.08)	
Share non-tradable	0.44	-0.05	0.09	0.17	0.02	0.13	0.28	
	(0.15)	(0.11)	(0.07)	(0.15)	(0.10)	(0.08)	(0.17)	
Observations	2,132	2,132	2,132	2,132	2,132	2,132	2,132	
R-squared	0.34	0.32	0.37	_	0.38	0.39	_	
Method	1S	\mathbf{RF}	OLS	IV	\mathbf{RF}	OLS	IV	
K-P LM p-value		-	-	.006	-	-	.006	

Table 1: AMLO's result in the 2006 election

Notes: Standard errors in parentheses clustered at the state level. All regressions weight observations by the local electoral turnout in the 2006 election. The estimates of column 1 correspond to the first stage estimates of the instrumental variables estimates of columns 4 and 7.

							Vote	share of	year:		
	Employ	ment ch	ange: fro	om 1994 to	2000	2006	2012	2018	2006	2012	2018
	2003	2003	2008	2013	wi	ith respe	ect to 19	94	with r	espect to	o 2000
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Employment change 93-03					0.03	-0.51			-0.59		
Employment enange 55 05					(0.23)	(0.27)			(0.28)		
Employment change 93-08					(0.20)	(0.21)	-0.13		(0.20)	0.03	
							(0.29)			(0.30)	
Employment change 93-13								-0.24			-0.11
								(0.32)			(0.36)
Local tariff drop	0.30	0.29	0.26	0.25							
	(0.06)	(0.06)	(0.05)	(0.08)							
Initial pop, log	0.00	-0.03	0.04	-0.46	0.19	0.69	0.28	-0.18	0.70	0.33	-0.08
	(0.23)	(0.23)	(0.22)	(0.26)	(0.24)	(0.16)	(0.20)	(0.25)	(0.09)	(0.14)	(0.19)
Area, log	-0.11	-0.10	-0.13	0.04	0.03	-0.18	-0.16	-0.09	-0.22	-0.15	-0.11
	(0.09)	(0.09)	(0.08)	(0.10)	(0.18)	(0.10)	(0.13)	(0.15)	(0.11)	(0.11)	(0.14)
Grains suitability	-0.22	-0.21	-0.17	-0.22	-0.06	-0.03	-0.07	-0.18	0.01	-0.03	-0.14
	(0.06)	(0.06)	(0.07)	(0.09)	(0.12)	(0.07)	(0.10)	(0.16)	(0.08)	(0.10)	(0.16)
Non-Tradable Emp. Share	0.42	0.45	0.48	0.45	-0.15	0.17	0.25	0.34	0.28	0.21	0.29
	(0.15)	(0.15)	(0.14)	(0.15)	(0.10)	(0.15)	(0.19)	(0.23)	(0.17)	(0.18)	(0.21)
Observations	2.132	2.132	2.132	2.132	2.132	2.132	2.132	2.132	2.132	2.132	2.132
Weights by election turnout in	2000	2006	2012	2018	2000	2006	2012	2018	2006	2012	2018
R-squared	0.35	0.35	0.38	0.25	-	-	-	-	-	-	-
Method	1S	1S	1S	1S	IV	IV	IV	IV	IV	IV	IV
K-P LM p-value	-	-	-	-	.006	.006	.008	.041	.006	.008	.041

Table 2: AMLO's results in three placebo elections

Notes: Standard errors in parentheses clustered at the state level. All regressions weight observations by the local electoral turnout in the respective elections. The estimates of columns 1 to 4 correspond to the first stage estimates of the instrumental variables estimates of columns 5 to 11.

tions between 2000 and 2018. Thus, to test for this we perform placebo estimate of the same specifications shown in columns 4 and 7 in table 1 for previous and later elections. Since our argument is that AMLO's protectionist platform was a salient feature only in the presidential run of 2006, we expect employment growth –explained by tariff drops from NAFTA– not to be a significant in these placebo estimates for other years.

Table 2 provides placebo estimates for other presidential elections. Columns 1-4 show first stage specifications on the effect of the local tariff drop on employment change, finding that the local economic effects of export access gains are present in economic censuses between 1998 to 2013. Columns 5-11 show IV estimates where the dependent variable is the differential vote share of each election since 2000. In columns 5 to 8, the dependent variable we use the difference with respect to PRD's share in 1994, while in columns 9 to 11 we use PRD's share in the 2000 election. We find that other than in 2006, NAFTA-induced economic gains do not associate with the growth in the local electoral performance of the left in any election. Given that the effects are nonexistent 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, from left-leaning platforms in general, or in favor of incumbent candidates.

We provide a number of robustness checks in the appendix. First, in order to assess the statistical significance in the difference of the coefficients in each election, we perform a stacked regression specification. Figure A.2 shows that the local tariff drop associates with a significant drop in AMLO's vote in 2006 with respect to the 1994 baseline, while effects are close to 0 for all other elections. Second, following Dell, Feigenberg and Teshima (2018 forthcoming), we restrict our sample to urban labor markets, where the local effects on manufactures should concentrate. Tables A.7 and A.8 in the appendix replicate tables 1 and 2 limiting our sample to urban municipalities and metropolitan areas which account for just over with over 50% of the population residing. While the main coefficients are larger, the overall interpretation of results -that negative effects of NAFTA induced employment growth on AMLO's vote gains are only observed in the 2006 election- remains unaltered. Third, our main specifications control for grains' agro-ecological suitability as means to identify areas of the country that should benefit most from AMLO's proposed import tariff extensions. Table A.9 replicates table 2 but controlling for the employment share in agriculture in 1990 instead of grain suitability, and the analytic conclusions remains. Finally, Borusyak, Hull and Jaravel (2018) provide a novel consistency framework for estimation in shift-share empirical analyses where the identification comes from exogenous shocks as it is our case. Table A.10 provides election-specific estimates following their estimation framework, showing that our main conclusions are robust.²⁵

Performing a back of the envelope calculation using the results in columns 4 and 7 of table

 $^{^{25}}$ The minor differences in estimates between corresponding specifications in table 2 and table A.10 are due to the winsorization of variables performed in our main specifications, which cannot be easily replicated when performing estimations under the Borusyak, Hull and Jaravel (2018) framework.

1, if NAFTA had not played a role in the election –which we interpret as a coefficient of zero– we find that AMLO would have gained an extra 8-9% in the national vote for the 2006 Mexican presidential election. While this counterfactual calculation relies on a linear projection that should be interpreted with caution, we find this effect to be sufficiently high for us to safely assume that it was pivotal for such a narrow electoral outcome. By appealing to his rural base with a protectionist stance, AMLO alienated voters in areas benefiting from NAFTA, losing the election as a consequence.

