Online appendix to *Export side effects of wars on organized crime: The case of Mexico*

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Contents

A1 Difference-in-differences analysis

A1.1 Homicides

We test the impact of a close PAN win in the 2007-2008 elections on homicides using a difference-in-differences estimation method. We estimate the following model, using as a reference the year when the election took place:

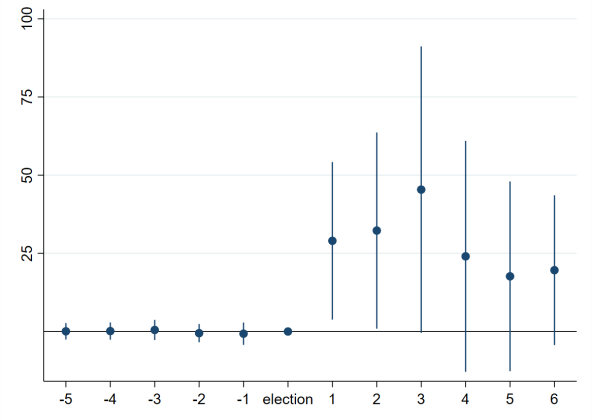
$$y_{mt} = \sum_{\tau=1}^{5} \beta_{-\tau} PANwin_{m,t-\tau} + \sum_{\tau=1}^{6} \beta_{\tau} PANwin_{m,t+\tau} + \delta_1 \times Margin_m \times Post_t + \\ + \delta_2 \times Margin_m \times Post_t \times PANwin_m + \psi_t + \gamma_m + \epsilon_{mt} \quad (1)$$

where y_{mt} denotes homicides per 100,000 population in year t in municipality m, $PANwin_{m,t-\tau}$ is a dummy variable that takes the value 1 if municipality m had a close PAN win in 2007-2008 and year t is τ years before the election year, $PANwin_{m,t+\tau}$ is a dummy variable that takes the value 1 if municipality m had a close PAN win in 2007 or 2008 and year t is τ years after the election year, $Margin_m$ denotes the PAN win vote margin in municipality m in the 2007-2008 elections, $PANwin_m$ is a dummy that takes value 1 when the PAN wins in municipality m in the 2007 and 2008 elections, $Post_t$ is a dummy that takes the value 1 if year t is after the election year, ψ_t is a vector of calendar year fixed effects, and γ_m is a vector of municipality fixed effects. We weight regressions by population as of 2005 and cluster standard errors at the municipality level. The estimation sample contains municipalities where PAN won or lost by a margin smaller than 5% of the total votes.

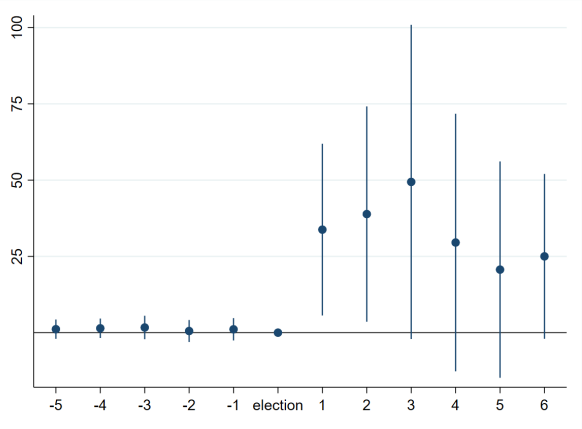
We present the results in Figure A.1, Panel (a). The figure shows no pre-trends. As in the RDD estimates, after the elections, a close PAN win has a large positive effect on homicides. In Panels (b) and (c), we split the sample into north and south municipalities using the median of the (average) latitude of the municipalities that have a close election in 2007 and 2008. In Panels (d) and (e), we split the sample according to the presence of cartels in 2007. There are no pre-trends in any of the subsamples. However, in line with the RDD results, a close PAN win only causes an increase in homicides in municipalities

in the north or with cartel presence in 2007.

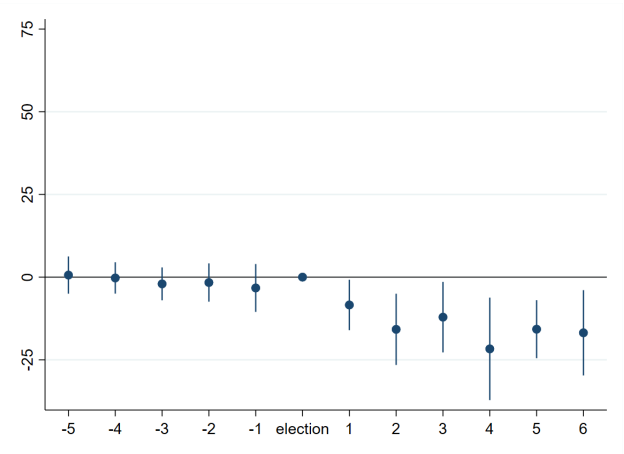
Figure A.1: DiD estimation: effect of a close PAN win on homicides



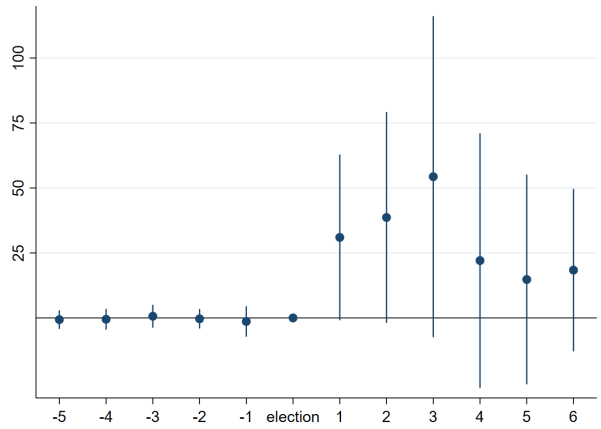
(a) All



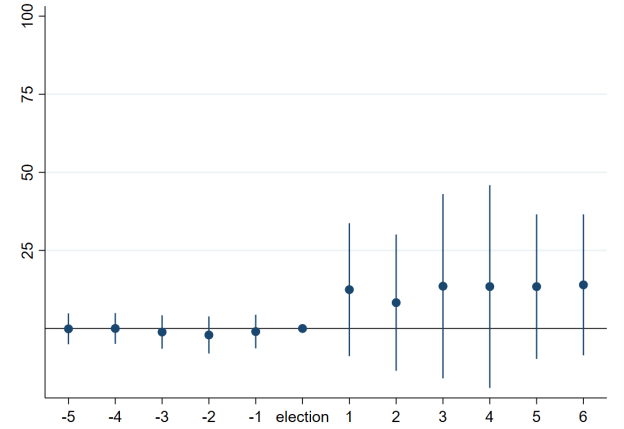
(b) North



(c) South



(d) Cartel presence



(e) No cartel presence

Notes: The figures report estimates of equation 1. The vertical lines are 95% confidence intervals. In Panels (b) and (c), we split the original sample of 198 municipalities into north (99 municipalities) and south (99 municipalities) using the median of the (average) latitude of the municipalities that have a close election in 2007 and 2008. In Panels (d) and (e), we split the sample according to the presence of cartels in 2007: cartel presence (31 municipalities) and no cartel presence (167 municipalities).

A1.2 Exports

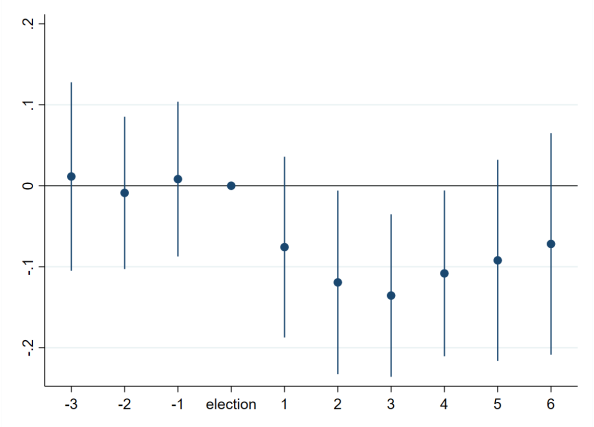
To gauge the effect on exports, we estimate the following model, also using as a reference the year when the election took place

$$y_{mcpt} = \sum_{\tau=1}^{3} \beta_{-\tau} PANwin_{m,t-\tau} + \sum_{\tau=1}^{6} \beta_{\tau} PANwin_{m,t+\tau} + \delta_1 \times Margin_m \times Post_t + \\ + \delta_2 \times Margin_m \times Post_t \times PANwin_m + \psi_{cpt} + \gamma_m + \epsilon_{mcpt} \tag{2}$$

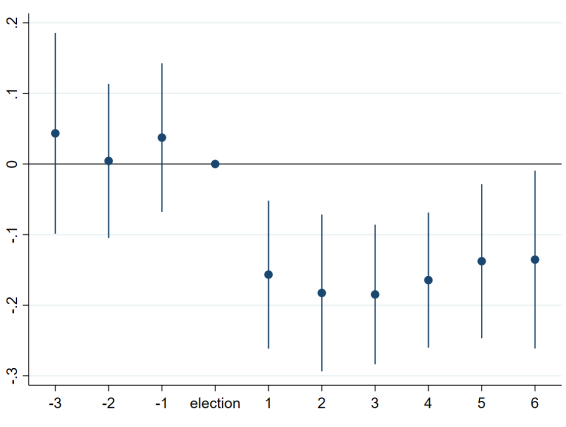
where y_{mcpt} denotes the natural logarithmic of exports of product p in year t from municipality m to country c, ψ_{cpt} is a vector of product-destination-year fixed effects, and the definition of the other variables is the same as in Equation 1. We restrict the sample to triples municipality-product-destination for which exports are positive over the estimation period. We present unweighted results and cluster standard errors at the municipality level. The estimation sample contains municipalities where PAN won or lost by a margin smaller than 5% of the total votes in the 2007 and 2008 elections.

As with homicides, Figure **??** shows no pre-trends and a large effect on exports following the close election of a PAN mayor. Panels (b), (c), (d) and (e) show results for the north-south and cartel-no cartel subsamples. In all subsamples, there are no pre-trends, while negative effects on exports are only observed in municipalities in the north or with cartel presence in 2007.

