

Structural disadvantage, gang presence and homicide in a Caribbean nation

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Gangs and violence in the Caribbean

- Little research has examined gangs and/or violence in the Caribbean.
- Anecdotal evidence suggests that these problems have grown significantly.
- No research has examined the relationship between community coviates and their relationship with gangs and/or violence.
- The Caribbean has little infrastructure to understand their gang and/or violence problems.

The present study

- (1) Identify the structural covariates associated with homicide in a Caribbean nation
- (2) Examine whether gang presence, after controlling for community structure, is associated with homicide.

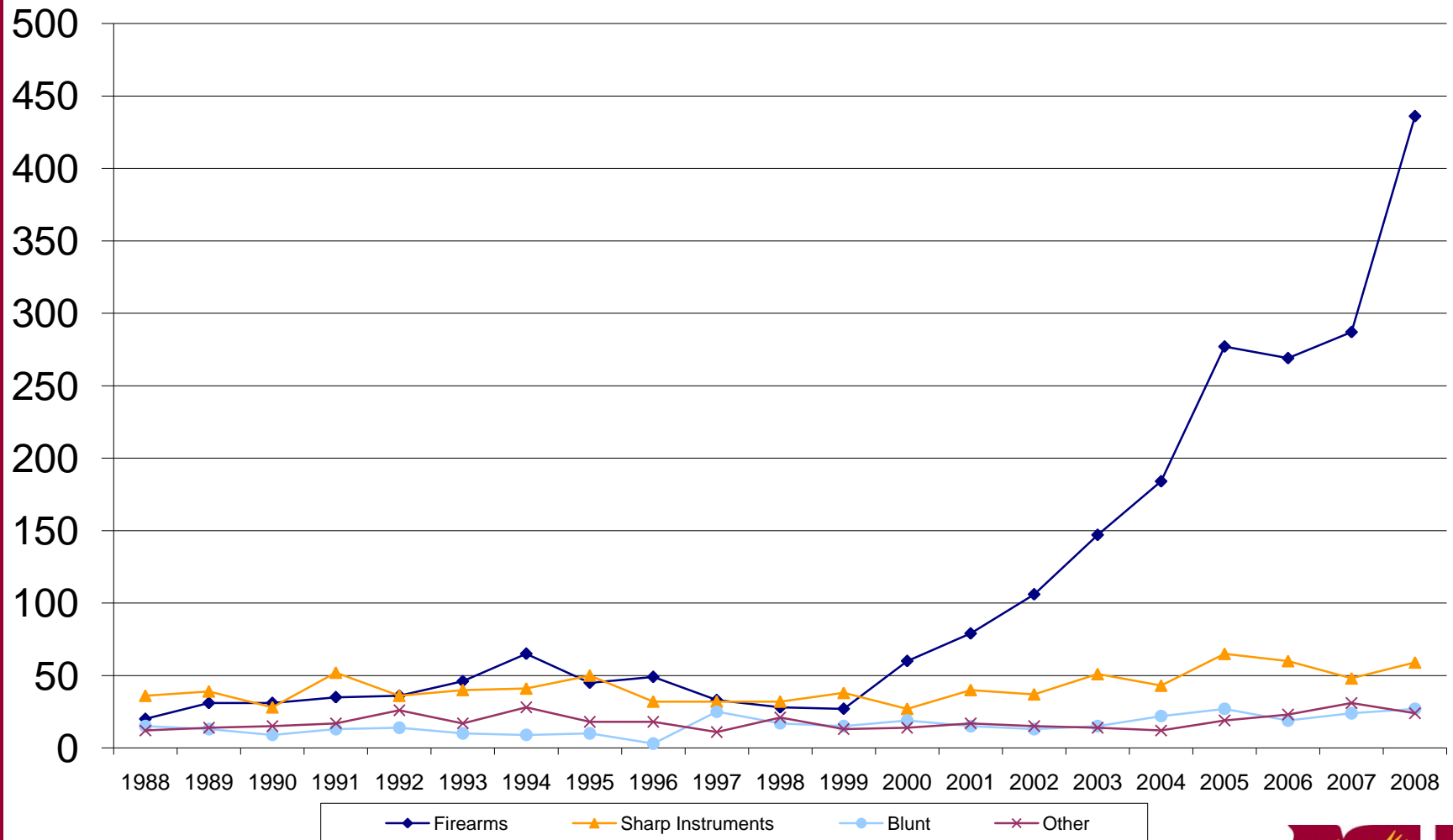
About T&T...