IV.C Incorporating import-competing pressures from NAFTA

While NAFTA opened the US market for Mexican products, it also made room for US and Canadian products to serve the Mexican market. The degree to which these import-competing pressures from NAFTA may have had affected local labor markets on the Mexican side has, to the authors' knowledge, not been documented. While a segment of the trade literature has found negative local economic and political effects of import competing pressures from integration, there are reasons to expect different effects for Mexico in the context of NAFTA. López-Córdova (2003) finds that NAFTA led to TFP gains in firms facing import-competing pressures due to NAFTA tariff drops. Moreover, lower protections from US/Canadian competition may correlate with lower imported input costs to local production. To assess the net economic and political effect of NAFTA, we incorporate data on Mexican tariff drops for imports benefiting from the agreement, and calculate similar measures of local tariff drops on Mexican imports of goods that started benefiting from the NAFTA accords in 1994.²⁶

Figure A.1 shows that, as was the case for US import tariffs drops under NAFTA, Mexican tariffs drops were also mostly determined by pre-NAFTA tariff levels, so that their variation can be considered exogenous to later events on Mexican local labor markets. Table 3 shows similar specifications to those in the previous section, but incorporating the local tariff drop imports from the US into Mexico. Columns 1-4 show the first stage coefficients tariff drops on

 $^{^{26}\}mathrm{We}$ are thankful to Ernesto López Cordova for having shared this data with us.

employment growth between 1993 and 2000, 2006, 2012 and 2018 respectively. These columns suggest that the effect of export access gains for local production remain mostly unaffected after controlling for import-competing pressures. Moreover, they show much smaller, positive and non-statistically significant independent economic effects of import competing pressures. These results suggest that import competing pressures did not lead to local labor market losses.

The estimates in columns 5-8 show the corresponding instrumental variable estimates of the effect of employment change on the change in vote for the left in the 2000, 2006, 2012 and 2018 elections with respect to the 1994 election. Again, these results confirm that a political backlash against the left is only observed for the 2006 election, when AMLO pursued a protectionist economic platform against expiring tariff exemptions under NAFTA.

IV.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, Dorn and Hanson (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.

To study these questions, we use a similar empirical strategy as used in table 1. We analyzed the political effect of employment change instrumented by NAFTA tariff drops, but now

						Vote share of year:					
	Employ	yment cl	nange fro	m 1994 to:	2000	2006	2012	2018	2006	2012	2018
	2003	2003	2008	2013	W	ith respe	ect to 19	94	with r	espect to	o 2000
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Employment change 93-03					-0.12	-0.55			-0.58		
Employment change by oo					(0.21)	(0.25)			(0.27)		
Employment change 93-08					(0.21)	(0.20)	-0.20		(0.21)	-0.02	
Employment change by be							(0.25)			(0.27)	
Employment change 93-13							(0.20)	-0.25		(*)	-0.07
1 0 0 0 0								(0.26)			(0.31)
											()
$MEX \rightarrow USA$ tariff drop	0.20	0.20	0.20	0.18							
-	(0.06)	(0.05)	(0.04)	(0.06)							
$\text{USA} \to \text{MEX}$ tariff drop	0.12	0.11	0.07	0.09							
	(0.08)	(0.08)	(0.07)	(0.07)							
Initial non-log	-0.01	-0.04	0.02	-0.47	0.15	0.67	0.34	-0.16	0.69	0.42	-0.03
mitiai pop, iog	(0.22)	(0.22)	(0.02)	(0.25)	(0.10)	(0.14)	(0.18)	(0.25)	(0.03)	(0.11)	(0.20)
Area log	-0.10	-0.08	-0.11	0.06	(0.20)	-0.18	-0.21	_0.09	-0.23	-0.22	(0.20)
mea, log	(0.08)	(0.00)	(0.07)	(0.00)	(0.02)	(0.09)	(0.11)	(0.15)	(0.11)	(0.10)	(0.12)
Grains suitability	-0.37	-0.35	-0.25	-0.35	-0.18	-0.09	-0.16	-0.32	0.00	-0.10	-0.24
Grams Subashity	(0.09)	(0.09)	(0.12)	(0.14)	(0.20)	(0.11)	(0.14)	(0.23)	(0.13)	(0.13)	(0.24)
Share non-tradable	2.10	2.22	2.29	2.26	-0.34	1.01	1.19	1.55	1.39	0.88	1.15
	(0.73)	(0.73)	(0.66)	(0.71)	(0.41)	(0.72)	(0.89)	(1.00)	(0.80)	(0.83)	(0.90)
	(0110)	(0110)	(0.00)	(0)	(0)	(0)	(0.00)	()	(0.00)	(0.00)	(0100)
Observations	2,132	2,132	2,132	2,132	2,132	2,132	2,132	2,132	2,132	2,132	2,132
Weights by election turnout in	2000	2006	2012	2018	2000	2006	2012	2018	2006	2012	2018
R-squared	0.36	0.35	0.37	0.25							
Method	1S	1S	1S	1S	IV	IV	IV	IV	IV	IV	IV
K-P LM p-value	-	-	-	-	.023	.022	.02	.113	.022	.02	.113

Table 3: Political effects including Mexican import tariff drops

Notes: Standard errors in parentheses clustered at the state level. All regressions weight observations by the local electoral turnout in the respective elections. The estimates of columns 1 to 4 correspond to the first stage estimates of the instrumental variables estimates of columns 5 to 11.

controlling for different dimensions of trade competition. Following Autor, Dorn and Hanson (2013), the specific expression²⁷ we use to proxy trade exposure in each city is:

$$\Delta$$
 trade exposure $_{c} = \sum_{i} \left(\frac{L_{c,i}}{L_{c}}\right) \times \frac{\Delta \text{trade}_{i,m}}{L_{i}}$

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 Δ trade_{*i*,*m*} is the change of trade in market m.²⁸ 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.²⁹

Table 4 shows the results of assessing the importance trade competition. 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. Columns 2 and 7 control for the local relevance of Chinese product export growth to the US Market, while columns 3 and 8 control for Chinese exports growth to Mexico. As Autor, Dorn and Hanson (2013) explains, these trade shocks may be explained by China's increased 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 therefore having an impact over the intensity and composition of Mexican exports to the US. To address this, columns 4 and 9 consider Chinese product exports growth to its top 10 non-NAFTA destinations, which is likely unaffected by NAFTA demand factors, and it is intended to capture China's supply productivity increase over the period. Finally, columns 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

 $^{^{27}}$ 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 of Autor, Dorn and Hanson (2013).