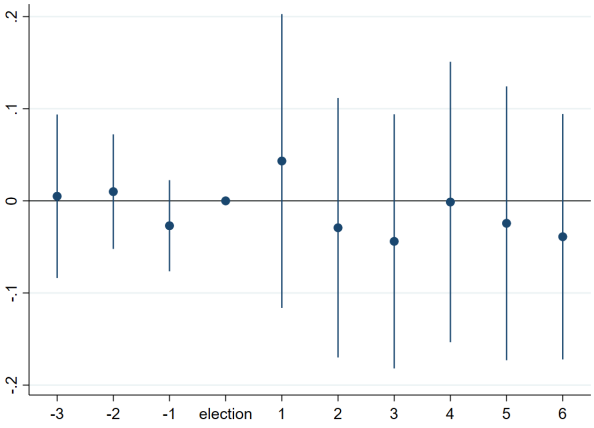
Figure A.2: DiD estimation: effect of a close PAN win on exports



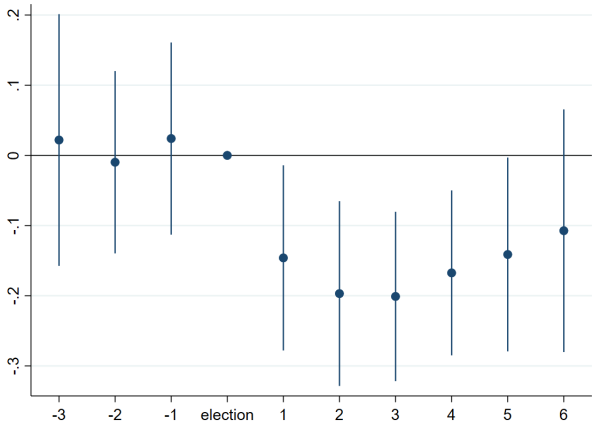
(a) All



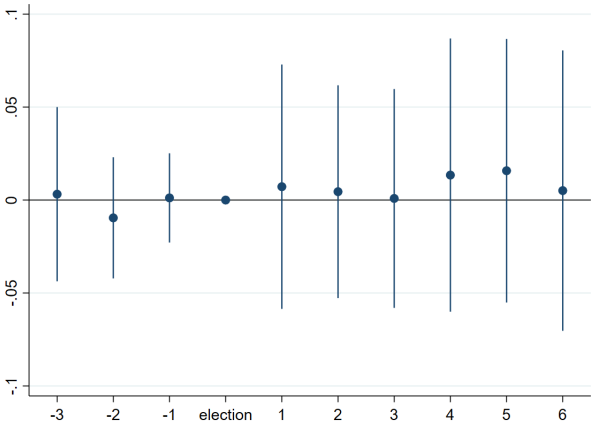
(b) North



(c) South



(d) Cartel presence



(e) No cartel presence

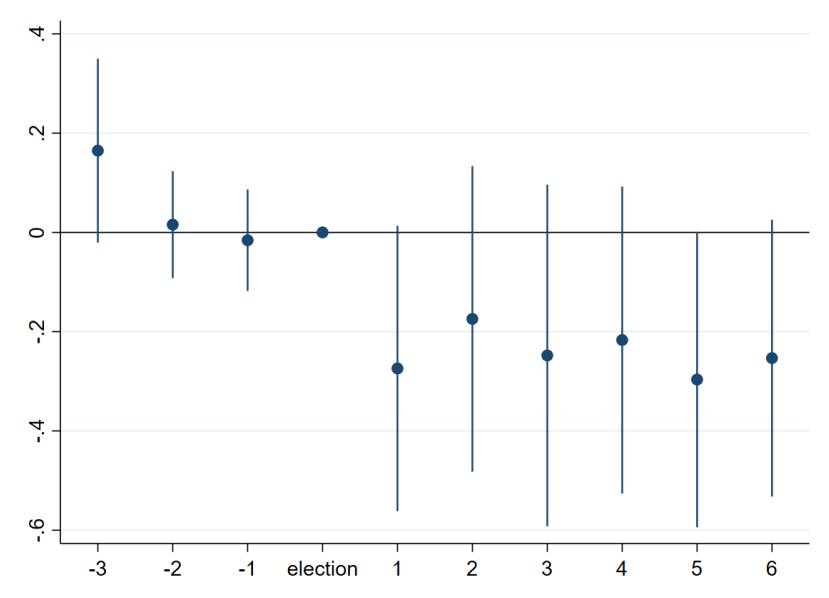
Notes: The figures report estimates of equation 2. The vertical lines are 95% confidence intervals. In Panels (b) and (c), we split the original sample of 198 municipalities into north (99 municipalities) and south (99 municipalities) using the median of the (average) latitude of the municipalities that have a close election in 2007 and 2008. In Panels (d) and (e), we split the sample according to the presence of cartels in 2007: cartel presence (31 municipalities) and no cartel presence (167 municipalities).

Finally, we estimate aggregate effects using

$$ln(y_{mt}+1) = \sum_{\tau=1}^{m} \beta_{-\tau} PANwin_{m,t-\tau} + \sum_{\tau=1}^{q} \beta_{\tau} PANwin_{m,t+\tau} + \delta_1 \times Margin_m \times Post_t + \\ + \delta_2 \times Margin_m \times Post_t \times PANwin_m + \psi_t + \gamma_m + \epsilon_{mt} \tag{3}$$

where y_{mt} denotes total exports in year t from municipality m. We allow for zeros (entries and exits) by using the transformation $y \to ln(1+y)$. Table **??** shows the results, which are less precise but point to a negative aggregate effect.

Figure A.3: DiD estimation: effect of a close PAN win on total exports

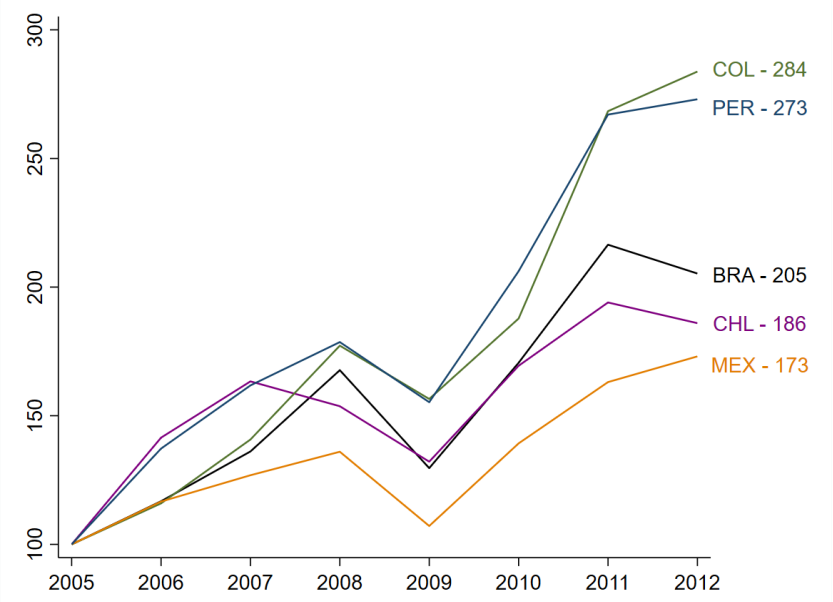


Notes: This figure reports estimates of equation 3. The vertical lines are 95% confidence intervals.

A2 Additional descriptive statistics

A2.1 Exports: Mexico and other Latin America countries

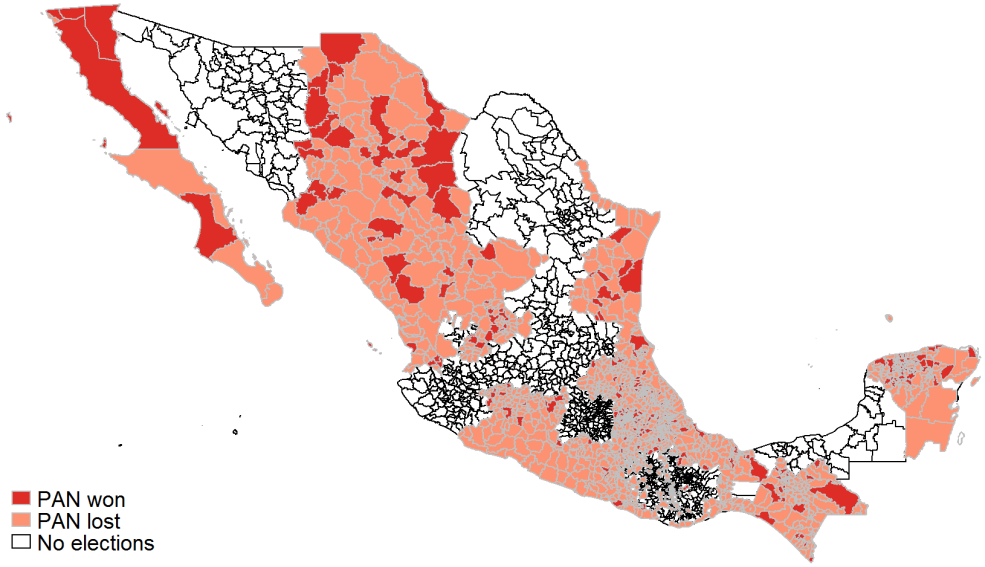
Figure A.4: Evolution of exports, 2005 = 100



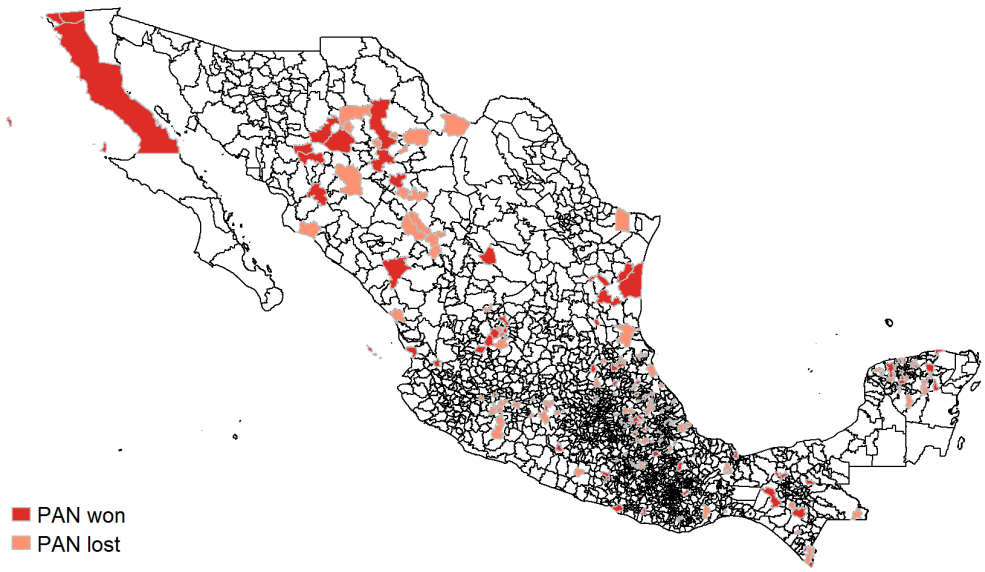
Notes: Evolution of annual exports of Colombia (COL), Peru (PER), Brazil (BRA), Chile (CHL), and Mexico (MEX). The value in 2005 is normalized to 100. The data are from the World Bank.

A2.2 Maps: electoral outcomes

Figure A.5: Spatial distribution of electoral outcomes



(a) Municipalities that had elections in 2007 and 2008



(b) Spread 5%

Notes: Panel A depicts the geographical distribution of PAN victories and losses in the 2007 and 2008 local elections. Panel B depicts PAN victories and losses by a margin smaller than 5%.

A2.3 Municipal exports: extensive margin

Table A.1: Importance of appearances and disappearances: municipality-level

	Exports		
	Election year	3rd year of the term	Growth (%)
Panel A: Total exports			
Intensive	61809	66413	7.4
Appearances		979	
Disappearances	787		
Share(%)	1.3	1.5	
Panel B: Pan win			
Intensive	41180	42003	2.0
Appearances		404	
Disappearances	464		
Share(%)	1.1	1.0	
Panel C: Pan loss			
Intensive	20629	24411	18.3
Appearances		575	
Disappearances	323		
Share(%)	1.5	2.3	

Notes: The table reports municipal exports of a given product to a given country that disappear (positive number in the election year and zero three years after) or appear (zero in the election year and positive three years after). The sample is comprised of municipalities that have close PAN elections in 2007 and 2008 (margin of PAN victory or loss smaller than 5% of total votes). Panel A includes all municipalities, Panel B restricts the sample to municipalities with PAN victories and Panel c restricts the sample to municipalities with PAN losses. Export values are in 1 million US dollars.

