Border Fences and the Mexican Drug War

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Abstract

The Secure Fence Act resulted in the construction of 649 miles of fencing along the US-Mexico border. At the same time, violence in the Mexican drug war spiked as drug cartels fought to control territory. I hypothesize that construction of the border fence caused fighting between drug cartels by changing the value of territory for smuggling, undermining agreements between cartels. I use novel fine-grained data on violence from death certificates, engineering maps of the border fence, and a difference in differences research design to show that construction of the fence caused at least 3,000 additional deaths in the border region. The entire effect of border fence construction is due to escalation of violence in areas where smuggling routes were not blocked by the new border fence—territories that became relatively more valuable for smuggling.

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1 Introduction

Due to the Secure Fence Act, the US government built 649 miles of fence on the border with Mexico between 2007 and 2011 (Borkowski, Fisher and Kostelnik, 2011). As the fence was being built the drug war in Mexico escalated, reaching a peak of over 25,000 homicides in 2011 as drug cartels fought to control territory. One of the goals of the Secure Fence Act was to reduce drug smuggling into the US (Bush, 2006). If successful, this would change the value of territory to drug cartels. I investigate whether the construction of the border fence caused drug war violence by changing the value of territory for smuggling, undermining agreements between cartels.

An important theoretical literature expects powerful individuals or organizations to seek to control territory when expectations of future revenue from that territory are high (Olson, 1993; Acemoglu and Robinson, 2005; Konrad and Skaperdas, 2012). A nascent empirical literature provides evidence that attempts to control territory by states (Caselli, Morelli and Rohner, 2015) and insurgent groups (de la Sierra, 2014) are driven by changes in their economic value. The construction of the fence on the US-Mexico border provides an opportunity to investigate whether criminal organizations also seek to control territory when the expected future value is higher and whether they will fight for that control.

I hypothesize that the construction of the border fence caused agreements between drug cartels about territorial control to break down by changing the value of territory. Additionally, since the exact final location of the border fence was a secret, uncertainty over the value of territory caused fighting in the border region to persist until the fence was completed. I expect fighting over territory that is unlikely to be fenced and will become relatively more valuable once the border fence is completed.

To test this theory, I use novel fine-grained data on violence from death certificates, engineering maps of the border fence and a difference in differences research design. I show that construction of the fence caused at least 3,000 additional deaths in the border region. The entire effect of border fence construction is due to escalation of violence in areas where smuggling routes were not blocked by the new border fence—territories that became relatively more valuable for smuggling.

We know very little about the effects of increased border security.[1] Yet the construction of

[1] One exception is Getmansky, Grossman and Wright (2017), who investigate the effect of border walls on property crime.

border fences and walls around the world is widespread and accelerating (Hassner and Wittenberg, 2015; Carter and Poast, 2017; Vallet, 2014). The US government is again planning a major expansion of border security infrastructure by building a large wall.

The paper proceeds as follows. The next section provides more information on the border fence constructed due to the Secure Fence Act. Section 3 develops a theory of fighting for territorial control by drug cartels and contrasts it with other explanations for the Mexican drug war. Section 4 explains the data and section 5 outlines the empirical strategy used to find the effect of the border wall construction on drug cartel violence. Section 6 overviews and results and finally section 7 concludes.

2 The Secure Fence Act

The Secure Fence Act was signed on October 26, 2006, requiring the US Department of Homeland Security (DHS) to construct double layered fencing along 850 miles of the US-Mexico border in five specific areas, but no funds were initially appropriated. Even after the passage of the Secure Fence Act, it wasn't clear the fence would actually be built as intended. Previous border security construction had been haphazard and plans were often proposed and not implemented.

In fact, the requirements of Secure Fence Act itself were relaxed by the time funding was appropriated a year later. The initial requirement of double fence was dropped, the mandated length was reduced to 700 km and the Secretary of Homeland Security was given authority to use his discretion as to the type and location of fencing. Initial plans for the fence were quickly stymied by environmental lawsuits, numerous landowners on the border refusing to sell their land, and multiple tracts of land for which the owner could not be determined. By September 30, 2007 only 2.32 miles of fencing had been constructed.[2] Thus, it would not have been obvious to leaders of drug cartels that the SBA would have a major impact on them. Only the actual construction of the fence indicated that a border fence of any significant size would actually be built.