²⁸Bilateral trade used in this section is the cleaned trade dataset by Bustos and Yildirim (2019).

²⁹We decided not to include Mexican exports to the US, as a control variable, since its effect is already captured and it is endogenous to the employment change, our main explanatory variable.

	AMLO vote share in 2006									
		with r	espect to	o 1994			with r	espect to	o 2000	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Employment change	-0.51	-0.53	-0.54	-0.53	-0.50	-0.59	-0.66	-0.68	-0.69	-0.61
	(0.27)	(0.31)	(0.31)	(0.32)	(0.28)	(0.28)	(0.32)	(0.29)	(0.31)	(0.28)
China \rightarrow US		0.03					0.08			
$Omina \rightarrow OO$		(0.03)					(0.00)			
China \rightarrow Mexico		(0.01)	0.05				(0.05)	0.13		
			(0.09)					(0.12)		
$China \rightarrow Other$			(0.00)	0.03				(0.22)	0.13	
				(0.08)					(0.11)	
$Mexico \rightarrow Other$					-0.03				()	0.07
					(0.05)					(0.04)
Initial pop, log	0.69	0.70	0.69	0.70	0.70	0.70	0.71	0.70	0.71	0.69
	(0.16)	(0.15)	(0.15)	(0.15)	(0.16)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)
Area, log	-0.18	-0.19	-0.19	-0.19	-0.18	-0.22	-0.25	-0.25	-0.26	-0.22
	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.11)	(0.11)	(0.10)	(0.11)	(0.10)
Grains suitability	-0.03	-0.03	-0.02	-0.03	-0.04	0.01	0.01	0.03	0.02	0.02
	(0.07)	(0.07)	(0.06)	(0.07)	(0.07)	(0.08)	(0.08)	(0.07)	(0.07)	(0.07)
Non-Tradable Emp. Share	0.17	0.18	0.18	0.18	0.17	0.28	0.31	0.32	0.32	0.29
	(0.15)	(0.16)	(0.16)	(0.17)	(0.15)	(0.17)	(0.17)	(0.16)	(0.17)	(0.16)
	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.102
Observations	2,132	2,132	2,132	2,132	2,132	2,132	2,132	2,132	2,132	2,132
Method	IV	IV	IV	IV	IV	IV	IV	IV	IV	IV
K-P LM p-value	.006	.009	.013	.012	.006	.006	.009	.013	.012	.006

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

Notes: Standard errors in parentheses clustered at the state level. 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 non-NAFTA markets. All regressions weight observations by the 2006 local electoral turnout.

trade shocks included in the analysis. Moreover, we find that these channels show no apparent independent effect on AMLO's 2006 vote gains.

IV.E Reconciling with voters that gained from NAFTA: Parties' media strategies in 2012

As we mentioned above, aggregating our main effects across Mexican cities suggests that AMLO's 2006 decision to pursue a protectionist platform cost him about 8% of the vote. If the political effects of his 2006 economic platform was as large and pivotal as our results suggest, AMLO may have reconsidered some of his proposals and responded accordingly in his presidential campaign

of 2012. That is, if voters in regions benefiting from NAFTA reacted negatively to AMLO's 2006 platform, it would be expected of him to prioritize these regions for efforts geared at appeasing and reconciling with voters concerned over his 2006 economic platform.

We study the intensity of AMLO's ads used in different locations, and the prevalence of ads with a conciliatory or confrontational tones. We expect a more intense media presence of AMLO in locations that benefited more from NAFTA and where he had an adverse result in 2006. We measure ad intensity as the ratio of the number of ads to the number of total votes of that location in the previous election. Regarding the message, we hypothesize that the share of conciliatory add should be higher in municipalities that experienced larger tariff drops due to NAFTA, but the prevalence of negative ads should not be affected by tariff drops. We leverage the fact that only some of his ads mention reconciliation after his radical 2006 stances. The shared heading in the script of the ads talking about reconciliation reads: "I candidly offer my hand as signal of reconciliation, of friendship, to those that I may have affected in my struggle for democracy and peace". These are the only adds that include the word "reconciliation". We benchmark these outcomes against the relative use of ads aimed at undermining the credibility of the PRI party, which was AMLO's main competitor (and eventual winner) in the 2012 election. The shared script heading in these ads reads: "Do you really think that voting for PRI will help this country? Do you really think there's anyone better than AMLO?". These were the only ads from AMLO that referred to other parties directly.³⁰

Results of our analysis is shown in table 5, where we run regressions similar to those above, but now using the ads as the dependent variables and focusing on the results of the reduced form and instrumental variable regressions. Consistent with our hypothesis, we find that places with a larger tariff drop or a larger increase in employment were places that AMLOs campaign chose to expose to a higher intensity of ads (columns 1 and 2): A one standard deviation drop on tariffs is correlated with a 0.06 s.d. increase in intensity of ads, while a one standard deviation in employment (instrumented by tariff drop) is found to increase ads by 0.27 st. deviation.

³⁰The "reconciliation" ad can be downloaded and viewed at http://pautas.ife.org.mx/materiales/pef_2012/RV00231-12.mp4. The ad attacking PRI can be found at http://pautas.ife.org.mx/materiales/pef_2012/RV0095912.mp4.

Regarding the use of conciliatory ads, results in columns 3 and 4 show that a one s.d. increase in the local tariff drop associates with a 0.29 standard deviation increase in the share of conciliatory ads. The estimates of the effect of employment change is even more steep: a one standard deviation of employment change is found to have increased conciliatory ads in 1.3 standard deviations. On the other hand, columns 5 and 6 show no meaningful relationship between local tariff drops or employment change on the prevalence of more frontal ads targeting his opponents of PRI. Probably this later result is consistent with the decision to run a less controversial electoral campaign. These results suggest that, while benefits from NAFTA informed AMLO's deployment of conciliatory messages in 2012, they did not inform his deployment of negative messages against the front-runner.