A2.4 Firm exports: extensive margin

Table A.2: Importance of appearances and disappearances: firm-level

	Exports		
	Election year	3rd year of the term	Growth (%)
Panel A: Total exports			
Intensive	40.07	44.86	11.95
Appearances		3.52	
Disappearances	7.55		
Share (%)	15.85	7.28	
Panel B: Pan win			
Intensive	23.67	24.56	3.76
Appearances		2.35	
Disappearances	5.46		
Share (%)	18.74	8.73	
Panel C: Pan loss			
Intensive	16.39	20.3	23.86
Appearances		1.17	
Disappearances	2.08		
Share (%)	11.26	5.45	

Notes: The table reports the share of firm exports of a given product to a given country, computed in the election year in municipalities with close elections in 2007 and 2008, that disappear in the final year of the mayoral term (disappearances). The table also reports the share of firm exports of a given product to a given country, computed in the final year of the mayoral term, that did not exist in the election year (appearances). Panel A includes all municipalities with close elections in 2007 and 2008, Panel B restricts the sample to municipalities with PAN victories and Panel c restricts the sample to municipalities with PAN losses.

A2.5 North/south and cartel/non-cartel splits

Table A.3: Baseline characteristics: north/south and cartel/non-cartel

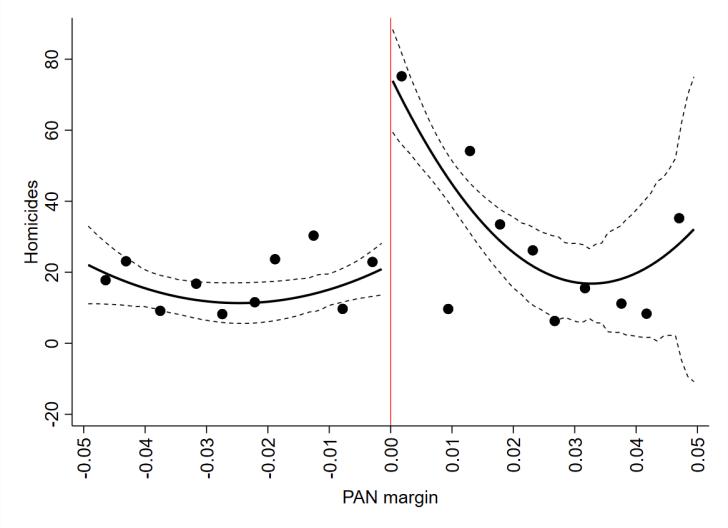
	(1)	(2)	(3)	(4)	(5)	(6)
	North	South	P-val.	Cartel	Non-cartel	P-val.
Panel A: Sociodemographic characteristics						
Population 2005	70290	29902	0.05	223174	17968	0
	(198903)	(60060)		(323091)	(21775)	
Population density	128.5	266.7	0 .04	428.2	154.8	0
(2005)	(433.9)	(486.7)		(839.5)	(342.8)	
PAN incumbent	0.32	0.31	0.88	0.39	0.31	0.37
	(0.47)	(0.47)		(0.5)	(0.46)	
GDP per capita	7000	5330	0	9999	5453	0
	(3552)	(2108)		(4218)	(2105)	
GDP	902	238	0.04	3057	108	0
(MM USD, 2005)	(3088)	(812)		(5127)	(183)	
Literacy rate	96.8	94.9	0	97.4	95.6	0.01
(ages 15-24, 2005)	(2.8)	(4.4)		(1.7)	(4.0)	
Homicide rate	14.4	10.4	0.25	11.4	12.6	0.8
(2006)	(29.4)	(18.1)		(13.1)	(26.0)	
Observations cartel	20	11		31	0	
Observations no-cartel	79	88		0	167	
Observations	99	99		31	167	
Panel B: Trade characteristics						
Total exports, 2006	494.7	90.4	0.13	1653	40	0
	(2557.7)	(629.7)		(4416.3)	(458.8)	
Exports: number	25.8	19.3	0.07	58.6	15.9	0
of countries	(30)	(18.7)		(37.8)	(14.3)	
Exports: number of pairs	257.9	63	0.03	833.1	35.6	0
product-country	(865.7)	(167.2)		(1419.3)	(77.7)	

Notes: The sample is comprised of all municipalities where the PAN won or lost by a margin smaller than 5% of the total votes in the 2007 and 2008 elections. In columns 1-2, we split the sample into north and south using the median of the (average) latitude of the municipalities, while in columns 4-5, we split the sample into cartel and non-cartel according to cartel presence in 2007 using data from Coscia and Rios (2012). Columns 3 and 6 report p-values of t-tests on the difference in means. Standard errors are reported in parentheses.

A3 Homicides, other crimes and crime perception

A3.1 Homicides: RD graph

Figure A.6: Cumulative homicides as a function of the PAN electoral share



Notes: RD graph on cumulative homicides in the three years following an election as a function of direct electoral shares for PAN in a Mexican municipality. The dots represent average homicides for each bin, and the solid line predicted values using a quadratic polynomial on the vote margin on each side of the zero cutoff. The graph weights homicides by population in 2005. Confidence intervals are presented at a 95% level. The estimation sample includes municipalities where PAN won or lost by a margin smaller than 5% of the total votes in the 2007 and 2008 elections. The interval [-0.05,0.05] is divided into 20 bins of size 0.005.

A3.2 Homicides: robustness

Table A.4: Homicides, robustness to the degree of the RD polynomial and vote margin

	(1)	(2)	(3)	(4)	(5)
Panel A: Bandwiths					
Mean if PAN loss	15.65	16.39	15.69	14.70	14.73
PAN win	34.54**	39.92**	41.22**	46.28**	47.91**
	(17.38)	(18.06)	(18.98)	(19.02)	(18.87)
Degree of RD polynomial	1st	1st	1st	1st	1st
Margin	7%	6%	5%	4%	3%
Observations	290	242	198	163	123
R-squared	0.21	0.24	0.25	0.31	0.31
Panel B: Degree of the RD polynomial, close elections					
Mean if PAN loss			15.69		
PAN win	25.90**	41.22**	52.98***	53.04**	68.11***
	(12.65)	(18.98)	(17.01)	(21.01)	(23.25)
Degree of RD polynomial	No	1st	2nd	3rd	4th
Margin	5%	5%	5%	5%	5%
Observations	198	198	198	198	198
R-squared	0.17	0.25	0.30	0.30	0.33
Panel C: Degree of the RD polynomial, all elections					
Mean if PAN loss			26.4		
PAN win	4.15	14.86	24.61	31.65*	47.36**
	(9.65)	(15.64)	(17.12)	(17.05)	(19.52)
Degree of RD polynomial	No	1st	2nd	3rd	4th
Margin	All	All	All	All	All
Observations	1,416	1,416	1,416	1,416	1,416
R-squared	0.00	0.02	0.03	0.03	0.05

Notes: Columns 1-5 report weighted regressions. Weights are determined by population size in 2005. The dependent variable is average annual homicides per 100,000 population in the three years following the 2007 and 2008 elections. In Panel A, we show results for different bandwidths using a linear polynomial on both sides of the cutoff. In Panel B, we show results for specifications using polynomials with different degrees in the sample of municipalities where the PAN wins or loses by a margin smaller than 5% in the 2007-2008 elections. In Panel C, we show results for specifications using polynomials with different degrees in the sample of all municipalities that had elections in 2007 and 2008.

A3.3 Other crimes

A natural question is whether the incidence of other types of crime also increased. Given how the drug war triggered inter-gang competition for areas experiencing government crackdowns, it is plausible for such increased gang presence to induce a spike in criminal activities beyond homicides. Increased competition and drug enforcement might also lead gangs to seek revenues in other criminal activities. This would be an indirect channel through which a close PAN win could affect economic outcomes at the local level. There are some limitations in documenting the effects on other crimes. Data is noisier due to underreporting. Furthermore, the most reliable source publishes crime statistics per municipality only from 2011. Therefore, differently from homicides, for which we could assess the impact over the mayoral term, we can only test the impact on the level observed in 2011.

Table A.5 reports results for six different types of crime. A close PAN win in 2007 and 2008 is associated with higher levels of extortion, robbery that target individuals and firms, displacement, and property damages in 2011. Effects are stronger in the north sample and in regions with a pre-existing cartel presence. We find no effect on kidnappings. For personal injuries, effects are confined to the north sample and to regions with a pre-existing cartel presence.

To test whether this effect is restricted to a close PAN win during the war period, we perform two tests. First, we use the 2004 and 2005 elections. Ideally, we would like to test the effect on other crimes in 2008, but since the data are available from 2011, we study the effect on the level in 2011. Table A.6 shows that a PAN win in those elections is in general not associated with higher levels of crime in 2011. On the contrary, for certain types of crime, a PAN win is associated with lower levels of crime in 2011. We also run a test using the 2010 and 2011 elections on crime in 2014. Most of the terms of mayors elected in those years took place after the war on drugs. We also find no impact.

The results suggest that a close PAN win during the war on drugs is associated with higher levels of homicides and other crimes. We also find effects on crimes that affect firms directly, such as extortion, robbery and property damages.

Table A.5: Other crimes

	(1)	(2)	(3)	(4)	(5)	(6)
	Panel A: Extortion			*Panel B: Displacement, property damages*		
Mean if PAN loss		5.4			126.5	
PAN win	4.6*	-3.4**	-3.0	260.4***	-112.7***	-28.2
	(2.7)	(1.7)	(2.7)	(86.5)	(36.4)	(57.5)
PAN win x North		6.0			366.4***	
		(4.3)			(112.2)	
PAN win x Cartel			8.1**			303.9***
			(4.0)			(116.2)
Observations	139	139	139	139	139	139
R-squared	0.17	0.34	0.38	0.38	0.52	0.58
	Panel C: Robbery businesses			*Panel D: Robbery individuals*		
Mean if PAN loss		63.3			484.5	
PAN win	75.6*	-76.7***	1.1	901.8***	-330.6***	17.0
	(44.2)	(27.5)	(22.1)	(297.7)	(92.8)	(150.7)
PAN win x North		153.8**			1,211.1***	
		(60.5)			(326.1)	
PAN win x Cartel			55.8			870.0***
			(50.1)			(328.8)
R-squared	0.19	0.36	0.50	0.29	0.48	0.58
	Panel E: Kidnapping			*Panel F: Personal injury*		
Mean if PAN loss		1.3			170.3	
PAN win	1.4	-0.1	1.0	191.8	-141.3***	-88.3
	(1.0)	(0.6)	(1.1)	(119.9)	(39.3)	(53.5)
PAN win x North		1.4			322.0**	
		(1.7)			(152.2)	
PAN win x Cartel			0.4			278.6*
			(1.6)			(156.8)
R-squared	0.10	0.13	0.13	0.22	0.37	0.48

Notes: Columns 1-6 report weighted regressions. Weights are determined by population size in 2005. In all panels, the dependent variables are averages of a certain crime type per 100,000 population in 2011. In panel A the dependent variable is extortion; in Panel B, displacements and property damages; in panel C, robberies that targeted business establishments; in Panel D, robberies that targeted business individuals; in Panel E, kidnapping; and in Panel F, personal injuries. For all regressions, the sample is comprised of municipalities where crime data is available and where PAN won or lost by a margin smaller than 5% in the 2007 and 2008 elections. All regressions include a linear RD polynomial on the margin of victory in the elections. In columns 2 and 4, we add to the model a dummy (its main effects and interactions with Margin, PAN win, and Margin x PAN win) that equals 1 if a municipality is located in the north (splitting the sample into two using the median of the average latitude of the municipalities); In columns 3 and 6, we add to the model a dummy (its main effects and interactions with Margin, PAN win, and Margin x PAN win) that equals 1 if a municipality has cartel presence in 2007. Robust standard errors are reported in parentheses.