The exact location of the fence was a secret. Even during construction plans continued to change due to cost overruns. The plans for the border fence were only released in 2011—after the

[2]Under the PF225 and VF300 programs through which DHS built fencing authorized by the SBA, only 0.72 miles of pedestrian fence and 1.6 miles of vehicle fence had been built by September 30, 2007. See GAO report http://www.gao.gov/new.items/d09244r.pdf

fence was nearly complete—after a long Freedom of Information Act lawsuit.

3 Explaining Violence in the Mexican Drug War

The intensity of the Mexican drug war increased dramatically in 2007, especially near the US border. Numerous explanations for the escalation of the drug war have been offered. These include the election of PAN mayors (Dell, 2015), the killing or arrest of cartel leaders (Calderón et al., 2015), uncertainty about government corruption(Zachary and Spaniel, 2015), and events in Colombia (Castillo, Mejia and Restrepo, 2013).

I present another explanation: the construction of the border fence on the US-Mexico border changed the value of territory.

3.1 Border Security and the Value of Territory for Drug Smuggling

It is well know that inter-cartel violence is driven by competition between drug cartels over territory (Beittel, 2015). Territorial control is valuable to cartels as locations to grow and process drugs, remain safe from the government and smuggle drugs into and out of Mexico. The border region is especially valuable for its smuggling routes into the US. Physical border security, including walls and fences, changes the cost of smuggling by drug cartels. Often cartels make significant investments into circumventing border security. Multiple tunnels crossing the border between Tijuana and San Diego have been discovered.

Constructing a border wall changes the relative value of territory for drug cartels, which upsets the equilibrium of territorial control. Fighting was previously limited by agreements between cartels about territorial control. This is ideal for cartels because agreements over territorial control are less costly than fighting (Fearon, 1995).[3]

Not only were there changes in the expected future value of territory, there was uncertainty about exactly where the border fence would be built, which causes. Because the planned location of the border fence was secret and changing, cartels would be especially uncertain about their future access to smuggling routes and the revenue streams and power that come with it. Uncertainty has been linked to instability and increased risk of violence in other contexts (Acharya and Lee, 2016).

[3]Bargains and tacit agreements about territorial control between non-state actors are also common in civil war (Staniland, 2012).

This uncertainty about future power and resources can lead to fighting. However, fighting reveals which cartels are stronger, enabling them to reach agreements that were previously impossible due to differing beliefs about the balance of power (Fearon, 1995; Reiter, 2003; Powell, 2006). I hypothesize that cartels will fight over territory in the border region only while uncertainty about the long-term value of territory near the border remains—while the fence is being constructed. Once the relative value of territory is known and stops changing, new agreements can be reached, limiting the violence.

If the fighting is actually caused by changes in the value of territory caused by the border fence, there should be increased competition over territory where smuggling routes were not blocked by the construction of the border fence.

Ciudad Juarez's public prosecutor, Jorge Arnaldo Nava Lpez, blames the El Paso fencing for contributing to a sharp uptick in crime along a fertile strip through the desert known as Valle de Juarez. The crime spike has been particularly acute where the barrier ends near Guadalupe municipality. "It has fostered a displacement towards the villages on the outskirts of Ciudad Juarez," Nava said. [4]

4 Data on Drug War Violence and Construction of the Border Fence

To measure drug war violence I use data from death certificates for more than $200,000$ localities in Mexico. Previous studies of the Mexican drug war use data on violence at the municipality-level. However, only 39 municipalities touch the US border and, because of the large size of Mexican municipalities, the construction of the border fence has different impacts on different parts of the same municipality.

4.1 Data on the Drug War in Mexico

Data on violence in Mexico is from National Institute of Statistics and Geography, which has made available mortality microdata from death certificates issued by the Ministry of Health. This shows homicides in Mexico by locality—cities, towns, or villages—the smallest territorial unit in Mexico.

[4] http://www.reuters.com/article/us-usa-trump-mexico-idUSKBN14O14N

Small localities are constantly being added and removed as population changes, so these rural localities are aggregated into 5km by 5km grid cells.

Homicides related to drug trafficking organizations are not distinguished from other homicides, but drug related violence accounted for the vast majority of homicides in Mexico during this period.