We follow a similar approach in table 6 to assess the distribution of PAN and PRI negative advertisements during the 2012 election. Columns 1 and 2 and 7 and 8 show that both PAN and PRI also had a relatively high ad intensity in locations experiencing higher tariff drops. However, columns 3 and 4 show that the share of PAN's negative ads against AMLO was higher in these areas: A one standard deviation drop on tariffs is correlated with a 0.11 s.d. increase in the share of negative ads against AMLO, while a one standard deviation in employment is found to increase these negative ads against AMLO by 0.52 s.d. Columns 5 and 6 show that these associations are actually negative for the share of ads attacking PRI's front-runner.³¹ Finally, columns 9 and 10 show that the proportion of PRI's negative ads against AMLO was not higher in areas benefiting most from NAFTA.³² Overall, these results suggest that the 2006 conflict was still resonating in the 2012 campaign strategies along the NAFTA dimension, with AMLO striking a conciliatory tone, PAN trying to exacerbate old fears about AMLO, and PRI remaining on the fance.

on the fence.

³¹One potential reason for this negative result is that PRI was the party responsible for the signing of the NAFTA accords in the early 90's. PAN's strategy may have considered that attacking PRI in places benefiting from NAFTA could be counterproductive.

³²The overall share of negative ads by PRI's was lower in total compared to AMLO or PAN, as is expected for front-runners in an election. Still, some negative ads were devoted to AMLO as the main competitor and to PAN as the incumbent during the spark in violence of the previous years.

		А	ds by Al	MLO - P	RD	
	Ad Int	tensity	Recond	iliation	Attacks	s on PRI
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Employment change		0.27		1.31		0.11
		(0.15)		(0.31)		(0.19)
Local tariff drop	0.06		0.29		0.03	
	(0.03)		(0.05)		(0.04)	
Area, log	-0.23	-0.27	-0.09	-0.26	0.19	0.17
	(0.06)	(0.06)	(0.08)	(0.18)	(0.10)	(0.09)
Initial pop, log	-0.54	-0.56	0.19	0.11	-0.09	-0.10
	(0.12)	(0.09)	(0.07)	(0.22)	(0.08)	(0.07)
Grain Suitability	-0.10	-0.10	0.12	0.14	-0.13	-0.12
	(0.03)	(0.04)	(0.07)	(0.12)	(0.06)	(0.06)
Non-Tradable Emp. Share	0.07	-0.03	0.03	-0.45	-0.23	-0.27
	(0.10)	(0.10)	(0.10)	(0.20)	(0.08)	(0.12)
Observations	2,349	2,349	2,349	2,349	2,349	2,349
R-squared	0.32	-	0.17	-	0.14	-
Method	\mathbf{RF}	IV	\mathbf{RF}	IV	\mathbf{RF}	IV

Table 5: AMLO's 2012 media ads

Notes: Columns 1, 3 and 5 provide reduced form estimates of the effects of the local tariff on AMLO's ad strategies, while columns 2, 4 and 6 provide instrumental variable estimates of the effect of employment growth between 1993 and 2008. Standard errors in parentheses are clustered at the city level. All regressions weight observations by the local electoral turnout of the 2012 election.

			Ads	by PAN				Ads	s by PRI	
	Ad int	tensity	Attacks	on AMLO	Attacks	s on PRI	Ad int	tensity	Attacks	on AMLO
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
		0.00		0 50		1 10		0.01		0.05
Employment change		0.29		0.52		-1.13		0.31		-0.05
		(0.15)		(0.29)		(0.27)		(0.16)		(0.22)
Local tariff drop	0.06		0.11		-0.25		0.07		-0.01	
	(0.04)		(0.07)		(0.05)		(0.04)		(0.05)	
A 1	0.00	0.07	0.07	0.00	0.10	0.99	0.00	0.07	0.00	0.04
Area, log	-0.23	-0.27	0.27	0.20	0.19	0.33	-0.23	-0.27	0.03	0.04
	(0.06)	(0.06)	(0.06)	(0.08)	(0.07)	(0.11)	(0.06)	(0.06)	(0.09)	(0.08)
Initial pop, log	-0.54	-0.56	-0.02	-0.05	0.05	0.12	-0.54	-0.56	0.18	0.18
	(0.12)	(0.09)	(0.10)	(0.12)	(0.08)	(0.17)	(0.13)	(0.10)	(0.11)	(0.12)
Grain Suitability	-0.10	-0.10	-0.01	-0.00	0.14	0.13	-0.09	-0.09	-0.43	-0.43
	(0.03)	(0.04)	(0.10)	(0.08)	(0.05)	(0.08)	(0.03)	(0.04)	(0.19)	(0.19)
Non-Tradable Emp. Share	0.08	-0.03	0.08	-0.11	0.13	0.55	0.09	-0.02	-0.10	-0.08
	(0.10)	(0.10)	(0.10)	(0.17)	(0.09)	(0.19)	(0.11)	(0.11)	(0.06)	(0.11)
Observations	2,349	2,349	2,349	2,349	2,349	2,349	2,349	2,349	2,349	2,349
R-squared	0.31	-	0.09	-	0.10	-	0.31	-	0.23	-
Method	\mathbf{RF}	IV	\mathbf{RF}	IV	\mathbf{RF}	IV	\mathbf{RF}	IV	\mathbf{RF}	IV

Table 6: PAN's and PRI's 2012 media ads

Notes: Columns 1, 3, 5, 7 and 9 provide reduced form estimates of the effects of the local tariff on PAN and PRI's ad strategies, while columns 2, 4, 6, 8 and 10 provide instrumental variable estimates of the effect of employment growth between 1993 and 2008. Standard errors in parentheses are clustered at the city level. All regressions weight observations by the local electoral turnout of the 2012 election.

IV.F Evaluating Stolper-Samuelson: Heterogeneity on skill-dependence

As discussed in the introduction, there are standing disagreements on the performance of workhorse models of trade in predicting the distributive and political effects of trade integration. Particularly, the Stolper-Samuelson theorem predicts that trade integration should yield economic gains towards economic activities that rely on the relatively abundant input of a country. To contribute to this debate, we perform similar specifications as those presented above, but separating economic growth according to the characteristics of different economic activities within Mexican cities.

More specifically, we evaluate in this section the effect of local tariff drops on employment in high and low skill-dependence industries. We separate industries along this dimension leveraging from their occupational staffing patterns and the education profile of each occupation as described in the US O*NET program.³³ We then evaluate the same specifications as above, but evaluating the economic effects of local tariff drops on each group of industries separately. Finally, we perform the rest of the instrumental variable analysis separately. While this presumes that the political effects travel through a single type of economic activity, we compare our results to those of previous specifications to assess which channel is more likely to explain the conclusions outlined above.