Table A.6: Other crimes, robustness

	(1)	(2)	(3)	(4)
Year elections	04-05	10-11	04-05	10-11
Year outcome	2011	2014	2011	2014
	Panel A: Extortion		*Panel B: Displacement, property damages*	
Mean if PAN loss	8.5	5.7	249.2	199.5
PAN win	-0.7	-2.2	-135.2	-64.0
	(4.1)	(2.8)	(100.5)	(70.6)
Observations	158	288	158	288
R-squared	0.05	0.07	0.26	0.12
	Panel C: Robbery businesses		*Panel D: Robbery individuals*	
Mean if PAN loss	226.7	121.5	1419.4	830.4
PAN win	-177.5*	-4.5	-1,334.1*	-150.6
	(104.9)	(90.5)	(679.4)	(484.0)
	0.27	0.16	0.27	0.20
	Panel E: Kidnapping		*Panel F: Personal injury*	
Mean if PAN loss	2.3	0.9	300.1	263.5
PAN win	-0.5	1.1	-185.1*	20.3
	(1.0)	(0.8)	(107.9)	(83.9)
R-squared	0.11	0.05	0.14	0.25

Notes: Columns 1-4 report weighted regressions. Weights are determined by population size in 2005. In columns 1 and 3, the dependent variable is the average of a certain crime type per 100,000 population in 2011; in columns 2 and 4, the dependent variable is the average of a certain crime type per 100,000 population in 2014. In panel A the dependent variable is extortion; in Panel B, displacements and property damages; in panel C, robberies that targeted business establishments; in Panel D, robberies that targeted business individuals; in Panel E, kidnapping; and in Panel F, personal injuries. In columns 1 and 3, the sample is comprised of municipalities where crime data is available and where PAN won or lost by a margin smaller than 5% in the 2004 and 2005 elections; in columns 2 and 4, the sample is comprised of municipalities where crime data is available and where PAN won or lost by a margin smaller than 5% in the 2010 and 2011 elections. All regressions include a linear RD polynomial on the margin of victory ins. Robust standard errors are reported in parentheses.

A3.4 Crime as an obstacle to business

Table A.7: Manufacturing Firms in Enterprise Survey

	(1)	(2)	(3)	(4)
	Crime as obstacle (1-4 score)	"Crime is the worst obstacle"	Hours spent on regulation	"Courts are a mayor obstacle"
Baseline (South, 2006)	1.25***	0.10***	17.89***	0.10***
	(0.11)	(0.01)	(2.86)	(0.02)
North	-0.28*	-0.06***	3.34	-0.06***
	(0.13)	(0.02)	(3.19)	(0.02)
2009	0.04	-0.06***	5.47	0.26***
	(0.19)	(0.01)	(6.76)	(0.07)
North $\times$ 2009	1.15***	0.11***	-19.05**	-0.09
	(0.26)	(0.02)	(7.37)	(0.07)
Observations	2,286	2,281	2,250	2,199
R-squared	0.06	0.01	0.03	0.06

Note: This table provides average response estimates for manufacturing firms surveyed in Mexico's enterprise surveys (World Bank) of 2006 and 2009. The first row provides the average response of southern firms in 2006 and the next three rows provide differences in these averages associated with northern firms, to firms surveyed in 2009, and to their interaction. Survey-provided weights for each firm are used to calculate the respective averages, and standard errors are clustered at the region level.

A4 Municipality-level export regressions

A4.1 Alternative weights and robustness

We present results for different weights and different margins and RD polynomials. We report regressions weighed by population in 2005, as with homicides. As the number of observations in export regressions is at the product-destination-municipality level (more than one observation per municipality) and the correlation between the population in 2005 and the number of product-destination observations per municipality is high, we also report (i) OLS regressions, and (ii) regressions weighted population as of 2005 divided by the number of product-destination observations per municipality.

Table A.8: Main results: different weights

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: WLS (population in 2005)						
PAN win	-0.15***	-0.13***	0.04	-0.15***	0.03*	-0.08***
	(0.02)	(0.02)	(0.03)	(0.02)	(0.02)	(0.02)
Observations	18,267	14,120	2,790	13,889	3,133	17,579
R-squared	0.58	0.59	0.80	0.57	0.75	0.59
Panel B: OLS						
PAN win	-0.10***	-0.08***	0.01	-0.12***	0.03**	-0.05***
	(0.02)	(0.03)	(0.02)	(0.03)	(0.01)	(0.02)
Observations	18,267	14,120	2,790	13,889	3,133	17,579
R-squared	0.52	0.54	0.71	0.52	0.74	0.53
Panel C: WLS (population in 2005/number of municipality observations)						
PAN win	-0.09***	-0.07***	-0.01	-0.11***	0.01	-0.04***
	(0.02)	(0.03)	(0.02)	(0.03)	(0.01)	(0.01)
Observations	18,267	14,120	2,790	13,889	3,133	17,579
R-squared	0.55	0.56	0.80	0.53	0.81	0.56
Sample	All	North	South	Cartel	No cartel	All
Growth	3 years	3 years	3 years	3 years	3 years	6 years

Notes: The table reports estimates of β of the regression $y_{mcp} = \beta PANwin_m + \delta_1 Margin_m + \delta_2 PANwin_m \times Margin_m + \psi_{cp} + \epsilon_{mcp}$, where m stands for municipality, p product, and c country of destination. The sample is comprised of municipalities where (i) PAN won or lost by a margin smaller than 5% of the total votes in the 2007 and 2008 elections and (ii) the value exported for the triple product-destination-municipality is positive in the years used to compute export growth. In columns 1-5, the dependent variable is the natural logarithmic of total exports in the final year of the new incumbent's term (3 years after the election) divided by total exports in the election year; in column 6, it is the natural logarithmic of total exports 6 years after the election divided by total exports in the election year. In columns 2-3, the sample is divided into north (99 municipalities) and south (99 municipalities) using the median of the (average) latitude of the municipalities that had close PAN elections in 2007 and 2008 (198 municipalities). In column 4, we report effects in municipalities with pre-existing cartel participation measured in 2007 (as identified by Coscia and Rios (2012), a total of 31 municipalities); in column 5, we report effects in municipalities with no pre-existing cartel activity (167 municipalities). Standard errors are clustered at the municipality level. In Panel A, we report regressions weighted by population in 2005; in Panel B, OLS regression; in Panel C, regressions weighted by population in 2005 divided by the number of product-destination observations of the municipality.

Table A.9: Robustness, different weights

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Different margins				Different polynomials		
Panel A: WLS (population in 2005)							
PAN win	-0.13***	-0.14***	-0.14***	-0.14***	-0.14***	-0.05	-0.08
	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.06)	(0.06)
Observations	20,803	19,317	14,414	12,661	18,267	18,267	18,267
R-squared	0.58	0.58	0.58	0.58	0.58	0.58	0.58
Panel B: OLS							
PAN win	-0.08***	-0.09***	-0.10***	-0.09***	-0.11***	-0.09***	-0.12***
	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.04)
Observations	20,803	19,317	14,414	12,661	18,267	18,267	18,267
R-squared	0.52	0.52	0.51	0.51	0.52	0.52	0.52
Panel C: WLS (population in 2005/number of municipality observations)							
PAN win	-0.08***	-0.08***	-0.09***	-0.09***	-0.10***	-0.08***	-0.10**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.04)
Observations	20,803	19,317	14,414	12,661	18,267	18,267	18,267
R-squared	0.56	0.56	0.55	0.54	0.56	0.56	0.56
Polynomial degree	1st	1st	1st	1st	2nd	3rd	4th
Margin	7%	6%	4%	3%	5%	5%	5%
Product-dest. FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Table reports RDD estimates at the municipality-product-destination level. Standard errors are clustered at the municipality level. The dependent variable is the natural logarithmic of total exports in the final year of the new incumbent's term (3 years after the election) divided by total exports in the election year. In columns 1-4, we show results for different PAN margins of the total votes in the 2007 and 2008 elections using a linear polynomial on both sides of the cutoff and product-destination fixed effects. In columns 5-7, we show results for specifications using polynomials with different degrees in the sample of municipalities where the PAN won or lost by a margin smaller than 5% in the 2007-2008 elections, controlling for product-destination fixed effects. In Panel A, we report regressions weighted by population in 2005; in Panel B, we report OLS regression; in Panel C, we report regressions weighted by population in 2005 divided by the number of observations (product-destination cells) of the municipality.

Table A.10: Time-series evoluion of the effect, different weights

	(1)	(2)	(3)	(4)	(5)	(6)
Elections	04 - 05	05 - 06	06 - 07	07 - 08	08 - 09	09 - 10
Panel A: WLS (population in 2005)						
PAN win	-0.09**	-0.15***	-0.13***	-0.15***	-0.05*	-0.00
	(0.04)	(0.05)	(0.03)	(0.02)	(0.02)	(0.05)
Observations	14,143	5,075	24,914	18,267	14,297	32,334
R-squared	0.61	0.67	0.49	0.58	0.64	0.48
Panel B: OLS						
PAN win	-0.04	-0.07**	-0.08***	-0.10***	-0.01	0.01
	(0.03)	(0.03)	(0.02)	(0.02)	(0.03)	(0.03)
Observations	14,143	5,075	24,914	18,267	14,297	32,334
R-squared	0.56	0.59	0.44	0.52	0.52	0.41
Panel C: WLS (population in 2005/number of municipality observations)						
PAN win	-0.03	-0.05**	-0.07***	-0.09***	-0.02	0.00
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Observations	14,143	5,075	24,914	18,267	14,297	32,334
R-squared	0.58	0.63	0.47	0.55	0.64	0.48
Linear RD Polynomial	Yes	Yes	Yes	Yes	Yes	Yes
Product-destination FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table reports estimates of β of the regression $y_{mcp} = \beta PANwin_m + \delta_1 Margin_m + \delta_2 PANwin_m \times Margin_m + \psi_{cp} + \epsilon_{mcp}$ for different election years, where m stands for municipality, p product, and c country of destination. Standard errors are clustered at the municipality level. The dependent variable is the natural logarithmic of total exports three years after the election, divided by total exports in the year when elections took place. The sample is comprised of triples municipality-product-destination where (i) PAN won or lost by a margin smaller than 5% of the total votes and (ii) the value exported for the triple is positive in the years used to compute export growth. In Panel A, we report regressions weighted by population in 2005; in Panel B, we report OLS regression; in Panel C, we report regressions weighted by population in 2005 divided by the number of observations (product-destination cells) of the municipality.

A4.2 Sample selection versus unobservables

In this section, we investigate the importance of product-destination fixed effects. The introduction of such controls decreases the sample size since in some cases only one municipality (singleton) exports to a given product-destination pair. Any change in results could be due to a change in the estimation sample (sample bias) or a control for unobservables. We then estimate, *for the same sample* that does not contain singletons, the impact of including product-destination dummies (columns 2 and 3 of Table A.11).