4.2 Data on the Construction of the Border Fence

Maps of the location of the border fence were obtained by Denise Gilman and University of Texas Working Group on Human Rights and the Border Wall through a Freedom of Information Act (FIOA) lawsuit against the U.S. Department of Homeland Security, U.S. Customs and Border Protection, and the U.S. Army Corps of Engineers.[5] These maps were produced by Michael Baker Jr., Inc, the engineering firm that planned and managed the construction of the fence. Because the litigants focused on Texas, the maps of the fence in Texas is more detailed than elsewhere.

5 Empirical Strategy

I use a difference in differences design to compare localities near the US border to localities elsewhere in Mexico, before, during, and after the construction of the border fence. I include two treatment periods—construction and post-construction—because I hypothesize different effects while construction is ongoing and after it is complete. This research design is similar to Donohue, Ho and Leahy (2013).

The baseline specification is

$$y_{i,t} = \alpha_i T_i + \beta_{i,t}(T_i \times Construction_t) + \delta(T_i \times Post_t) + \gamma_t + \epsilon_{i,t} \tag{1}$$

where $y_{i,t}$ is the number of homicides per square kilometer in unit j at time t, T_i is a treatment indicator, $Construction_t$ indicates the period during fence construction, $Post_t$ indicates the period after construction was complete, and γ_t represents the time period effect.

The individual units of analysis, i are a localities for incorporated localities and a 5km by 5km grid cells for unincorporated areas. Incorporated localities in Mexico have defined boundaries, but smaller unincorporated localities do not. Unincorporated localities also keep changing, as

[5] Gilman v. U.S. Department of Homeland Security, No. 1:09-CV-00468 (D.D.C.)

the government removes localities that no longer have residents and adds new localities. Because of the lack of defined territorial boundaries for rural localities and changes over time, I combine unincorporated localities into 5km by 5km grid cells. Grid cells may be less than $25km^2$ if they intersect incorporated localities or the border. The unit of time is the month.

I use September 30, 2007 to May 10, 2011 as the construction period. September 30, 2007 is the first date the Government Accounting Office lists any construction progress on the border fence.[6] May 10, 2011 is the day Barack Obama announced the completion of the border fence (Obama, 2011).

In order the identify the overall effect of the border fence on violence, as well as the local effect in areas where the fence was built and the displacement effect where it was not built, I use several different treatment indicators. For the overall effect, the treatment group is the area within 10km of the US border. This combines possible local effects in areas with smuggling routes blocked by the fence and displacements effects to areas where the fence was not built. For the local effect of the fence in areas where smuggling routes are blocked by its construction, the treatment group is areas where fence construction blocks straight-line to the nearest point 5km into the US. This is done because in some areas the border fence is over 1km into the US. For the displacement effect, the treatment group is all areas where the straight-line to the nearest point 5km into the US is not blocked by fence construction.

This model relies on the assumption that if the border fence had not been built, violence in the border region and violence in the control region would have had the same trends over time. The main concern in selecting a control group is that border localities and control localities may differ in ways related to the trends in violence over time. Because of this, I compare to three different control groups: all of Mexico at least 100km from the US, the region near Mexico's southern border with Guatemala and Belize, and a matched control group.

The drug war affected all areas of Mexico, so I use the rest of Mexico away from the border as a control group. I restrict the control group to localities at least 100km from the US border to avoid the possibility that the construction of the border fence affected localities in the control group. The Mexico's southern border region is an intuitive control group for it's northern border. Like the border with the US, the border with Guatemala and Belize is an area of substantial drug

[6] See http://www.gao.gov/new.items/d09244r.pdf

smuggling. It is similarly valuable territory to drug cartels, but, importantly, there were no major changes in border security infrastructure on this border during the study period.

For the third control group I matched each locality near the US border with localities at least 100km from the border elsewhere in Mexico using nearest neighbor propensity score matching without replacement on pre-treatment characteristics that might possibly affect trends in violence. These include population, urban or rural status, the presence of drug cartels before the fence was constructed and the political party of the mayor.

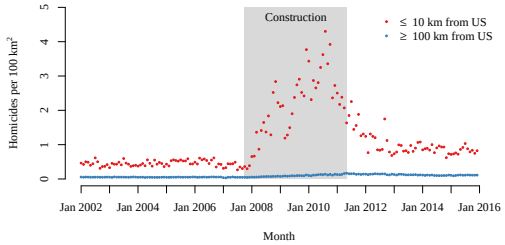
These data were compiled from multiple sources. Locality-level population figures are from the 2005 census[7] Data on the local presence of drug cartels is from Coscia and Rios (2012), who machine code mentions of drug cartel activity from newspapers. Data on mayoral elections if from (Dell, 2015).