- Population 1.3 million
- East Indian 40.0%, African 37.5%, Afro-Indian 20.5%
- Roman Catholic 26.0%; Hindu 22.5%; Protestant 24.6%; Islam 5.8%; Shouter Baptist 5.4%; other Christian 10.7%
- Parliamentary democracy with two major political parties (PNM and UNC)
- Granted independence on August 31, 1962
- Major industry is petroleum (40% of GDP)

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Homicides by Weapon Type: 1988-2008



Data

1. Trinidad & Tobago gang expert survey
 - Replication of Eurogang Research Program Expert Survey.
 - Surveyed gang experts in all TT station districts, 100% response rate, in 2006.
2. Homicide data
 - Number of homicides in 2006 by station district
 - Homicide data is reliable and valid
3. 2000 Trinidad & Tobago census data
 - On foot
 - Focus on socio-economic and public health issues
 - Shape file for station districts obtained from TTPS

Number of youth gangs and gang members in Trinidad & Tobago			
National Total		<i>n</i>	
	Gangs	95	
	Gang Members	1,269	
Year formed			
	Before 2000	8.4	25.8
	2000 - 2006	24.2	74.2
	Missing	67.4	
	N=	95	31

Number of youth gangs and gang members in Trinidad & Tobago by Station District

Gangs and Gang Members by Station District			
		Station Districts	
		<i>n</i>	%
Number of Gangs			
	0	31	59.6
	1 to 4	14	26.9
	5 to 10	6	11.5
	11 to 15	0	0.0
	16 to 19	1	1.9
	Total	52	100.0
Number of Gang Members			
	0	31	59.6
	1 to 50	14	26.9
	51 to 125	4	7.7
	126 to 250	2	3.8
	251 to 385	1	1.9
	Total	52	100.0

Top five station districts for number of gangs and number of gang				
	Number of Gangs	Number of Gang Members		
Five station districts with the most gangs				
Besson Street	19	385		
San Juan	8	130		
Sangre Grande	8	90		
St. Joseph	7	55		
Belmont	6	165		
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Sangre Grande	8	90		

Table 1: Descriptive Statistics (n=61)