Table A.11: Sample bias versus unobservables

	(1)	(2)	(3)
Panel A: WLS (population in 2005)			
PAN win	-0.18***	-0.15***	-0.20***
	(0.03)	(0.02)	(0.03)
Observations	21,435	18,267	18,267
R-squared	0.00	0.58	0.01
Panel B: OLS			
PAN win	-0.13***	-0.10***	-0.13***
	(0.02)	(0.02)	(0.03)
Observations	21,435	18,267	18,267
R-squared	0.00	0.52	0.01
Panel C: WLS (population in 2005/# of municipality observations)			
PAN win	-0.10***	-0.09***	-0.10***
	(0.02)	(0.02)	(0.03)
Observations	21,435	18,267	18,267
R-squared	0.00	0.55	0.01
Linear RD Polynomial	Yes	Yes	Yes
Product-destination FE	No	Yes	No
Product-destination singletons	Yes	No	No

Notes: The table reports RDD estimates at the municipality-product-destination level. In column 1, the sample is comprised of municipalities where (i) PAN won or lost by a margin smaller than 5% in the 2007 and 2008 elections and (ii) the value exported for the triple product-destination-municipality is positive over the new incumbent's term. In columns 2 and 3, product-destination observations that are not observed in more than one municipality are dropped (singletons perfectly explained by a dummy product-destination). The dependent variable is log of the 3-year export growth factor. Standard errors are clustered at the municipality level. In Panel A, we report regressions weighted by population in 2005; in Panel B, we report OLS regression; in Panel C, we report regressions weighted by population in 2005 divided by the number of observations (product-destination cells) of the municipality.

A4.3 More election years: 2007-2010

Table A.12: Additional election years: 2007-2010

	(1)	(2)	(3)	(4)	(5)
Panel A: WLS (population in 2005)					
PAN win	-0.08***	-0.07**	-0.00	-0.09***	0.01
	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)
Observations	47,567	32,393	10,030	30,265	12,368
R-squared	0.60	0.62	0.73	0.61	0.75
Panel B: OLS					
PAN win	-0.04**	-0.04	0.01	-0.07**	0.02
	(0.02)	(0.02)	(0.01)	(0.03)	(0.01)
Observations	47,567	32,393	10,030	30,265	12,368
R-squared	0.53	0.55	0.69	0.53	0.72
Panel C: WLS (population in 2005/number of municipality observations)					
PAN win	-0.04**	-0.04*	0.01	-0.07***	0.01
	(0.02)	(0.02)	(0.01)	(0.02)	(0.01)
Observations	47,567	32,393	10,030	30,265	12,368
R-squared	0.60	0.59	0.80	0.57	0.82
Sample	All	North	South	Cartel	No cartel
Linear RD Polynomial	Yes	Yes	Yes	Yes	Yes
Product-destination FE	Yes	Yes	Yes	Yes	Yes

Notes: The table reports estimates of β of the regression $y_{mcp} = \beta PANwin_m + \delta_1 Margin_m + \delta_2 PANwin_m \times Margin_m + \psi_{cp} + \epsilon_{mcp}$, where m stands for municipality, p product, and c country of destination. The sample is comprised of municipalities where (i) PAN won or lost by a margin smaller than 5% of the total votes in the 2007-2008-2009-2010 elections and (ii) the value exported for the triple product-destination-municipality is positive in the years used to compute export growth. The dependent variable is the natural logarithmic of total exports in the final year of the new incumbent's term (3 years after the election) divided by total exports in the election year. In columns 2-3, the sample is divided into north (294 municipalities) and south (296 municipalities) using the median of the (average) latitude of the municipalities that had close PAN elections in 2007-2008-2009-2010 (590 municipalities). In column 4, we report effects in municipalities with pre-existing cartel participation measured in 2007 (as identified by Coscia and Rios (2012), a total of 95 municipalities); in column 5, we report effects in municipalities with no pre-existing cartel activity (495 municipalities). Standard errors are clustered at the municipality level. In Panel A, we report regressions weighted by population in 2005; in Panel B, we report OLS regression; in Panel C, we report regressions weighted by population in 2005 divided by the number of observations (product-destination cells) of the

A4.4 Growth measure that includes zeros

Table A.13: Growth measure that includes zeros

	(1)	(2)	(3)	(4)	(5)
Panel A: WLS (population in 2005)					
PAN win	-0.37***	-0.42**	-0.18*	-0.39***	0.11
	(0.07)	(0.16)	(0.10)	(0.08)	(0.13)
Observations	43,156	33,298	6,278	33,978	6,390
R-squared	0.70	0.72	0.76	0.70	0.71
Panel B: OLS					
PAN win	-0.23***	-0.19	-0.04	-0.30***	0.13
	(0.07)	(0.13)	(0.12)	(0.08)	(0.11)
Observations	43,156	33,298	6,278	33,978	6,390
R-squared	0.63	0.67	0.65	0.65	0.69
Panel C: WLS (population in 2005/number of municipality observations)					
PAN win	-0.12	-0.10	0.16	-0.27***	0.23**
	(0.08)	(0.10)	(0.15)	(0.08)	(0.11)
Observations	43,156	33,298	6,278	33,978	6,390
R-squared	0.65	0.68	0.76	0.65	0.75
Sample	All	North	South	Cartel	No cartel
Linear RD Polynomial	Yes	Yes	Yes	Yes	Yes
Product-destination FE	Yes	Yes	Yes	Yes	Yes

Notes: The table reports estimates of β of the regression $y_{mcp} = \beta PANwin_m + \delta_1 Margin_m + \delta_2 PANwin_m \times Margin_m + \psi_{cp} + \epsilon_{mcp}$, where m stands for municipality, p product, and c country of destination. The dependent variable is $2 * (exp_{t+3} - exp_t)/(exp_{t+3} + exp_t)$, where exp_{t+3} denotes exports in the final year of the new incumbent's term (3 years after the election) and exp_t is total exports in the election year; in column 6, is the natural logarithmic of total exports 6 years after the election divided by total exports in the election year. The sample is comprised of municipalities where (i) PAN won or lost by a margin smaller than 5% of the total votes in the 2007 and 2008 elections and (ii) the value exported for the triple product-destination-municipality is either positive in the years used to compute export growth. In columns 2-3, the sample is divided into north (99 municipalities) and south (99 municipalities) using the median of the (average) latitude of the municipalities that had close PAN elections in 2007 and 2008 (198 municipalities). In column 4, we report effects in municipalities with pre-existing cartel participation measured in 2007 (as identified by Coscia and Rios (2012), a total of 31 municipalities); in column 5, we report effects in municipalities with no pre-existing cartel activity (167 municipalities). Standard errors are clustered at the municipality level. In Panel A, we report regressions weighted by population in 2005; in Panel B, we report OLS regression; in Panel C, we report regressions weighted by population in 2005 divided by the number of observations (product-destination cells) of the municipality.

A4.5 North and cartel presence: interaction with PAN win dummies instead of sample splits

Table A.14: North and cartel presence

	(1)	(2)	(3)	(4)	(5)	(6)
	WLS (pop. 2005)		OLS		WLS (pop. 2005/N)	
PANwin	-0.02	-0.06**	-0.00	-0.02	-0.01	-0.02
	(0.05)	(0.03)	(0.04)	(0.03)	(0.02)	(0.02)
PANwinXnorth	-0.13***		-0.10***		-0.10***	
	(0.05)		(0.04)		(0.02)	
PANwinXcartel		-0.09***		-0.09***		-0.09***
		(0.02)		(0.02)		(0.02)
Observations	18,267	18,267	18,267	18,267	18,267	18,267
R-squared	0.58	0.58	0.52	0.52	0.56	0.56
Linear RD Polynomial	Yes	Yes	Yes	Yes	Yes	Yes
Margin x North	Yes	Yes	Yes	Yes	Yes	Yes
Margin x North x PAN win	Yes	Yes	Yes	Yes	Yes	Yes
Margin x Cartel	No	No	No	No	No	No
Margin x Cartel x PAN win	No	No	No	No	No	No
Product-destination FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The sample is comprised of municipalities where (i) PAN won or lost by a margin smaller than 5% of the total votes in the 2007 and 2008 elections and (ii) the value exported for the triple product-destination-municipality is positive in the years used to compute export growth. The dependent variable is the natural logarithmic of total exports in the final year of the new incumbent's term (3 years after the election) divided by total exports in the election year. Standard errors are clustered at the municipality level. In columns 1-2, we report regressions weighted by population in 2005; in columns 3-4, we report OLS regressions; in columns 5-6, we report regressions weighted by population in 2005 divided by the number of observations (product-destination cells) of the municipality.

A4.6 Export destination (US vs others) and share of population that immigrated to the US

Table A.15: Results by destination and share of the population that immigrated to the US

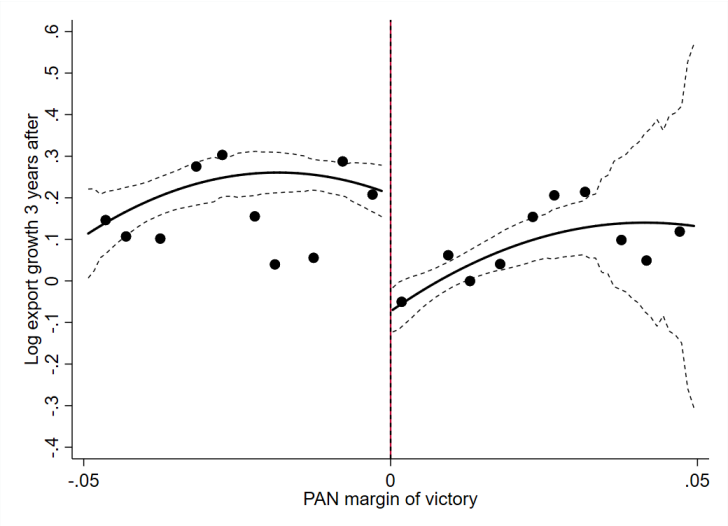
	(1)	(2)	(3)	(4)
	Country of destination		Share immigrants to the US	
	US	Others	High	Low
Panel A: WLS				
PANwin	-0.17***	-0.14***	0.04	-0.17***
	(0.04)	(0.02)	(0.02)	(0.02)
Observations	4,665	13,602	3,290	13,238
R-squared	0.34	0.65	0.79	0.62
Panel B: OLS				
PANwin	-0.09*	-0.10***	0.01	-0.12***
	(0.05)	(0.02)	(0.02)	(0.02)
Observations	4,665	13,602	3,290	13,238
R-squared	0.28	0.61	0.64	0.55
Panel C: WLS (population in 2005/number of municipality observations)				
PANwin	-0.09**	-0.09***	0.00	-0.11***
	(0.04)	(0.01)	(0.02)	(0.02)
Observations	4,665	13,602	3,290	13,238
R-squared	0.32	0.65	0.68	0.59

Notes: The sample is comprised of municipalities where (i) PAN won or lost by a margin smaller than 5% of the total votes in the 2007 and 2008 elections and (ii) the value exported for the triple product-destination-municipality is positive in the years used to compute export growth. The dependent variable is the natural logarithmic of total exports in the final year of the new incumbent's term (3 years after the election) divided by total exports in the election year. Regressions include linear RD polynomials on the vote margin on each side of the threshold and product-destination fixed effects. Standard errors are clustered at the municipality level. In column 1, we restrict the sample to exports to the US; in column 2, we exclude exports to the US. In columns 3 and 4, we split the sample by the median of the distribution of the share of the local population living in the US, measured in 2006 using *matriculas consulares* data. In Panel A, we report regressions weighted by population in 2005; in Panel B, we report OLS regressions; in Panel C, we report regressions weighted by population in 2005 divided by the number of observations (product-destination cells) of the municipality.