Table 7 shows the results of these specifications. Columns 1 and 2 show separate first-stage regressions on employment change in high skill and low skill economic activities. Both regressions show positive coefficients, but the economic effects on low-skill activities are more than twice those observed for high-skill activities. This heterogeneity is in line with Stolper-Samuelson predictions, given that Mexico is relatively abundant in low-skill labor vis-a-vis the US and Canada. Our results are consistent with previous studies for Mexico (Hanson and Harrison, 1999; Esquivel and Rodriguez-López, 2003; Robertson, 2004; Chiquiar, 2008; Atkin, 2016), who find that NAFTA-induced export manufacturing growth led to wage gains and a reduction in the Mexican skill premium, motivating younger cohorts of Mexicans to drop-out of school.

 $\overline{^{33}}$ We are thankful to Muhammed Yildirim for sharing this data with us.

	Employme	ent change		Vote share of year 2006							
	High Skill	Low Skill	W	ith respe	ect to 19	94	W	ith respe	ect to 20	00	
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
H-employment change			-0.21 (0.13)		-1.11 (0.68)		-0.16 (0.12)		-1.35 (0.76)		
L-employment change			(0110)	-0.28	(0.00)	-0.42	(0.12)	-0.20	(0.10)	-0.51	
Local tariff drop	$0.12 \\ (0.04)$	0.33 (0.07)		(0.09)		(0.23)		(0.09)		(0.24)	
Initial pop, log	0.46	-0.30	0.71	0.57	1.19	0.55	0.70	0.59	1.33	0.55	
Area, log	(0.17) -0.12	-0.04	(0.20) -0.11	(0.13) -0.12	(0.34) -0.25	(0.17) -0.14	(0.13) -0.15	(0.13) -0.15	(0.33) -0.33	(0.10) -0.19	
Grains suitability	(0.10) -0.15	-0.19	(0.12) 0.07	(0.11) 0.03	(0.14) -0.09	(0.09) -0.01	(0.11) 0.14	(0.10) 0.11	(0.19) -0.07	(0.10) 0.03	
Non-Tradable Emp. Share	(0.09) 0.32 (0.12)	(0.08) 0.43 (0.15)	(0.07) 0.04 (0.08)	(0.06) 0.09 (0.07)	(0.16) 0.31 (0.28)	(0.07) 0.14 (0.13)	(0.06) 0.09 (0.09)	(0.04) 0.12 (0.08)	(0.18) 0.45 (0.33)	(0.07) 0.25 (0.14)	
Observations	2,132	2,132	2,132	2,132	2,132	2,132	2,132	2,132	2,132	2,132	
R-squared	0.53	0.26	0.30	0.35	-	_	0.35	0.37	-	_	
Method	1S	1S	OLS	OLS	IV	IV	OLS	OLS	IV	IV	
K-P LM p-value	-	-		-	.025	.006	-	-	.025	.006	

Table 7: NAFTA, skill intensity and AMLO's 2006 results

Notes: The estimates of columns 1 and 2 correspond to the first stage estimates of the instrumental variables estimates of columns 5, 6, 9 and 10. All regressions weight observations by the local electoral turnout of the 2006 election. Standard errors in parentheses clustered at the state level.

With regards to political effects, columns 3 and 4 in table 7 show OLS estimates for the effect of employment growth in each type of sector on the growth of AMLO's vote with respect to the 1994 election, while columns 5 and 6 show these effects instrumented by the local tariff drop. The estimate from column 6 seems in line with the previous results of the paper: a one standard deviation increase in employment for low-skill activities associates with a 0.42 standard deviation drop in support for AMLO. The estimate in column 5 is much larger than those observed in previous specifications, as consequence of a lower first-stage effect of local tariff drops on high-skill employment, but the coefficient is less precise. Columns 7-10 show similar analyses for the change in support for AMLO with respect to the 2000 election, pointing to similar conclusions. Overall, the stronger economic effects of NAFTA on low-skill economic activities -and the consistency of the corresponding political effects to our previous results- suggest that AMLO's decision to reject the NAFTA accords in 2006 faced an uphill chance to attract low-skill workers employed in areas benefiting most from trade integration.

V Conclusions

In this paper, we assessed whether economic gains from trade integration affect voter preferences over protectionist policy platforms. We tackle this question in the case of Mexico's 2006 presidential election, when debates over NAFTA became uniquely contentious. We show that cities concentrated in economic activities gaining access to the US-market benefited from NAFTA. Our economic results are consistent with other studies pursuing similar questions with different methodologies. We also find economic results consistent Stolper-Samuelson's predictions, as the effects of integration are stronger for low-skill activities. Our political results point to important negative effects of these NAFTA-induced economic gains on AMLO's 2006's presidential bid that are absent for other post-NAFTA elections. Given that debates over NAFTA and trade integration were contentious only in 2006, we argue that export market access gains eroded support for protectionism. The overall effect of our estimates on the 2006 election are large, and most likely pivotal for the election's final result.

We further expand our analysis in three directions. First, we incorporate import competing pressures under NAFTA, finding no independent economic effect and robust political effects of local export access gains. The implication of this result is that the net effect of export market access gains and import competing pressures from NAFTA was positive for Mexican local labor markets. Second, we assess the relevance of Chinese competition in US and Mexican markets, and of Chinese and Mexican gains in competitiveness. We find that controlling for these variables does not alter our conclusions, and that they show no independent political effects. Finally, we evaluate how NAFTA tariff drops associated with parties' media strategies in the 2012 election, finding evidence that the tensions of the 2006 contest mapped into 2012 ad strategies along the NAFTA export access gain dimension.

Overall, our findings suggest that economic gains from integration can erode local preferences for economic nationalism. This paper balances the growing literature on the political effects of import competing pressures from integration, and highlights an open avenue for future research on the domestic political effects of globalization.

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A Appendix

US import tariffs before and after NAFTA

Table A.1 shows the average tariffs before NAFTA and the estimated (weighted) tariff reduction, using the HS classification at 2-digit. The table lists the top 40 groups of products (out of 96), sorted by tariff reduction.

AMLO's vote share in levels

Table A.2 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 one 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. Table A.3 shows that these estimates are present in all elections between 2000 and 2018. While export tariff drops were not subject to manipulation (Figure 1), there is a negative spatial association between the local tariff drop and the baseline support for the left. For this reason, the correct specifications -described above- consider the change in support for the left in comparison to the 1994 or 2000 elections as our main political outcome variable.

Tariff drop for Mexican imports from the US and Canada

Figure A.1 shows the average Mexican tariffs before NAFTA and the corresponding tariff drops induced by NAFTA. These are presented for industries at the 4-digit level of the ISIC 3.1 Industry Classification. Similar to tariffs on Mexican exports to the US, we observe that import tariff drops were almost fully explained by pre-NAFTA tariff levels, so their change was not likely influenced by interest groups.