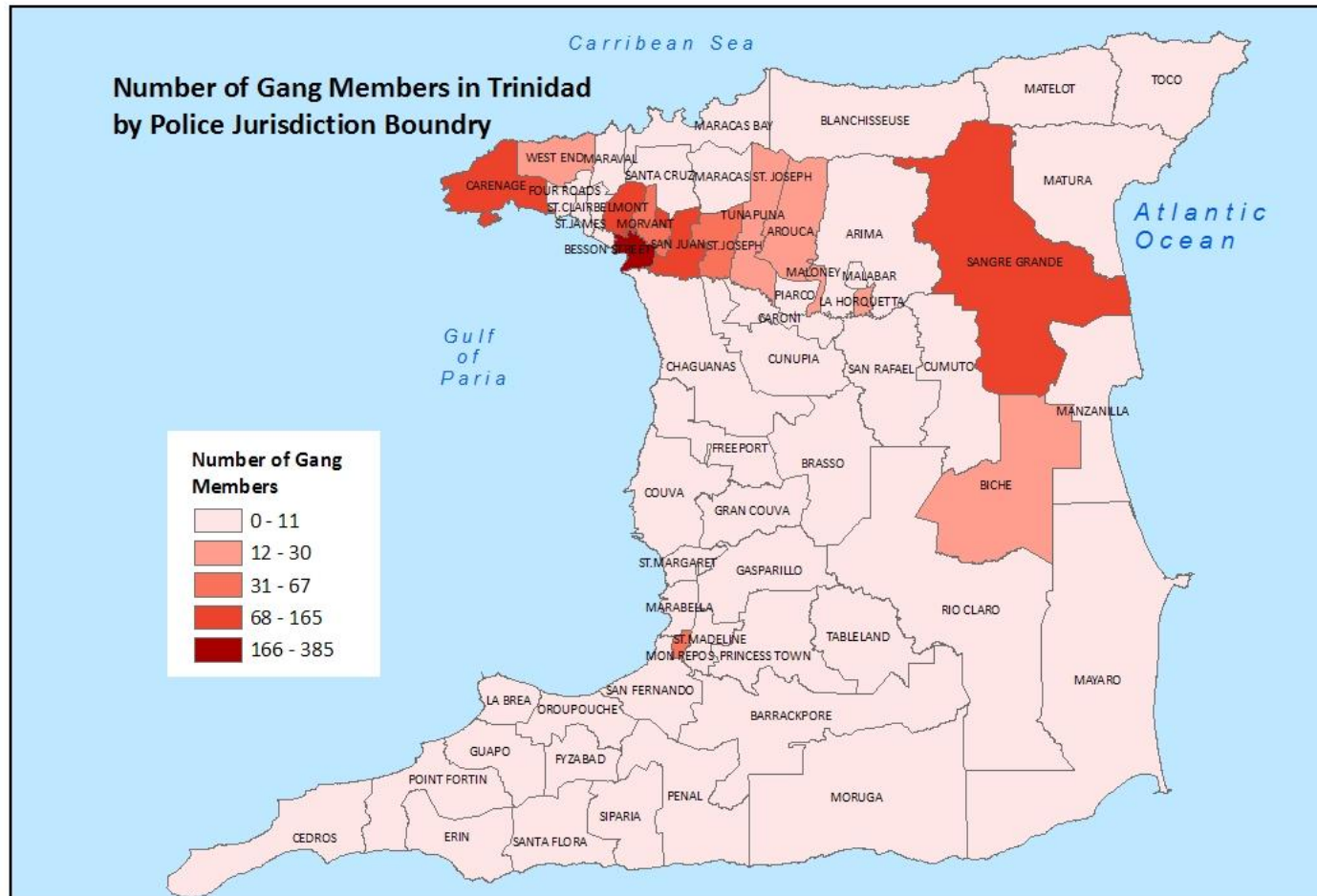
	Mean	SD	Min	Max
Dependent Variable				
# of reported homicides	5.18	11.04	0.00	67.00
Independent Variables				
Social/Familial disadvantage	0.00	1.00	-1.73	3.87
Cultural/Traditional disadvantage	0.00	1.00	2.56	2.53
Number of gangs	1.36	3.00	0.00	19.00
Number of gang members	20.02	56.73	0.00	385.00
Variables included in components				
% Male residents aged 12- 24	13.28	1.19	8.70	15.80
% of residents foreign born	3.66	2.74	0.50	14.40
% of residents without a secondary education	49.75	9.18	27.39	74.9
% of residents unemployed	6.07	2.08	1.97	13.13
% female-headed households with kids	19.83	4.94	5.30	32.30
Median household income	1,976.97	470.36	1,000.00	3,400.00
% of residents who have a 5 year address	16.92	4.36	8.42	26.37
% African	36.84	19.97	3.20	80.50

Table 2: Component Loadings

	Component 1	Component 2
	Cultural/Traditional Disadvantage	Social/Familial Disadvantage
% Male residents aged 12- 24	0.702	
% of residents foreign born	-0.749	0.311
% of residents without a secondary education	0.899	-0.006
% of residents unemployed	0.230	0.731
% female-headed households with kids	-0.504	0.686
Median household income	-0.752	-0.269
% of residents who have a 5 year address	0.825	-0.108
% African	-0.065	0.853