Table 1 compares pre-treatment locality characteristics for the entire border region and the three control groups. Tables 4 and 5 show pre-treatment characteristics for territories where smuggling routes were and were not blocked by the fence as well as control groups. Comparisons between trends in all treatment and control groups can be seen in figure 1. The matched data is more balanced in both pre-treatment characteristics, as expected, and in homicide trends, except during the period when the border fence was being constructed.

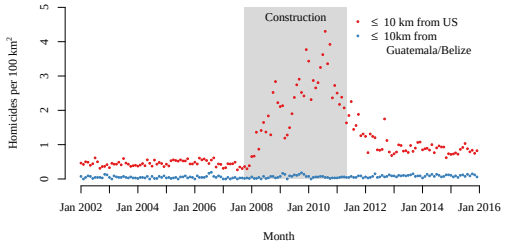
[7]Some localities have zero population in the 2005 census. This is either because no one in a village responded to the census or because the locality did not yet exist in 2005.

Table 1: Summary Statistics for Entire Border Region and Control Groups

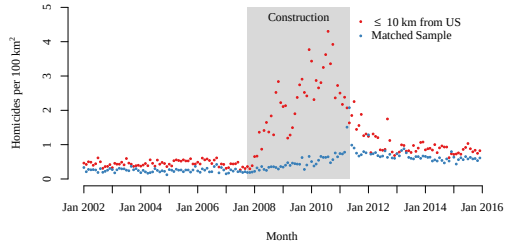
Statistic	N	Mean	St. Dev.	Min	Max
Within 10km of the US					
Population 2005	764	7,396.728	75,933.660	0	1,301,452
Urban	764	0.058	0.233	0	1
Beltrn-Leyva cartel 2005	764	0.181	0.385	0	1
La Familia cartel 2005	764	0.130	0.336	0	1
Gulf cartel 2005	764	0.394	0.489	0	1
Juarez cartel 2005,	764	0.233	0.423	0	1
Sinaloa cartel 2005	764	0.243	0.429	0	1
Sinaloa family 2005	764	0.000	0.000	0	0
Tijuana cartel 2005	764	0.137	0.345	0	1
Zetas cartel 2005	764	0.199	0.399	0	1
Other cartels 2005	764	0.000	0.000	0	0
PAN mayor 2005	764	0.126	0.332	0	1
PRI mayor 2005	764	0.759	0.428	0	1
PRD mayor 2005	764	0.075	0.263	0	1
More than 100km from the US control group					
Population 2005	53,172	1,811.506	24,501.520	0	1,820,888
Urban	53,172	0.077	0.266	0	1
Beltrn-Leyva cartel 2005	53,172	0.062	0.240	0	1
La Familia cartel 2005	53,172	0.014	0.118	0	1
Gulf cartel 2005	53,172	0.062	0.241	0	1
Juarez cartel 2005,	53,172	0.054	0.225	0	1
Sinaloa cartel 2005	53,172	0.084	0.277	0	1
Sinaloa family 2005	53,172	0.008	0.089	0	1
Tijuana cartel 2005	53,172	0.027	0.162	0	1
Zetas cartel 2005	53,172	0.071	0.257	0	1
Other cartels 2005	53,172	0.002	0.049	0	1
PAN mayor 2005	53,172	0.310	0.463	0	1
PRI mayor 2005	53,172	0.523	0.499	0	1
PRD mayor 2005	53,172	0.236	0.425	0	1
Within 10km of Mexico's southern border control group					
Population 2005	327	1,470.575	7,742.974	0	136,825
Urban	327	0.070	0.256	0	1
Beltrn-Leyva cartel 2005	327	0.031	0.172	0	1
La Familia cartel 2005	327	0.000	0.000	0	0
Gulf cartel 2005	327	0.046	0.210	0	1
Juarez cartel 2005,	327	0.031	0.172	0	1
Sinaloa cartel 2005	327	0.000	0.000	0	0
Sinaloa family 2005	327	0.000	0.000	0	0
Tijuana cartel 2005	327	0.000	0.000	0	0
Zetas cartel 2005	327	0.095	0.293	0	1
Other cartels 2005	327	0.000	0.000	0	0
PAN mayor 2005	327	0.144	0.351	0	1
PRI mayor 2005	327	0.645	0.479	0	1
PRD mayor 2005	327	0.254	0.436	0	1
Matched control group					
Population 2005	764	9,065.551	85,523.930	0	1,687,549
Urban	764	0.075	0.263	0	1
Beltrn-Leyva cartel 2005	764	0.199	0.399	0	1
La Familia cartel 2005	764	0.111	0.315	0	1
Gulf cartel 2005	764	0.547	0.498	0	1
Juarez cartel 2005,	764	0.126	0.332	0	1
Sinaloa cartel 2005	764	0.228	0.420	0	1
Sinaloa family 2005	764	0.000	0.000	0	0
Tijuana cartel 2005	764	0.134	0.340	0	1
Zetas cartel 2005	764	0.187	0.390	0	1
Other cartels 2005	764	0.000	0.000	0	0
PAN mayor 2005	764	0.145	0.353	0	1
PRI mayor 2005	764	0.777	0.416	0	1
PRD mayor 2005	764	0.075	0.263	0	1