A5 Firm-level exports: additional tables and figures

A5.1 RD graph

Figure A.7: Log export growth as a function of the PAN electoral share



Notes: RDD graph on log export growth as a function of direct electoral shares for PAN in a Mexican municipality. The graph weights log export growth by Population in 2005. Confidence intervals are presented at a 95% level. The data for exports is formed by triples of municipality, product, and country of destination.

A5.2 Firm exports, extensive margin, municipality-level aggregation

Table A.16: Changes in the number of exporting firms

	(1)	(2)	(3)	(4)	(5)
PAN win	-0.42	-0.88*	-0.72	-0.34	0.64
	(0.59)	(0.49)	(0.91)	(0.64)	(1.12)
Observations	10661	8153	809	8507	575
R-squared	0.46	0.47	0.93	0.47	0.846
Sample	All	North	South	Cartel	No cartel
Linear RD Polynomial	Yes	Yes	Yes	Yes	Yes
Product-destination FE	Yes	Yes	Yes	Yes	Yes

Notes: The table reports RDD estimates at the municipality-product-destination level, where the outcome variable is the change in the local number of single-plant firms selling a product to a given destination between 2007 and 2010. Standard errors are clustered at the municipality level. The sample is comprised of municipalities where PAN won or lost by a margin smaller than 5% of the total votes in the 2007 and 2008 elections. In columns 2-3, the sample is divided into north (99 municipalities) and south (99 municipalities) using the median of the (average) latitude of the municipalities that had close PAN elections in 2007 and 2008 (198 municipalities). In column 4, we report effects in municipalities with pre-existing cartel participation measured in 2007 (as identified by Coscia and Rios (2012), a total of 31 municipalities); in column 5, we report effects in municipalities with no pre-existing cartel activity (167 municipalities).

A6 Effects on other outcomes

A6.1 Public finance results

Table A.17: Effects on selected government revenues/expenditures accounts

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Construction, public goods (housing, schooling, hospitals, etc.)						
PAN win	0.23*	0.27	0.12	0.20	0.05	0.15*
	(0.14)	(0.17)	(0.12)	(0.14)	(0.06)	(0.08)
Observations	148	87	61	29	119	194
R-squared	0.19	0.22	0.03	0.32	0.05	0.08
Panel B: Tax revenues						
PAN win	0.02	-0.03	0.33	0.02	0.09	0.02
	(0.04)	(0.04)	(0.31)	(0.05)	(0.12)	(0.04)
Observations	147	86	61	29	118	188
R-squared	0.10	0.16	0.15	0.32	0.05	0.02
Panel C: Federal transfers						
PAN win	-0.00	-0.01	0.02	-0.01	0.01	-0.03
	(0.01)	(0.02)	(0.04)	(0.01)	(0.02)	(0.02)
Observations	148	87	61	29	119	187
R-squared	0.02	0.09	0.08	0.09	0.01	0.01
Sample	All	North	South	Cartel	No cartel	All
Elections	07-08	07-08	07-08	07-08	07-08	04-05
Linear RD Polynomial	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table reports estimates of β of the regression $y_m = \beta PANwin_m + \delta_1 Margin_m + \delta_2 PANwin_m \times Margin_m + \epsilon_m$, where y_m is the growth of a given government revenue or expenditure (natural logarithmic of a given amount three years after the election divided by the amount in the election year). Regressions are weighted by population size in 2005. In columns 1-5 (6), the sample is comprised of municipalities where the PAN won or lost by a margin smaller than 5% of the total votes in the 2007-2008 (2004-2005) elections and for which we can observe the government expenditure or revenue amount in the years used to compute the growth measure. In columns 2-3, the sample is divided into north (99 municipalities) and south (99 municipalities) using the median of the (average) latitude of the municipalities that had close PAN elections in 2007 and 2008 (198 municipalities). In column 4, we report effects in municipalities with pre-existing cartel participation measured in 2007 (as identified by Coscia and Rios (2012), a total of 31 municipalities); in column 5, we report effects in municipalities with no pre-existing cartel activity (167 municipalities).

A6.2 Foreign direct investment

Table A.18: FDI - project level

	(1)	(2)	(3)	(4)	(5)	(6)
	CAPEX (MM USD)	New jobs per 1,000 inhabitants	Capital per new job (1,000 USD)	CAPEX (MM USD)	New jobs per 1,000 inhabitants	Capital per new job (1,000 USD)
Panel A: PAN mayors during the war on drugs - project level						
Mean if PAN loss	115.53	328.76	286.15	92.26	304.98	319.03
PANwin	-177.5***	100.5	-650.4**	-106.1***	281.4***	-736.3**
	(33.52)	(91.95)	(267.8)	(16.6)	(69.05)	(312.8)
Observations	174	174	174	111	111	111
R-squared	0.053	0.017	0.185	0.039	0.028	0.234
Elections	07-08	07-08	07-08	07-08	07-08	07-08
Period	07-12	07-12	07-12	07-10	07-10	07-10
Panel B: PAN mayors before the war on drugs - project level						
Mean if PAN loss	96.18	390.90	305.26	56.88	342.81	201.27
PANwin	-35.81	-49.88	27.06	66.65**	-46.27	146.1*
	(69.86)	(94.18)	(100.3)	(28.75)	(130)	(68.32)
Observations	114	114	114	63	63	63
R-squared	0.014	0.009	0.062	0.022	0.01	0.019
Elections	04-05	04-05	04-05	04-05	04-05	04-05
Period	04-09	04-09	04-09	04-07	04-07	04-07

Notes: Table reports RD estimates at the greenfield project level, where the outcome is the value of the relevant variable. The sample is comprised of greenfield projects located in municipalities where PAN won or lost by a margin smaller than 5% in the relevant period. Panel A shows the effects of a close PAN victory in 2007-2008 on average project values between 2007 and 2012 (columns 1-3) or between 2007 and 2010 (columns 4-6). Panel B shows similar effects of a close PAN win in 2004-2005 on average project values between 2004 and 2009 (columns 1-3) or between 2004 and 2007 (columns 4-6). Columns 1 and 4 assess effects on a project's CAPEX levels. Columns 2 and 5 evaluate effects on a project's number of new jobs. Columns 3 and 6 show effects on the average project's capital per new created job.

A6.3 Production, production per worker, revenues (economic census)

Table A.19: Production, production per worker, wages and employment

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Production		Production per worker		Hours per worker		Revenues		Revenues minus maquila	
Panel A: All industries										
PAN win	-0.03	0.02	-0.03	0.01	-0.00	-0.00	-0.01	0.02	-0.01	0.02
	(0.03)	(0.03)	(0.03)	(0.03)	(0.01)	(0.01)	(0.03)	(0.02)	(0.03)	(0.02)
Observations	197	246	197	243	198	243	198	246	198	246
R-squared	0.04	0.01	0.03	0.00	0.01	0.01	0.03	0.01	0.02	0.02
Panel B: Manufacturing										
PAN win	-0.08*	-0.01	-0.10**	-0.03	-0.01	-0.01	-0.08*	-0.00	-0.08*	-0.02
	(0.05)	(0.03)	(0.05)	(0.03)	(0.01)	(0.01)	(0.05)	(0.03)	(0.05)	(0.04)
Observations	192	226	181	208	181	208	192	226	192	226
R-squared	0.07	0.01	0.12	0.01	0.01	0.02	0.07	0.01	0.07	0.03
Panel C: Services, construction and retail										
PAN win	-0.03	0.01	-0.03	0.00	-0.01*	0.00	-0.01	0.03	-0.01	0.03
	(0.02)	(0.04)	(0.03)	(0.02)	(0.00)	(0.01)	(0.04)	(0.04)	(0.04)	(0.04)
Observations	192	224	186	202	186	202	192	224	192	224
R-squared	0.01	0.02	0.04	0.01	0.03	0.00	0.00	0.02	0.00	0.02
Elections	07-08	04-05	07-08	04-05	07-08	04-05	07-08	04-05	07-08	04-05
Linear Polynomial	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: The table reports β's of the regression $log(y_{mt'}/y_{mt})^{1/5} = \alpha + \beta PANwin_m + \delta_1 Margin_m + \delta_2 PANwin_m \times Margin_m + \epsilon_m$, where $t' = t + 5$ and y_{mt} is the value of a particular variable (production, production per worker, revenues, revenues excluding maquilas) in municipality m, year t. The data come from the economic censuses of the years 2003, 2008, and 2012. We weight regressions by population in 2005. In columns 1-3-5, the sample is comprised of municipalities where (i) PAN won or lost by a margin smaller than 5% in the 2007 and 2008 elections and (ii) the value of the variable was positive in 2008 and 2013. In columns 2-4-6, the sample is comprised of municipalities where (i) PAN won or lost by a margin smaller than 5% in the 2004 and 2005 elections and (ii) the value of the variable was positive in 2003 and 2008.

A6.4 Private security and income growth by skill-age group (population census)

Table A.20: Private security: guards

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Annualized salary growth (log)						
Mean if Pan loss	0.07	0.06	0.07	0.07	0.08	0.05
PANwin	-0.07***	-0.08***	-0.04**	-0.08***	-0.03	0.01
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)
Observations	160	86	74	29	131	182
R-squared	0.37	0.48	0.06	0.66	0.03	0.15
*Panel B: (#guards_2010 - #guards_2000)*1000/Pop_05*						
Mean if Pan loss	2.02	2.95	0.82	2.35	1.29	2.63
PANwin	2.17**	1.43	1.32	2.34**	0.11	-1.83*
	(0.89)	(0.98)	(1.23)	(0.85)	(1.27)	(1.03)
Observations	160	86	74	29	131	190
R-squared	0.12	0.07	0.08	0.27	0.06	0.11
Sample	All	North	South	Cartel	Non-cartel	All
Elections	07-08	07-08	07-08	07-08	07-08	04-05

Notes: The table reports β's of the regression $y_m = \alpha + \beta PANwin_m + \delta_1 Margin_m + \delta_2 PANwin_m \times Margin_m + \epsilon_m$. The data come from the (amplified survey) population censuses of the years 2000 and 2010. Since this census is a survey, we follow the recommendation of the Mexican Statistical Institute (INEGI) and aggregate data at the municipality level using the weights provided by INEGI. In Panel A, the dependent variable is log of the average income of guards in 2010 divided by the average income of guards in 2000. In Panel B, the dependent variable is number of guards in 2010 minus the number of guards in 2000, per 1,000 population as of 2005. In columns 1-5 (6), the sample is comprised of municipalities where the PAN won or lost by a margin smaller than 5% of the total votes in the 2007-2008 (2004-2005) elections and for which there is a positive number of guards with non-zero wages. In columns 2-3, the sample is divided into north (99 municipalities) and south (99 municipalities) using the median of the (average) latitude of the municipalities that had close PAN elections in 2007 and 2008 (198 municipalities). In column 4, we report effects in municipalities with pre-existing cartel participation measured in 2007 (as identified by Coscia and Rios (2012), a total of 31 municipalities); in column 5, we report effects in municipalities with no pre-existing cartel activity (167 municipalities). Regressions are weighted by population size in 2005. Robust standard errors are reported in parentheses.