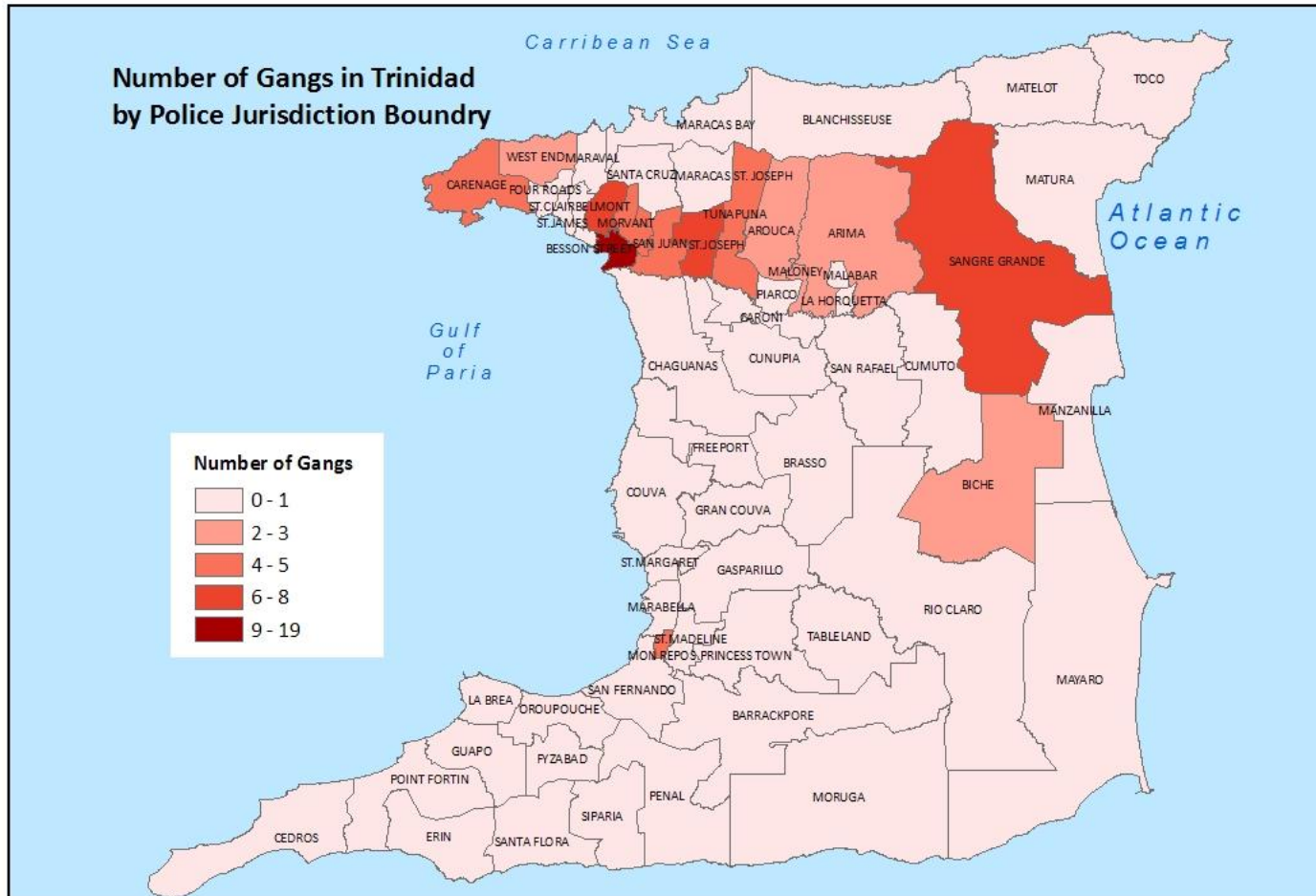
Principal components analysis with varimax rotation