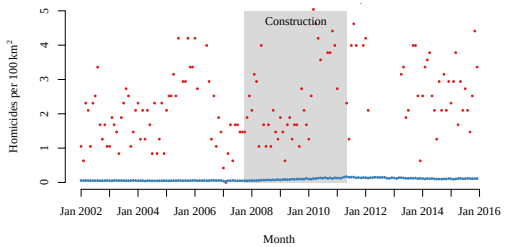
(a) Entire US-Mexico border region and all of Mexico at least 100km from the border.



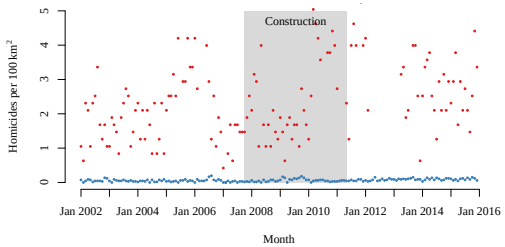
(b) Entire US-Mexico border region and Mexico's southern border region.



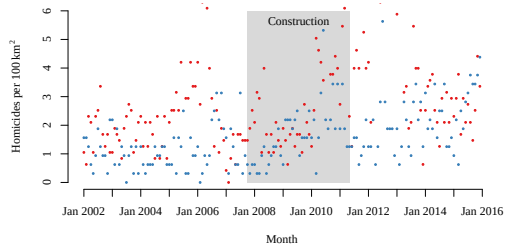
(c) Entire US-Mexico border region and a matched control group.



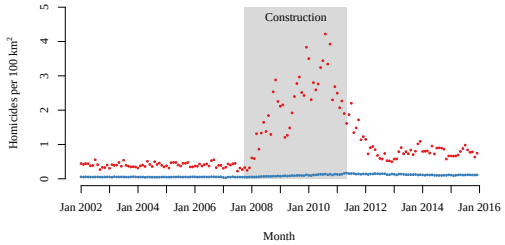
(d) US-Mexico border regions with smuggling routes blocked by border fence and all of Mexico at least 100km from the border.



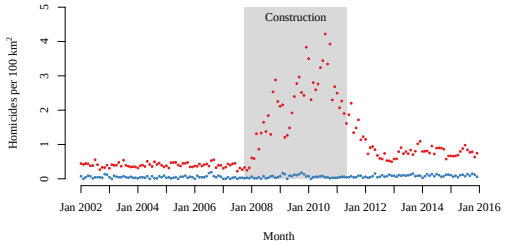
(e) US-Mexico border regions with smuggling routes blocked by border fence and Mexico's southern border region.



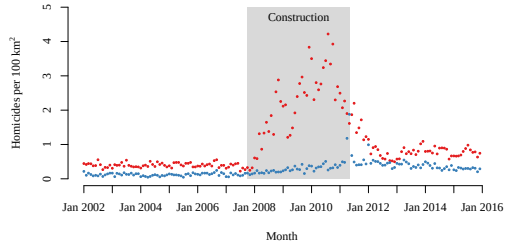
(f) US-Mexico border regions with smuggling routes blocked by border fence and a matched control group.



(g) US-Mexico border regions with smuggling routes not blocked by border fence and all of Mexico at least 100km from the border.