First Stage, Reduced Form, OLS and IV estimates for other elections

Tables A.4, A.5 and A.6 provide results analogous to those presented in table 1, but for the 2000, 2012 and 2018 presidential elections. They show that while first-stage economic effects remain significant for later periods, reduced form and instrumental variable political effects are not statistically significant for any election other than the 2006 contest.

Stacked Regression

Figure A.2 shows a plot of the estimated coefficients using a stacked regression performed to evaluate whether the differences in the political effects of the local tariff drop in each election are statistically significant. Using the 1994 elections as a baseline period, we estimate that a one standard deviation

Table A.1:	Tariff	drop
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HS code	Description	Initial tariff	reduction
61	articles of apparel and clothing accessories-knitted or crocheted	17.0	-17.0
55	man-made staple fibers, inc. yarns etc.	15.0	-15.0
60	knitted or crocheted fabrics	14.0	-14.0
64	footwear, gaiters, and the like	10.9	-10.9
54	man-made filaments, inc. yarns and woven etc.	10.0	-10.0
52	cotton, inc. yarns and woven fabrics thereof	9.9	-9.9
62	articles of apparel and clothing accessories-not knitted or crocheted	9.6	-9.6
58	special woven fabrics, tufted textiles, lace	9.0	-9.0
63	made-up textile articles nesoi, needlecraft sets, worn clothing, rags	9.0	-9.0
66	umbrellas, sun umbrellas, walking-sticks, whips, riding- crops and parts	8.2	-8.2
56	wadding, felt and nonwovens, special yarns, twine, cordage, ropes and cables and articles	8.0	-8.0
20	preps of vegs, fruits, nuts, etc.	7.4	-7.4
70	glass and glassware	7.2	-7.2
69	ceramic products	7.0	-7.0
32	tanning or dyeing extracts, dyes, pigments, paints and varnishes, putty, and inks	5.9	-5.9
42	articles of leather, saddlery and harness, travel goods, handbags, articles of guit	7.2	-5.9
51	wool and fine or coarse animal hair, inc. yarns and wo- ven fabrics thereof	5.9	-5.9
29	organic chemicals	5.8	-5.8
59	impregnated, coated, covered, or laminated textile prod, textile prod for industrial use	5.8	-5.8
71	pearls, stones, prec. metals, imitation jewelry, coins	5.8	-5.8
57	carpets and other textile floor coverings	6.5	-5.5
86	railway or tramway locomotives, rolling stock, track fix- tures and fittings, signals	5.5	-5.5
16	ed. prep. of meat, fish, crustaceans, etc	5.5	-5.5
24	tobacco and manuf. tobacco substitutes	5.5	-5.5
04	dairy, eggs, honey, and ed. products	5.4	-5.4
46	manu. of straw, esparto, or other plaiting materials, basketware and wickerwork	5.3	-5.3
96	miscellaneous manufactured articles	5.1	-5.1
83	miscellaneous articles of base metal	5.1	-5.1
39	plastics and articles thereof	5.1	-5.1
07	edible vegetables	5.1	-5.1
50	silk, inc. yarns and woven fabrics thereof	5.0	-5.0
21	misc. edible preparations	5.0	-5.0
92	musical instruments, parts and accessories	5.0	-5.0
95	toys, games and sports equip, parts and acces.	4.9	-4.9
90	optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and accessories	4.9	-4.9
33	oils and resinoids, perfumery, cosmetic or toilet prepa- rations	4.9	-4.9
88	aircraft, spacecraft, and parts thereof	4.5	-4.5
73	rticles of iron or steel	4.5	-4.5
81	base metals nesoi, cermets, articles etc.	4.3	-4.3
72	iron and steel	5.1	-4.3

	Employment change	Vote sh	nare of ye	ear 2006
VARIABLES	(1)	(2)	(3)	(4)
Employment change			-0.43	-1.21
			(0.10)	(0.33)
Local tariff drop	0.29	-0.35		
	(0.06)	(0.07)		
Initial pop, log	-0.04	0.79	0.65	0.74
	(0.23)	(0.23)	(0.18)	(0.14)
Area, log	-0.09	-0.18	-0.16	-0.30
	(0.09)	(0.10)	(0.11)	(0.13)
Grains suitability	-0.21	0.17	0.13	-0.10
	(0.06)	(0.07)	(0.07)	(0.10)
Non-Tradable Emp. Share	0.44	-0.27	-0.06	0.27
	(0.15)	(0.13)	(0.09)	(0.21)
Observations	2,132	2,132	2,132	2,132
R-squared	0.34	0.33	0.36	_
Method	1S	\mathbf{RF}	OLS	IV
K-P LM p-value	-	-	-	.006

Table A.2: AMLO's vote share in the 2006 election

Notes: The estimates of column 1 correspond to the first stage estimates of the instrumental variables estimates of column 4. Standard errors in parentheses clustered at the state level. All regressions weight observations by the local electoral turnout in the 2006 election.



Figure A.1: Baseline tariffs and tariff drops for Mexican import tariffs

Notes: Figure shows the relation between pre-liberalization tariff (log(1 + tariff)) and the change in tariffs before (year 1993) after NAFTA (year 2001). The product tariffs used for the figure correspond to the simple average at the 4-digit level for the ISIC 3.1 industry classification. The line shows the fitted line of a regression with coefficient -0.60; standard error: 0.038.

	vote share in year:						
	2000	2006	$20\dot{1}2$	2018			
	(1)	(2)	(3)	(4)			
Employment change 93-03	-1.16	-1.21					
	(0.25)	(0.33)					
Employment change 93-08			-1.08				
			(0.36)				
Employment change 93-13				-1.09			
				(0.37)			
Initial pop, log	0.48	0.74	0.84	-0.17			
	(0.16)	(0.14)	(0.18)	(0.40)			
Area, log	-0.23	-0.30	-0.46	-0.16			
	(0.14)	(0.13)	(0.14)	(0.19)			
Grains suitability	-0.22	-0.16	-0.10	-0.37			
	(0.17)	(0.18)	(0.23)	(0.37)			
Share non-tradable	0.50	1.31	1.65	2.16			
	(0.80)	(1.05)	(1.24)	(1.53)			
Observations	2,132	2,132	2,132	2,132			
Method	IV	IV	IV	IV			
Weights	yes	yes	yes	yes			
K-P LM p-value	.006	.006	.007	.037			

Table A.3: PRD's and AMLO's vote share levels

Notes: The estimates of all columns provide instrumental variables estimates of the effect of employment growth on the elections vote share for the left. Standard errors in parentheses clustered at the state level. All regressions weight observations by the local electoral turnout of the respective election.