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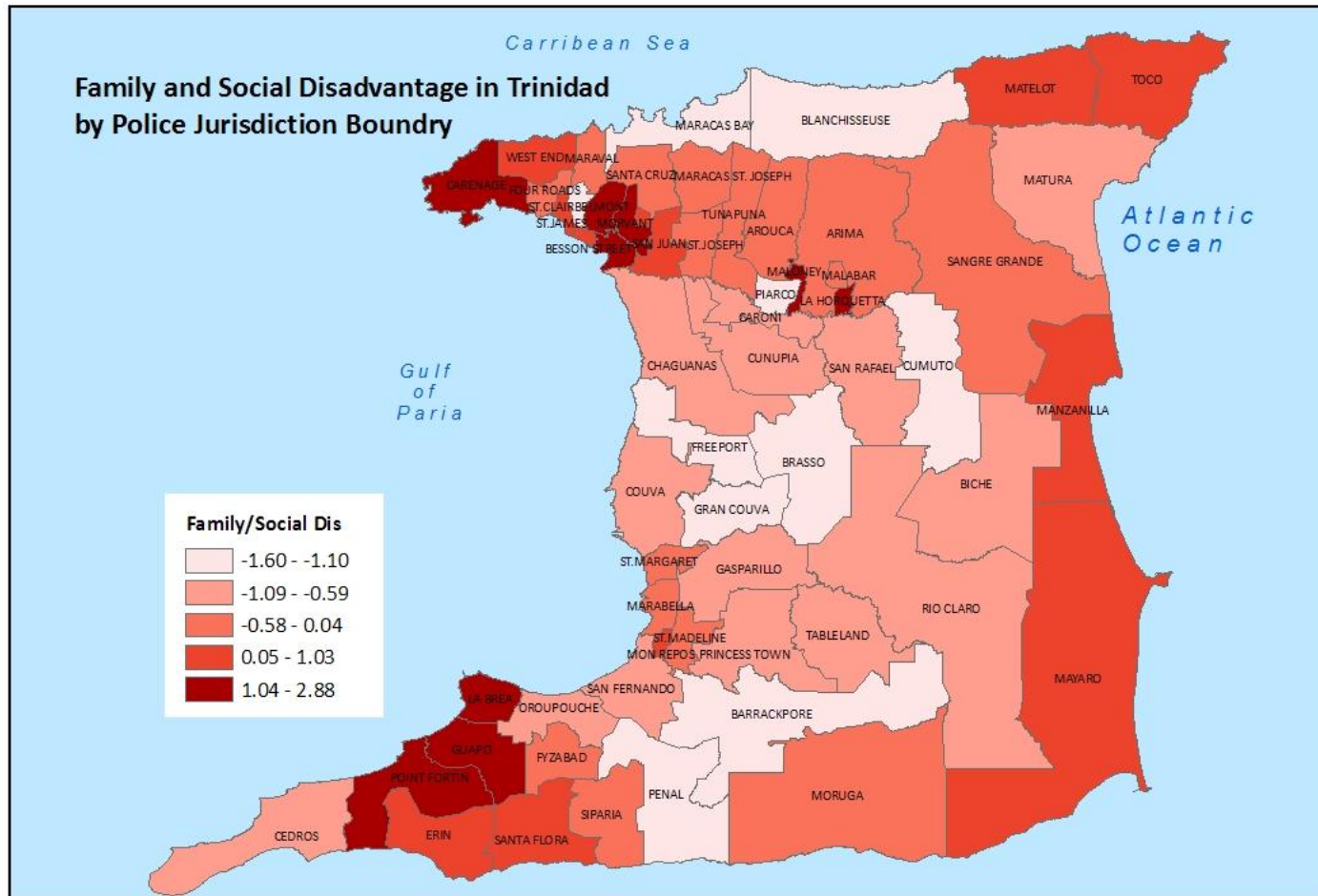