(h) US-Mexico border regions with smuggling routes not blocked by border fence and Mexico's southern border region.



(i) US-Mexico border regions with smuggling routes not blocked by border fence and a matched control group.

Figure 1: Homicides per 100km^2 in the entire border region, territories in the border region where smuggling was blocked by the border fence, and areas where it could be displaced compared to different control groups.

6 Results

Table 2 shows difference in differences estimates for three different treatment groups, each using three difference control groups. Models 1-3 show the overall effect of the border fence construction period on territory within 10km of the US border. This combines potential changes in the level of violence in areas where the border fence blocks smuggling routes and in areas where no fence is constructed, where smuggling might be displaced. There are $694,614$ km^2-months in the border region construction period, so a significant coefficient of 0.005 is means $3,473$ additional homicides were caused by the construction of the border fence within 10km of the border. Models 4-6 show that there is no effect of the border fence on violence in territories that where smuggling routes will be blocked by construction of the border fence. This is as expected, because these territories are relatively less valuable to drug cartels once the border fence is built. Models 7-9 show the effect of building the border fence on violence in territories where the fence is not built. This effect is statistically indistinguishable from the overall effect. This is consistent with the hypothesis, because these are territories that have a relatively higher value after construction of the border fence.

Table 3 shows the same models with and indicator variable for any violence in that territory in that month as the dependent variable. Again, the effect is statistically significant over the whole border region and in areas where the fence will not be built. This show that the probability of fighting over a territory is increased, not just the magnitude of violence in those territories.

In some models the post-construction treatment is significant for the areas where smuggling routes are blocked by the border fence, but never in the preferred specification using a matched control group, model 6.

These models show standard errors clustered by locality. However, spatial autocorrelation is a concern. Results are robust to clustering standard errors by higher levels, such as municipalities. These are shown in the appendix.

Table 2: Number of Homicides in Territory

	Overall			Local			Displacement		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
$T_i \times Construction_t$	0.004***	0.005***	0.004**	0.012	0.013	0.001	0.004**	0.005***	0.004**
	(0.001)	(0.002)	(0.002)	(0.009)	(0.009)	(0.013)	(0.001)	(0.002)	(0.002)
$T_i \times Post_t$	0.00002	0.0002	−0.001	0.012**	0.012**	−0.015	−0.0004	−0.0002	−0.0002
	(0.0005)	(0.002)	(0.001)	(0.005)	(0.006)	(0.013)	(0.0005)	(0.002)	(0.001)
Control group	All Mexico	Southern Border	Matched Sample	All Mexico	Southern Border	Matched Sample	All Mexico	Southern Border	Matched Sample
Observations	9,061,248	183,288	256,704	8,936,928	58,968	8,064	9,057,216	179,256	248,640
R^2	0.0002	0.002	0.002	0.0002	0.006	0.029	0.0002	0.002	0.003

Note: Standard errors clustered at the locality level, *p<0.1; **p<0.05; ***p<0.01

Table 3: Probability of Violence in Territory

	Overall			Local			Displacement		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
$T_i \times Construction_t$	0.005***	0.007***	0.005**	0.021	0.023	−0.001	0.005***	0.006***	0.004**
	(0.002)	(0.002)	(0.002)	(0.021)	(0.021)	(0.028)	(0.002)	(0.002)	(0.002)
$T_i \times Post_t$	0.0002	0.0003	−0.004*	0.040**	0.040**	−0.010	−0.001	−0.001	−0.002
	(0.001)	(0.002)	(0.002)	(0.018)	(0.018)	(0.028)	(0.001)	(0.002)	(0.002)
Control group	All Mexico	Southern Border	Matched Sample	All Mexico	Southern Border	Matched Sample	All Mexico	Southern Border	Matched Sample
Observations	9,061,248	183,288	256,704	8,936,928	58,968	8,064	9,057,216	179,256	248,640
R^2	0.001	0.002	0.001	0.002	0.068	0.020	0.001	0.002	0.001

Note: Standard errors clustered at the locality level, *p<0.1; **p<0.05; ***p<0.01

7 Conclusion

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Table 4: Summary Statistics for Territories Blocked by Border Fence and Control Groups