		Vote share of year 2000					
	Employment change	with	respect t	o 1994			
VARIABLES	(1)	(2)	(3)	(4)			
Employment change			-0.20	0.02			
			(0.08)	(0.22)			
Local tariff drop	0.30	0.00					
	(0.06)	(0.07)					
Initial pop, log	0.00	0.14	0.17	0.14			
, .	(0.23)	(0.22)	(0.18)	(0.22)			
Area, log	-0.11	0.04	0.00	0.04			
	(0.09)	(0.15)	(0.15)	(0.16)			
Grains suitability	-0.22	-0.08	-0.14	-0.07			
	(0.06)	(0.10)	(0.10)	(0.12)			
Non-Tradable Emp. Share	0.42	-0.12	-0.04	-0.12			
-	(0.15)	(0.08)	(0.07)	(0.10)			
Observations	2,132	2,132	2,132	2,132			
R-squared	0.35	0.02	0.05	_			
Method	1S	\mathbf{RF}	OLS	IV			
K-P LM p-value	-	-	-	.006			

Table A.4: Result in the 2000 election

Notes: The estimates of column 1 correspond to the first stage estimates of the instrumental variables estimates of columns 4 and 7. Standard errors in parentheses clustered at the state level. All regressions weight observations by the local electoral turnout of the 2000 election.

		Vote share of year 2012					
	Employment change	with respect to 1994			with r	o 2000	
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Employment change			-0.02	-0.10		0.12	0.04
			(0.09)	(0.30)		(0.06)	(0.32)
Local tariff drop	0.24	-0.02			0.01		
	(0.05)	(0.07)			(0.08)		
Initial pop, log	0.06	0.23	0.22	0.24	0.32	0.30	0.32
	(0.18)	(0.21)	(0.22)	(0.20)	(0.13)	(0.15)	(0.13)
Area, log	-0.08	-0.13	-0.13	-0.14	-0.16	-0.15	-0.16
	(0.09)	(0.12)	(0.12)	(0.12)	(0.10)	(0.10)	(0.10)
Grains suitability	-0.22	-0.05	-0.05	-0.07	-0.04	-0.01	-0.04
	(0.07)	(0.08)	(0.08)	(0.10)	(0.07)	(0.07)	(0.11)
Non-Tradable Emp. Share	0.42	0.21	0.22	0.25	0.22	0.17	0.20
	(0.13)	(0.13)	(0.11)	(0.18)	(0.09)	(0.08)	(0.18)
Observations	2,132	2,132	2,132	2,132	2,132	2,132	2,132
R-squared	0.39	0.11	0.11	_	0.16	0.17	_
Method	1S	\mathbf{RF}	OLS	IV	\mathbf{RF}	OLS	IV
K-P LM p-value	-	-	-	.008	-	-	.008

Table A.5: Result in the 2012 election

Notes: The estimates of column 1 correspond to the first stage estimates of the instrumental variables estimates of columns 4 and 7. Standard errors in parentheses clustered at the state level. All regressions weight observations by the local electoral turnout of the 2012 election.

		Vote share of year 2018					
	Employment change	with respect to 1994		with respect to		o 2000	
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Employment change			0.10 (0.07)	-0.23 (0.36)		0.21 (0.06)	-0.10 (0.40)
Local tariff drop	0.23	-0.05	()	()	-0.02	()	· /
	(0.06)	(0.09)			(0.09)		
Initial pop, log	0.03	-0.08	-0.13	-0.08	-0.03	-0.07	-0.02
	(0.19)	(0.17)	(0.18)	(0.17)	(0.14)	(0.12)	(0.15)
Area, log	-0.07	-0.08	-0.06	-0.10	-0.10	-0.07	-0.11
	(0.09)	(0.15)	(0.15)	(0.14)	(0.13)	(0.13)	(0.13)
Grains suitability	-0.21	-0.12	-0.08	-0.17	-0.11	-0.05	-0.13
	(0.07)	(0.11)	(0.12)	(0.14)	(0.12)	(0.12)	(0.15)
Non-Tradable Emp. Share	0.44	0.24	0.20	0.34	0.23	0.14	0.28
-	(0.14)	(0.11)	(0.10)	(0.23)	(0.09)	(0.07)	(0.22)
Observations	2,132	2,132	2,132	2,132	2,132	2,132	2,132
R-squared	0.38	0.04	0.05	_	0.04	0.07	_
Method	1S	\mathbf{RF}	OLS	IV	\mathbf{RF}	OLS	IV
K-P LM p-value	-	-	-	.007	-	-	.007

Table A.6: Result in the 2018 election

Notes: The estimates of column 1 correspond to the first stage estimates of the instrumental variables estimates of columns 4 and 7. Standard errors in parentheses clustered at the state level. All regressions weight observations by the local electoral turnout of the 2018 election.



Figure A.2: Stacked regression

Notes: Figure shows the estimated effect of the local tariff drop on the change in the vote for AMLO in each post-NAFTA election using a stacked regression. Specifically, we estimate the following equation:

$$\mathrm{AMLO}_{y,c} = \beta * \mathrm{LTD}_c + \gamma * X_c + \sum_{y=2000}^{2018} \left[\beta_y \left(\mathrm{LTD}_c \times (\mathrm{year} = y) \right) + \gamma_y \left(\mathrm{X}_c \times (\mathrm{year} = y) \right) \right] + \lambda_y + \epsilon_{y,c}$$

where the dependent variable is the local vote share for AMLO (or the left wing candidate) in each election $(p \in [1994, 2000, 2006, 2012, 2018])$ and commuting zone (c), *LTD* variables is the Local Tariff Drop that affected each commuting zone, X stands for a vector with the controls used in the main estimates (area and population (in logs), grain suitability, share of non-tradable employment), and λ_p stands for period fixed effects. All estimates are relative to the results of 1994 (the omitted period). Standard errors are clustered at the commuting zone level and observations are weighted by the total voting population of each location in the respective election. A Wald test with the hypothesis that the coefficients of 2000 and 2006 are equal to each other is rejected at the 5% confidence level.

increase in the local tariff drop associates with a drop of 0.13 standard deviations in AMLO's vote share in 2006. Estimates for 2012 and 2018 are positive and statistically insignificant, and the estimate for 2000 is negative and close to zero. A Wald test is able to reject the hypothesis that the coefficients for the local tariff drop in 2000 and 2006 are equal with a 5% confidence level.