Table A.21: Individual income growth by skill-age

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Years of schooling >=13, age<45						
PANwin	-0.02***	-0.02**	0.01	-0.02***	-0.00	0.03***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Observations	195	99	96	31	164	243
R-squared	0.15	0.22	0.01	0.47	0.05	0.07
Panel B: Years of schooling >=13, age>=45						
PANwin	-0.04***	-0.05***	0.03	-0.04***	0.01	0.04***
	(0.01)	(0.01)	(0.04)	(0.01)	(0.03)	(0.01)
Observations	144	78	66	30	114	185
R-squared	0.12	0.29	0.03	0.47	0.00	0.09
Panel C: Years of schooling <13, age<45						
PANwin	-0.05***	-0.05***	-0.01	-0.05**	-0.01	0.05**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)	(0.02)
Observations	198	99	99	31	167	246
R-squared	0.21	0.27	0.02	0.29	0.04	0.22
Panel D: Years of schooling <13, age>=45						
PANwin	-0.06***	-0.07***	-0.00	-0.06**	-0.02	0.06***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)	(0.02)
Observations	198	99	99	31	167	246
R-squared	0.20	0.28	0.04	0.33	0.02	0.20
Sample	All	North	South	Cartel	Non-cartel	All
Elections	07-08	07-08	07-08	07-08	07-08	04-05

Notes: The table reports β's of the regression $log(y_{m2010}/y_{m2000})^{1/10} = \alpha + \beta PANwin_m + \delta_1 Margin_m + \delta_2 PANwin_m \times Margin_m + \epsilon_m$, where y_{mt} is the average income of a skill-age group in municipality m in year t. The data come from the population censuses of the years 2000 and 2010. Since this census is a survey, we follow the recommendation of the Mexican Statistical Institute (INEGI) and aggregate the data at the municipality level using the weights provided by INEGI. In columns 1-5 and 7-11 (6 and 12), the sample is comprised of municipalities where the PAN won or lost by a margin smaller than 5% of the total votes in the 2007-2008 (2004-2005) elections and for which there is a positive number of respondents with non-zero wages. In columns 2-3 and 8-9, the sample is divided into north (99 municipalities) and south (99 municipalities) using the median of the (average) latitude of the municipalities that had close PAN elections in 2007 and 2008 (198 municipalities). In columns 4-10, we report effects in municipalities with pre-existing cartel participation measured in 2007 (as identified by Coscia and Rios (2012), a total of 31 municipalities); in columns 5-11, we report effects in municipalities with no pre-existing cartel activity (167 municipalities). Regressions are weighted by population size in 2005. Robust standard errors are reported in parentheses.

A6.5 Migration patterns

We study migration patterns using two different approaches. First, we study net migration patterns (inflow minus outflow) by studying effects on population growth. Second, by using a sample from the census to trace individual movements to and from municipalities. We use a representative publicly available 10% sample of the census in Mexico. In this sample individuals are asked about their municipality of residence in 2005. We define migrants as individuals that resided in a different municipality in 2005. We estimate both probabilities of leaving a municipality after a close PAN win and the probability of arriving into a municipality after a close PAN win.

We also divide workers in high skill and low skill. This division is based on educational attainment. Following the labor literature we define high skill as workers with university education. Low skill are workers with less than high school education.

Table A.22: Population growth: ln(population_2010/population_ 2005)

	(1)	(2)	(3)	(4)	(5)	(6)
PANwin	0.02*	0.04***	0.03	0.03**	-0.00	0.03
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)	(0.02)
Observations	198	99	99	31	167	247
R-squared	0.10	0.25	0.03	0.33	0.01	0.05
Sample	All	North	South	Cartel	Non-cartel	All
Elections	07-08	07-08	07-08	07-08	07-08	04-05

Notes: The table reports β's of the regression $log(y_{m2010}/y_{m2000}) = \alpha + \beta PANwin_m + \delta_1 Margin_m + \delta_2 PANwin_m \times Margin_m + \epsilon_m$, where y_{mt} is the total population in municipality m in year t. In columns 1-5 (6), the sample is comprised of municipalities where the PAN won or lost by a margin smaller than 5% of the total votes in the 2007-2008 (2004-2005) elections. In columns 2-3, the sample is divided into north (99 municipalities) and south (99 municipalities) using the median of the (average) latitude of the municipalities that had close PAN elections in 2007 and 2008 (198 municipalities). In column 4, we report effects in municipalities with pre-existing cartel participation measured in 2007 (as identified by Coscia and Rios (2012), a total of 31 municipalities); in column 5, we report effects in municipalities with no pre-existing cartel activity (167 municipalities). Regressions are weighted by population size in 2005. Robust standard errors are reported in parentheses.

Table A.23: Individual Migration Patterns

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		All			Cartel			No Cartel	
Panel A: Dependent variable 1 if a worker left municipality, PAN win origin									
Mean PAN loss	0.04	0.09	0.04	0.09	0.13	0.08	0.02	0.06	0.02
PAN win	0.03	-0.01	0.03	0.05	-0.03	0.07	-0.01	-0.02	-0.01
	(0.03)	(0.04)	(0.03)	(0.05)	(0.05)	(0.05)	(0.01)	(0.02)	(0.01)
Linear RD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Skill	All	High	Low	All	High	Low	All	High	Low
Observations	934287	71005	863282	299552	40950	258602	634735	30055	604680
R-squared	0	0	0.01	0.01	0	0.01	0	0	0
Panel B: Dependent variable 1 if a worker arrived to municipality, PAN win destination									
Mean PAN loss	0.05	0.09	0.04	0.05	0.08	0.05	0.04	0.10	0.04
PAN win	0.01	0.00	0.01	0.02	0.00	0.03*	-0.01	0.00	-0.01
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)	(0.03)	(0.01)
Linear RD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Skill	All	High	Low	All	High	Low	All	High	Low
Observations	928886	70442	858464	282195	38896	243299	646691	31526	615165
R-squared	0	0	0	0	0	0	0	0	0

Notes: The table reports estimates of β of the regression $y_m = \beta PANwin_m + \delta_1 Margin_m + \delta_2 PANwin_m \times Margin_m + \epsilon_m$, where y_m is a dummy variable that takes value 1 if an individual worker moved. Panel A estimates the probability of an individual to move from a municipality, i.e. out-migration, PAN win refers to the municipality of origin where the PAN won or lost by a margin smaller than 5% of the total votes in the 2007-2008. Panel B estimates the probability of an individual arriving into a municipality, i.e. immigration, PAN win refers to the municipality of destination where the PAN won or lost by a margin smaller than 5% of the total votes in the 2007-2008. We use a linear RD polynomial in all regressions. High-skill are individuals with university degrees, or the equivalent years of approved studies. Low skill are workers with less than high school education. Cartel activity is measured using Coscia and Rios (2012) classification of whether a municipality has cartel presence in 2007. Standard errors are clustered at the municipality level. The sample of individual workers is the 10% census sample publicly available from INEGI.

A7 Inclusion of state fixed effects

Table A.24: Municipal exports: region fixed-effects

	(1)	(2)	(3)	(4)	(5)
Panel A: Homicides					
PAN win	8.3	19.0	-6.2	38.5*	-4.7
	(9.3)	(13.6)	(5.9)	(19.2)	(4.9)
Observations	198	99	99	31	167
R-squared	0.78	0.77	0.57	0.81	0.73
Panel B: WLS (population in 2005)					
PAN win	-0.06**	-0.08***	0.04	-0.07*	0.01
	(0.03)	(0.03)	(0.04)	(0.04)	(0.02)
Observations	18,267	14,120	2,790	13,889	3,133
R-squared	0.58	0.59	0.80	0.57	0.75
Panel C: OLS					
PAN win	-0.05***	-0.05***	0.01	-0.07**	0.01
	(0.02)	(0.02)	(0.02)	(0.03)	(0.01)
Observations	18,267	14,120	2,790	13,889	3,133
R-squared	0.52	0.54	0.72	0.52	0.75
Panel D: WLS (population in 2005/number of municipality observations)					
PAN win	-0.06**	-0.08***	0.04	-0.07*	0.01
	(0.03)	(0.03)	(0.04)	(0.04)	(0.02)
Observations	18,267	14,120	2,790	13,889	3,133
R-squared	0.58	0.59	0.80	0.57	0.75
Sample	All	North	South	Cartel	No cartel
Linear RD Polynomial	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes
Product-destination FE	Yes	Yes	Yes	Yes	Yes

Notes: In Panel A, the table reports β's of the regression $y_m = \alpha + \beta PANwin_m + \delta_1 Margin_m + \delta_2 PANwin_m \times Margin_m + \gamma_m + \epsilon_m$, where γ_m stands for state fixed effects and we use population in 2005 as weights. In Panels B-D, the table reports β's of the regression $y_{mcp} = \alpha + \beta PANwin_m + \delta_1 Margin_m + \delta_2 PANwin_m \times Margin_m + \psi_{cp} + \gamma_{mr} + \epsilon_m$, where ψ_{cp} stands for product-destination fixed effects. In column 1, the sample is comprised of municipalities where the PAN won or lost by a margin smaller than 5% of the total votes in the 2007-2008 elections. In columns 2-3, the sample is divided into north (99 municipalities) and south (99 municipalities) using the median of the (average) latitude of the municipalities that had close PAN elections in 2007 and 2008 (198 municipalities). In column 4, we report effects in municipalities with pre-existing cartel participation measured in 2007 (as identified by Coscia and Rios (2012), a total of 31 municipalities); in column 5, we report effects in municipalities with no pre-existing cartel activity (167 municipalities). Standard errors are clustered at the municipality level. In Panel A, we report regressions weighted by population in 2005; in Panel B, we report OLS regression; in Panel C, we report regressions weighted by population in 2005 divided by the number of observations (product-destination cells) of the municipality.

Table A.25: Firm exports: region fixed-effects

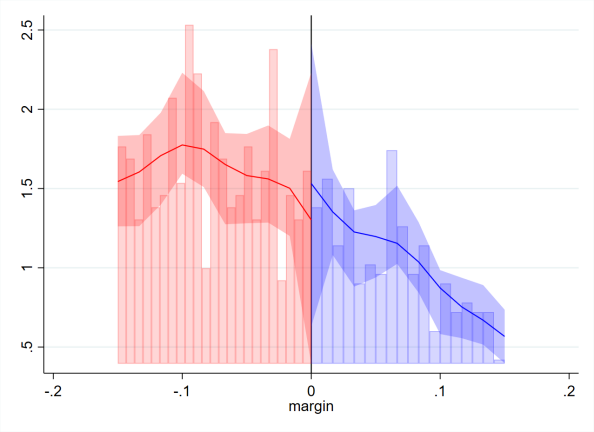
	(1)	(2)	(3)	(4)
	Homicides		Exports	
PAN win	42.48**	22.94**	-0.21**	-0.46**
	(17.01)	(11.21)	(0.09)	(0.21)
State FE	No	Yes	No	Yes
Observations	66	65	15170	15169
R-squared	0.32	0.81	0.08	0.08

Notes: In columns 1 and 2, the table reports β's of the regression $y_m = \alpha + \beta PANwin_m + \delta_1 Margin_m + \delta_2 PANwin_m \times Margin_m + \gamma_r + \epsilon_m$, where γ_s stands for state fixed effects and we use population in 2005 as weights. In columns 3 and 4, the table reports β's of the regression $y_{fmcp} = \alpha + \beta PANwin_m + \delta_1 Margin_m + \delta_2 PANwin_m \times Margin_m + \psi_{cp} + \gamma_r + \epsilon_m$, where ψ_{cp} stands for product-destination fixed effects. The sample is comprised of (i) municipalities where PAN won or lost by a margin smaller than 5% in local elections between 2007 and 2008, and (ii) exporters that have a single plant within a state. Robust standard errors are reported in parentheses.