Statistic	N	Mean	St. Dev.	Min	Max
Within 10km of the US and smuggling routes blocked by fence					
Population 2005	24	31,498.830	78,212.080	0	348,387
Urban	24	0.625	0.495	0	1
Beltrn-Leyva cartel 2005	24	0.208	0.415	0	1
La Familia cartel 2005	24	0.042	0.204	0	1
Gulf cartel 2005	24	0.292	0.464	0	1
Juarez cartel 2005,	24	0.125	0.338	0	1
Sinaloa cartel 2005	24	0.125	0.338	0	1
Sinaloa family 2005	24	0.000	0.000	0	0
Tijuana cartel 2005	24	0.042	0.204	0	1
Zetas cartel 2005	24	0.208	0.415	0	1
Other cartels 2005	24	0.000	0.000	0	0
PAN mayor 2005	24	0.042	0.204	0	1
PRI mayor 2005	24	0.875	0.338	0	1
PRD mayor 2005	24	0.042	0.204	0	1
More than 100km from the US control group					
Population 2005	53,172	1,811.506	24,501.520	0	1,820,888
Urban	53,172	0.077	0.266	0	1
Beltrn-Leyva cartel 2005	53,172	0.062	0.240	0	1
La Familia cartel 2005	53,172	0.014	0.118	0	1
Gulf cartel 2005	53,172	0.062	0.241	0	1
Juarez cartel 2005,	53,172	0.054	0.225	0	1
Sinaloa cartel 2005	53,172	0.084	0.277	0	1
Sinaloa family 2005	53,172	0.008	0.089	0	1
Tijuana cartel 2005	53,172	0.027	0.162	0	1
Zetas cartel 2005	53,172	0.071	0.257	0	1
Other cartels 2005	53,172	0.002	0.049	0	1
PAN mayor 2005	53,172	0.310	0.463	0	1
PRI mayor 2005	53,172	0.523	0.499	0	1
PRD mayor 2005	53,172	0.236	0.425	0	1
Within 10km of Mexico's southern border control group					
Population 2005	327	1,470.575	7,742.974	0	136,825
Urban	327	0.070	0.256	0	1
Beltrn-Leyva cartel 2005	327	0.031	0.172	0	1
La Familia cartel 2005	327	0.000	0.000	0	0
Gulf cartel 2005	327	0.046	0.210	0	1
Juarez cartel 2005,	327	0.031	0.172	0	1
Sinaloa cartel 2005	327	0.000	0.000	0	0
Sinaloa family 2005	327	0.000	0.000	0	0
Tijuana cartel 2005	327	0.000	0.000	0	0
Zetas cartel 2005	327	0.095	0.293	0	1
Other cartels 2005	327	0.000	0.000	0	0
PAN mayor 2005	327	0.144	0.351	0	1
PRI mayor 2005	327	0.645	0.479	0	1
PRD mayor 2005	327	0.254	0.436	0	1
Matched control group					
Population 2005	24	12,654.670	29,934.220	0	127,606
Urban	24	0.625	0.495	0	1
Beltrn-Leyva cartel 2005	24	0.208	0.415	0	1
La Familia cartel 2005	24	0.000	0.000	0	0
Gulf cartel 2005	24	0.375	0.495	0	1
Juarez cartel 2005,	24	0.083	0.282	0	1
Sinaloa cartel 2005	24	0.167	0.381	0	1
Sinaloa family 2005	24	0.000	0.000	0	0
Tijuana cartel 2005	24	0.083	0.282	0	1
Zetas cartel 2005	24	0.167	0.381	0	1
Other cartels 2005	24	0.000	0.000	0	0
PAN mayor 2005	24	0.042	0.204	0	1
PRI mayor 2005	24	0.958	0.204	0	1
PRD mayor 2005	24	0.042	0.204	0	1

Table 5: Summary Statistics for Territories Not Blocked by Border Fence and Control Groups