Results excluding rural areas

Following Dell, Feigenberg and Teshima (2018 forthcoming), we provide a version of our estimates that conditions the data to urban areas where the local labor market effects of trade integration should be relatively meaningful. Our conclusions remain unaltered.

		Vote share of year 2006					
	Employment change	with respect to 1994		with respect t		o 2000	
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)
E			0.90	0.56		0.96	0.72
Employment change			(0.29)	(0.28)		(0.10)	(0.31)
Local tariff drop	0.32	-0.18	(0120)	(01=0)	-0.24	(0.20)	(0.01)
	(0.08)	(0.08)			(0.09)		
Initial pop. log	-0.19	0.71	0.60	0.60	0.68	0.54	0.54
r · r) - · 0	(0.21)	(0.23)	(0.18)	(0.15)	(0.19)	(0.14)	(0.10)
Area, log	-0.06	-0.10	-0.09	-0.13	-0.14	-0.11	-0.19
	(0.13)	(0.13)	(0.12)	(0.11)	(0.12)	(0.13)	(0.14)
Grains suitability	-0.22	0.07	0.03	-0.05	0.14	0.12	-0.02
	(0.07)	(0.07)	(0.07)	(0.08)	(0.05)	(0.06)	(0.10)
Non-Tradable Emp. Share	0.31	-0.07	0.04	0.10	-0.01	0.10	0.21
	(0.15)	(0.11)	(0.09)	(0.12)	(0.13)	(0.11)	(0.16)
Observations	773	773	773	773	773	773	773
R-squared	0.21	0.36	0.40	_	0.38	0.39	_
Method	OLS	OLS	OLS	IV	OLS	OLS	IV
K-P LM p-value		-	-	.006	-	-	.006

Table A.7: Equivalent to table 1, excluding rural localities

Notes: The estimates of column 1 correspond to the first stage estimates of the instrumental variables estimates of columns 4 and 7. Standard errors in parentheses clustered at the state level. All regressions weight observations by the local electoral turnout of the 2006 election.

	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	0.09	-0.55			-0.73			
	(0.27)	(0.28)			(0.31)			
Employment change 93-08			-0.39			-0.29		
			(0.31)			(0.29)		
Employment change 93-13				-0.60			-0.43	
				(0.40)			(0.39)	
Initial pop, log	0.26	0.59	0.56	-0.44	0.54	0.46	-0.51	
	(0.24)	(0.15)	(0.20)	(0.41)	(0.10)	(0.18)	(0.40)	
Area, log	0.06	-0.13	-0.35	0.01	-0.19	-0.22	0.14	
	(0.22)	(0.11)	(0.16)	(0.26)	(0.14)	(0.14)	(0.27)	
Grains suitability	-0.09	-0.06	-0.14	-0.30	-0.02	-0.09	-0.19	
	(0.24)	(0.13)	(0.14)	(0.25)	(0.10)	(0.20)	(0.25)	
Non-Tradable Emp. Share	-0.84	0.59	0.24	0.34	0.21	1.51	0.33	
	(0.56)	(0.69)	(0.21)	(0.25)	(0.16)	(1.14)	(0.23)	
Observations	773	773	773	773	773	773	773	
R-squared	0.03	0.34	0.03	-0.43	0.19	0.09	-0.30	
Method	IV	IV	IV	IV	IV	IV	IV	
K-P LM p-value	.006	.006	.011	.083	.006	.011	.083	

Table A.8: Equivalent	to table 2, excluding	rural localities
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Notes: The estimates of all columns provide instrumental variables estimates of the effect of employment growth on the growth of the vote share for the left. Standard errors in parentheses clustered at the state level. All regressions weight observations by the local electoral turnout of the respective election.

	Vote share of year:							
	2000	2006	2012	2018	2006	2012	2018	
	W	ith respe	ect to 19	94	with r	with respect to 2000		
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Employment change 93-03	0.02	-0.38			-0.45			
	(0.18)	(0.20)			(0.19)			
Employment change 93-08			0.05			0.20		
			(0.20)			(0.21)		
Employment change 93-13				0.07			0.17	
				(0.22)			(0.24)	
Initial pop, log	0.12	0.76	0.36	0.11	0.82	0.48	0.28	
	(0.21)	(0.18)	(0.21)	(0.27)	(0.13)	(0.14)	(0.24)	
Area, log	0.08	-0.19	-0.18	-0.15	-0.28	-0.22	-0.22	
	(0.13)	(0.10)	(0.11)	(0.17)	(0.10)	(0.07)	(0.14)	
Agro Emp. Share	-0.15	0.33	0.46	0.74	0.47	0.54	0.77	
	(0.22)	(0.18)	(0.17)	(0.20)	(0.24)	(0.21)	(0.24)	
Non-Tradable Emp. Share	-0.26	0.39	0.55	0.83	0.61	0.54	0.76	
	(0.20)	(0.20)	(0.26)	(0.33)	(0.21)	(0.27)	(0.35)	
Observations	2,132	2,132	2,132	2,132	2,132	2,132	2,132	
Method	IV	IV	IV	IV	IV	IV	IV	
Weights	yes	yes	yes	yes	yes	yes	yes	
K-P LM p-value	.018	.017	.012	.034	.017	.012	.034	

Table A.9: Equivalent to table 2, controlling for Agriculture employment

Robust standard errors in parentheses p < 0.01, p < 0.05, p < 0.1

Notes: The estimates of all columns provide instrumental variables estimates of the effect of employment growth on the growth of the vote share for the left. Standard errors in parentheses clustered at the state level. All regressions weight observations by the local electoral turnout in each presidential election.

Table A.10: Equivalent to table 2, using the estimation method of Borusyak, Hull and Jaravel (2018)

	2000	2006	2012	2018	2006	2012	2018
	W	ith respe	ect to 19	94	with r	espect to	o 2000
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Employment change 93-03	0.28	-0.45			-0.68		
	(0.21)	(0.32)			(0.29)		
Employment change 93-08			0.09			0.23	
			(0.36)			(0.42)	
Employment change 93-13			. ,	-0.23			-0.09
				(0.32)			(0.39)
				, ,			. ,
SSIV first stage F-stat.	25.0	22.88	29.31	6.12	22.88	29.31	6.12
N of localities	2,132	2,132	2,132	2,132	2,132	2,132	2,132
N of industries	731	731	731	731	731	731	731

Notes: The estimates of column 1 correspond to the first stage estimates of the instrumental variables estimates of columns 4 and 7. Standard errors in parentheses clustered at the 4-digit industry level. All regressions weight observations by the local electoral turnout in each presidential election.