A8 Election manipulation tests

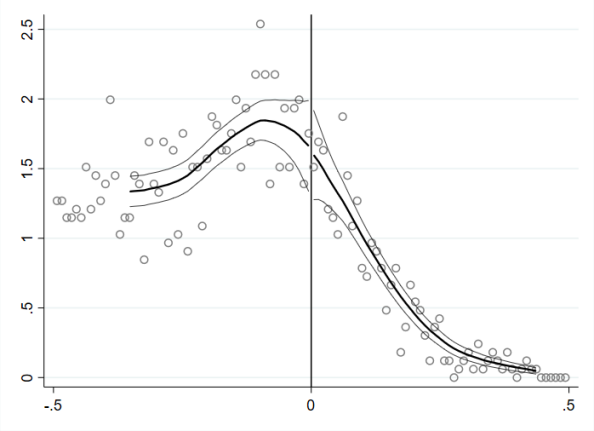
First, we implement Cattaneo et al. (2018) based on their theoretical work (Cattaneo et al., 2020). For our application, we use the baseline bandwidth of 5% and the sample of elections for which PAN either won or lost by a margin of at most 50%. In graph A.8 we find no evidence of manipulation around the discontinuity. We then perform the traditional McCrary (2008) test. As we can see in graph A.9 we find no evidence of manipulation around the discontinuity.

Figure A.8: Cattaneo, Jansson and Ma (2018) Manipulation Test 5% bandwidth



Notes: This graph represents a histogram of frequencies of electoral outcomes around the electoral discontinuity. The "x" axis represents the winning (losing) margin for PAN. The shaded regions represent 95% confidence intervals. We define a 5% bandwidth for a close electoral outcome.

Figure A.9: McCrary (2008) Manipulation Test



Notes: This graph represents a histogram of frequencies of electoral outcomes around the electoral discontinuity. The "x" axis represents the winning (losing) margin for PAN. We also report the 95% confidence intervals in the predicted distribution from both sides of the discontinuity.

A9 Effects of law enforcement operations

Using a difference-in-differences framework, we test the impact of high-impact drug law enforcement operations coordinated by the federal government on homicides and exports. Identification strategies that exploit this source of variation have been used in the literature finding no effects in exports. One possible explanation is that governments strategically choose to deploy law enforcement to places where it is more valuable to intervene, which can bias estimates. We collect data on operations between 2006 and 2009 from the document *Memoria Documental: Operaciones Contra el Narcotráfico*, contained in the *Informe de Rendición de Cuentas 2006-2012* of the *Secretaría de la Defensa Nacional* (SEDENA, 2012). We obtain information on the date and location of each operation. Because the location information only includes the state, we interact this information with municipal pre-existing cartel presence (measured in 2007) from Coscia and Rios (2012) to obtain a measure at the municipality level. Since the government carried out several operations in the same location, we record the date of the first operation and classify as *post* all the years after this date.

We perform the estimation in a sample of all Mexican municipalities. To make the results comparable with the main results of the paper, we also perform the estimation in the sample of municipalities with close elections in 2007-2008 (PAN victory or loss by less than 5% of total votes).

We estimate the following model to test effects on homicides, using as a reference the year when the operation took place,

$$y_{mt} = \sum_{\tau=1}^{m} \beta_{-\tau} Operation_{m,t-\tau} + \sum_{\tau=1}^{q} \beta_{\tau} Operation_{m,t+\tau} + \psi_t + \gamma_m + \epsilon_{mt} \tag{4}$$

where y_{mt} denotes averages homicides per 100,000 population in year t, $Operation_{m,t-\tau}$ is a dummy variable that takes value 1 if municipality m was the location of a law enforcement operation and year t is τ years before the year of the operation, $Operation_{m,t+\tau}$ is a dummy variable that takes value 1 if municipality m was the location of a law enforcement operation and year t is τ years after the year of the operation, ψ_t is a vector of year

fixed effects, and γ_m is a vector of municipality fixed effects. We weight regressions by population as of 2005.

To test the effect on exports, we estimate the following model, also using as a reference the year when the first operation took place:

$$y_{mcpt} = \sum_{\tau=1}^{m} \beta_{-\tau} Operation_{m,t-\tau} + \sum_{\tau=1}^{q} \beta_{\tau} Operation_{m,t+\tau} + \psi_{cpt} + \gamma_m + \epsilon_{mcpt} \quad (5)$$

where y_{mcpt} denotes the natural logarithmic of exports of product p in year t from municipality m to destination c, and ψ_{cpt} is a vector of product-destination-year fixed effects. We cluster standard errors at the municipality level.

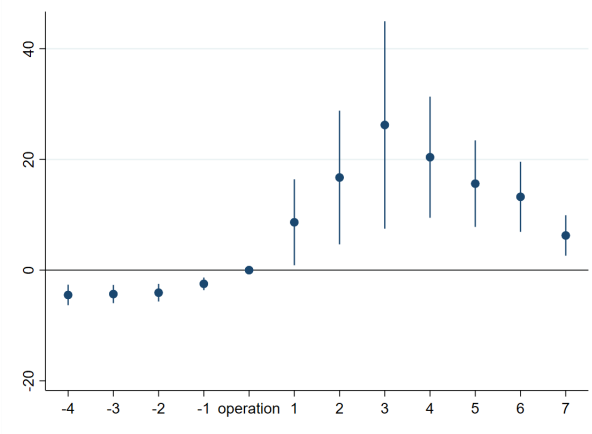
In Panels (a) and (b) of Figure**??**, we report results for homicides (equation 4) from all municipalities and municipalities with close elections, respectively. We can see an increase in homicides after operations. When the sample is comprised of all municipalities, we do not observe parallel trends before the operations. In Panels (c) and (d), we report results for exports (equation 5) from all municipalities and municipalities with close elections, respectively. When the sample is comprised of all municipalities, we see no decrease in exports after the operations; when the sample is comprised of municipalities with close elections, we see an increase in exports. At first glance, this result is counter-intuitive. However, we stress that operations are a choice variable and thus the estimates can be biased due to omitted variables or reverse causality.

Finally, we estimate aggregate effects using

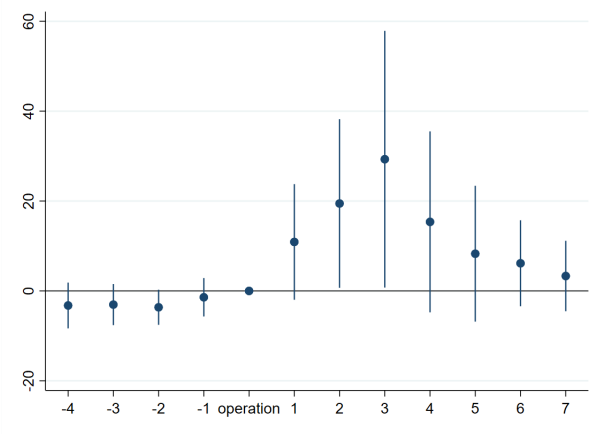
$$y_{mt} = \sum_{\tau=1}^{m} \beta_{-\tau} Operation_{m,t-\tau} + \sum_{\tau=1}^{q} \beta_{\tau} Operation_{m,t+\tau} + \psi_t + \gamma_m + \epsilon_{mt} \quad (6)$$

where y_{mt} denotes total exports in year t from municipality m. Regressions are weighted by population as of 2005. We allow for zeros (entries and exits) by using the transformation $y \rightarrow ln(1 + y)$. Panels (e) and (f) show null results for all municipalities and municipalities with close elections in 2007-2008.

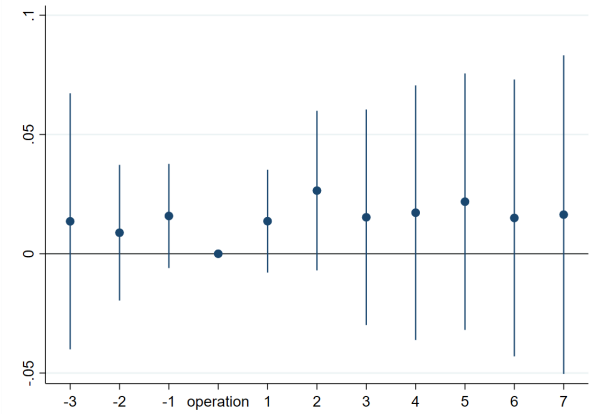
Figure A.10: DiD estimation: effect of a drug enforcement operations on homicides and exports



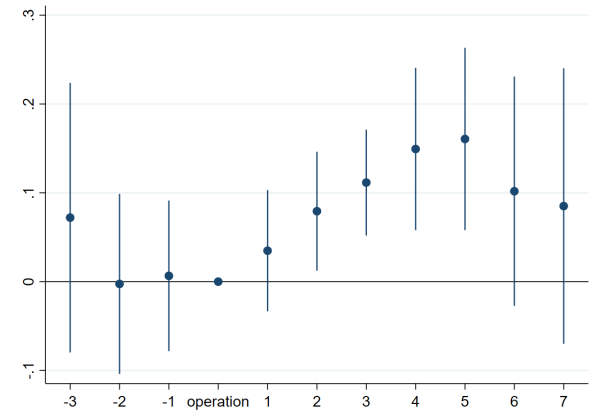
(a) Homicides (all municipalities)



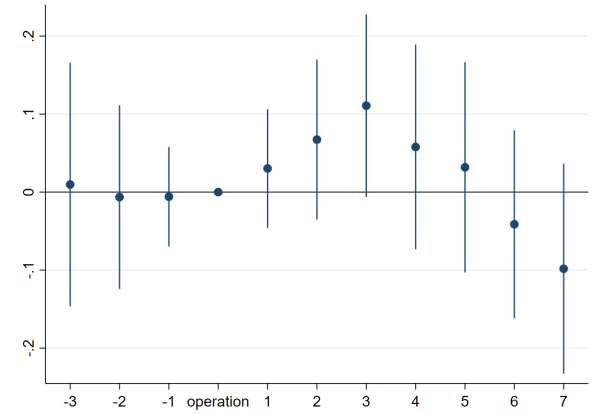
(b) Homicides (close elections)



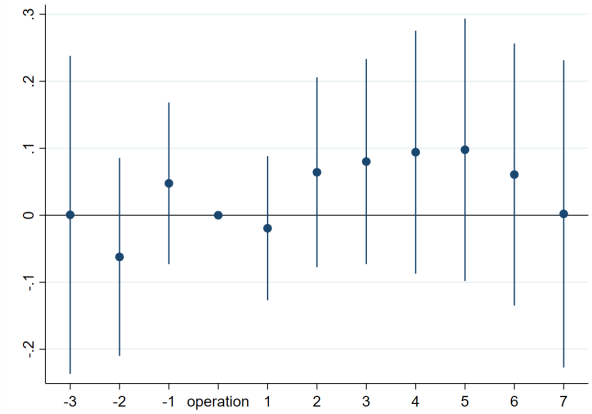
(c) Exports (all municipalities)



(d) Exports (close elections)



(e) Aggregate exports (all municipalities)



(f) Aggregate exports (close elections)

Notes: Panels (a) and (b) report estimates of equation 4; Panels (c) and (d) report estimates of equation 5; Panels (e) and (f) report estimates of equation 6. The vertical lines are 95% confidence intervals. In Panels (a), (c) and (e), the estimation sample is comprised of all Mexican municipalities; in Panels (b), (d), and (f), the sample is comprised of municipalities where PAN won or lost by a margin smaller than 5% of the votes in the 2007-2008 elections.

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