Statistic	N	Mean	St. Dev.	Min	Max
Within 10km of the US					
Population 2005	740	6,615.038	75,784.660	0	1,301,452
Urban	740	0.039	0.194	0	1
Beltrn-Leyva cartel 2005	740	0.180	0.384	0	1
La Familia cartel 2005	740	0.132	0.339	0	1
Gulf cartel 2005	740	0.397	0.490	0	1
Juarez cartel 2005,	740	0.236	0.425	0	1
Sinaloa cartel 2005	740	0.247	0.432	0	1
Sinaloa family 2005	740	0.000	0.000	0	0
Tijuana cartel 2005	740	0.141	0.348	0	1
Zetas cartel 2005	740	0.199	0.399	0	1
Other cartels 2005	740	0.000	0.000	0	0
PAN mayor 2005	740	0.128	0.335	0	1
PRI mayor 2005	740	0.755	0.430	0	1
PRD mayor 2005	740	0.076	0.265	0	1
More than 100km from the US control group					
Population 2005	53,172	1,811.506	24,501.520	0	1,820,888
Urban	53,172	0.077	0.266	0	1
Beltrn-Leyva cartel 2005	53,172	0.062	0.240	0	1
La Familia cartel 2005	53,172	0.014	0.118	0	1
Gulf cartel 2005	53,172	0.062	0.241	0	1
Juarez cartel 2005,	53,172	0.054	0.225	0	1
Sinaloa cartel 2005	53,172	0.084	0.277	0	1
Sinaloa family 2005	53,172	0.008	0.089	0	1
Tijuana cartel 2005	53,172	0.027	0.162	0	1
Zetas cartel 2005	53,172	0.071	0.257	0	1
Other cartels 2005	53,172	0.002	0.049	0	1
PAN mayor 2005	53,172	0.310	0.463	0	1
PRI mayor 2005	53,172	0.523	0.499	0	1
PRD mayor 2005	53,172	0.236	0.425	0	1
Within 10km of Mexico's southern border control group					
Population 2005	327	1,470.575	7,742.974	0	136,825
Urban	327	0.070	0.256	0	1
Beltrn-Leyva cartel 2005	327	0.031	0.172	0	1
La Familia cartel 2005	327	0.000	0.000	0	0
Gulf cartel 2005	327	0.046	0.210	0	1
Juarez cartel 2005,	327	0.031	0.172	0	1
Sinaloa cartel 2005	327	0.000	0.000	0	0
Sinaloa family 2005	327	0.000	0.000	0	0
Tijuana cartel 2005	327	0.000	0.000	0	0
Zetas cartel 2005	327	0.095	0.293	0	1
Other cartels 2005	327	0.000	0.000	0	0
PAN mayor 2005	327	0.144	0.351	0	1
PRI mayor 2005	327	0.645	0.479	0	1
PRD mayor 2005	327	0.254	0.436	0	1
Matched control group					
Population 2005	740	6,687.809	63,247.660	0	1,137,465
Urban	740	0.053	0.224	0	1
Beltrn-Leyva cartel 2005	740	0.222	0.416	0	1
La Familia cartel 2005	740	0.107	0.309	0	1
Gulf cartel 2005	740	0.553	0.498	0	1
Juarez cartel 2005,	740	0.135	0.342	0	1
Sinaloa cartel 2005	740	0.242	0.429	0	1
Sinaloa family 2005	740	0.000	0.000	0	0
Tijuana cartel 2005	740	0.135	0.342	0	1
Zetas cartel 2005	740	0.188	0.391	0	1
Other cartels 2005	740	0.000	0.000	0	0
PAN mayor 2005	740	0.139	0.346	0	1
PRI mayor 2005	740	0.797	0.402	0	1
PRD mayor 2005	740	0.081	0.273	0	1

Table 6: Number of Homicides in Territory

	Overall			Local			Displacement		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
$T_i \times Construction_t$	0.004**	0.005**	0.004**	0.012	0.013	0.001	0.004**	0.005**	0.004*
	(0.002)	(0.002)	(0.002)	(0.010)	(0.010)	(0.013)	(0.002)	(0.002)	(0.002)
$T_i \times Post_t$	0.00002	0.0002	−0.001	0.012*	0.012*	−0.015	−0.0004	−0.0002	−0.0002
	(0.0005)	(0.001)	(0.001)	(0.007)	(0.007)	(0.014)	(0.0005)	(0.001)	(0.001)
Control group	All Mexico	Southern Border	Matched Sample	All Mexico	Southern Border	Matched Sample	All Mexico	Southern Border	Matched Sample
Observations	9,061,248	183,288	256,704	8,936,928	58,968	8,064	9,057,216	179,256	248,640
R^2	0.0002	0.002	0.002	0.0002	0.006	0.029	0.0002	0.002	0.003

Note: Standard errors clustered at the municipality level, *p<0.1; **p<0.05; ***p<0.01