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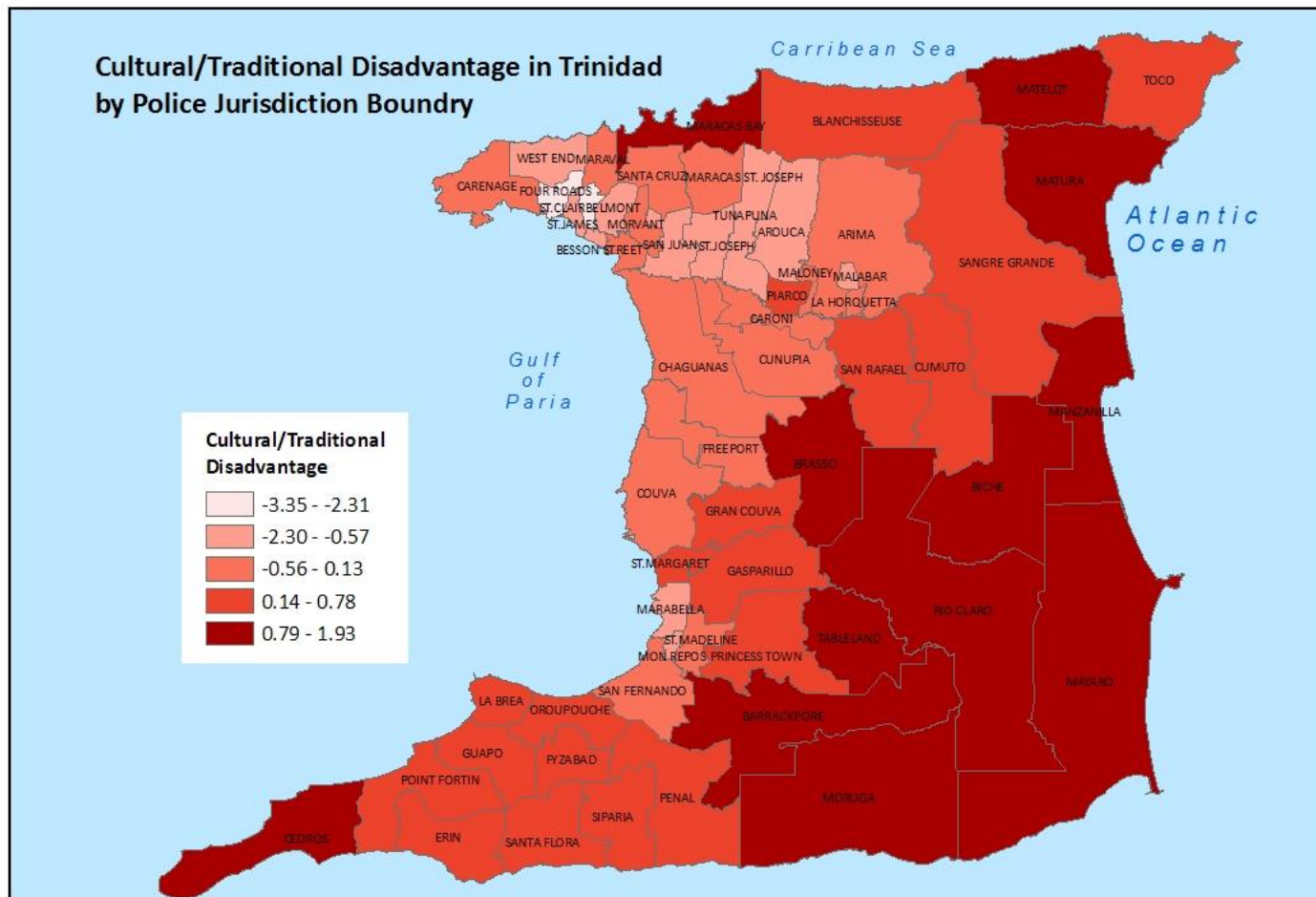


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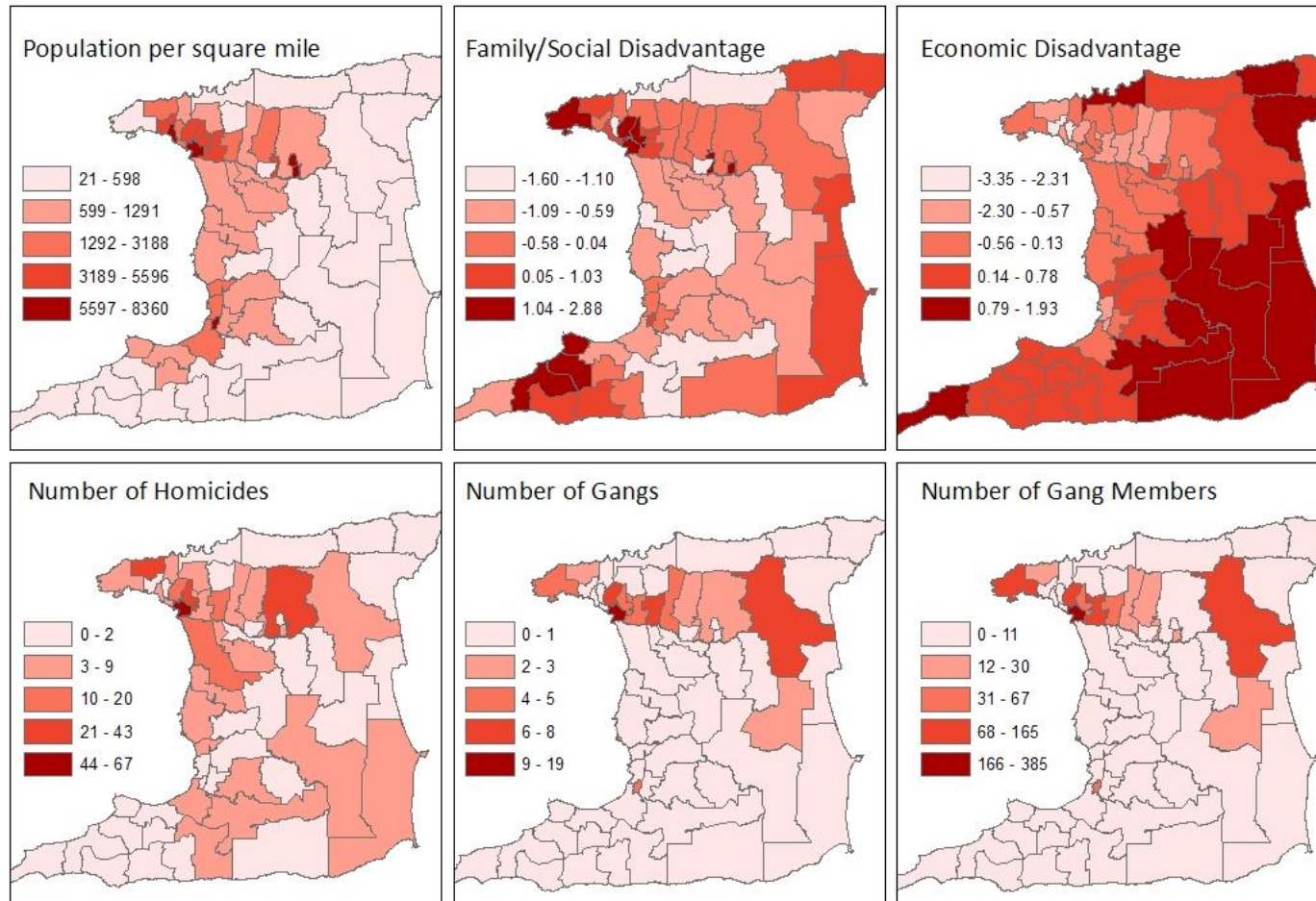


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Results from the negative binomial regression models predicting homicide counts, controlling for gang members/gangs

Model 1

- Social/familial disadvantage is positively related to homicide

Model 2

- Social/familial disadvantage is positively related to homicide
- Number of gang members is positively related to homicide

Model 3

- Cultural/traditional disadvantage² is negatively related to homicide
- Number of gang members is positively related to homicide

Interpreting the estimated incidence rate ratios

Increase in # of gangs members	Percent increase in homicides	Increase in # of gangs	Percent increase in homicides
1	0.4%	1	9.1%
5	2.0%	2	19.0%
10	4.1%	3	29.9%
50	22.1%	4	41.7%
100	49.1%	5	54.6%
150	82.0%	10	138.9%
200	122.2%	20	470.8%
400	393.7%		

Conclusions

- Structural co-variates do not operate similarly in Trinidad as they do in the US
- Extreme cultural/traditional disadvantage was found to be a protective factor against high levels of homicide.
- Gangs and gang membership are significantly associated with levels of homicide.