



Direct Democracy, Decentralization and Governance in Indigenous Communities in Mexico

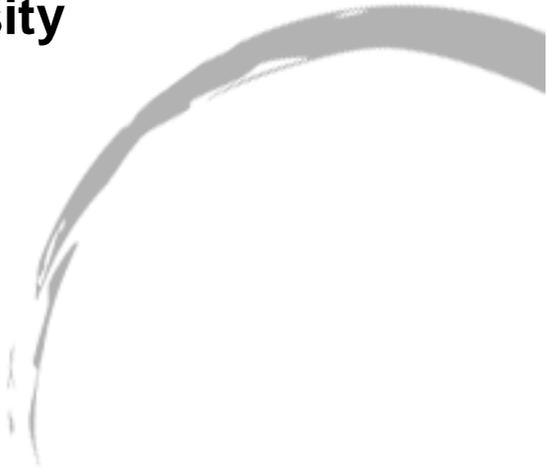
**IPD Decentralization TF Meeting
10-11 June 2009, Columbia University**

Alberto Diaz-Cayeros

UCSD

Beatriz Magaloni

Stanford



Institutions and Development

- What is the impact of local institutions on citizen's participation, satisfaction with local government performance, and levels of information?
- What is the impact of local institutions and citizen participation in development?
 - Supply of public goods
 - Female empowerment
 - Infant mortality
 - Crime

Local Institutions in Mexico

- 2,440 municipalities in charge of providing local public goods: police and public safety; water and sewerage; roads; garbage collection; public markets.
- Decentralization in 1989: funds come mostly from federal revenue sharing transfers, through state governments
- Decentralization in 1990s: education and health is jointly supplied by federal, state and municipal authorities; social infrastructure funds for municipalities

Variance in Municipal Institutions

- Municipal Authorities are elected every three years with no-reelection
- Standard account: no-reelection creates terrible incentives, as there is virtually no accountability
- Yet authorities can be elected by:
 - Indigenous “Usos y Costumbres”
 - Party Competition

Variance in Municipal Institutions

PARTY COMPETITION

- Local alternation as sign of democracy
- Fixed terms, no immediate re-election
- Career concerns
- Levels of Party Competition
 - Hegemonic
 - Competitive

USOS Y COSTUMBRES

- Elected by Unanimity / Majority / Assembly / Lottery
- Local concerns
- Variable terms (1 to 3 years)
- No salary in “cargos” and “Tequio”

Controversial accounts of benefits of usos y costumbres

Governabanse con gran policia
Con cierto orden,
Constituyendo sus Reyes
Por voto, o elecciones

They governed themselves with
great police

With a certain order
Constituting their Kingdoms
Through votes and elections

Mercurio Indiano
Patricio Antonio Lopez, 1726

That monster, custom, who all sense doth
eat

Of habits devil is angel yet in this
That to the use of actions fair and good
He likewise gives a frock or livery
That aptly is put on.

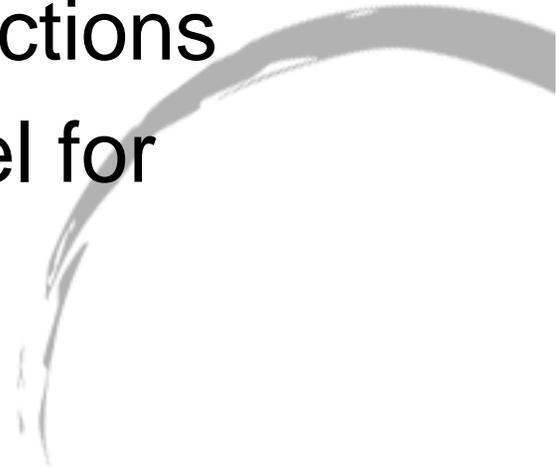
Hamlet III 4

Problems of Endogeneity

- “Usos y costumbres” are only present in poor/indigenous communities --are these institutions the cause or the effect of poverty/levels of development?
- Prior to the introduction of “usos y costumbres” in 1995, poor/indigenous communities were also the most hegemonic (virtual PRI monopolies with no alternation)



Existing studies make inferences from cross-sections

- Eisenstadt (2006) finds more violence and electoral conflict
 - Benton (2009) finds erosion of competitiveness in federal elections
 - Cleary (2009) estimates model for adoption
- 

Inferential Leverage

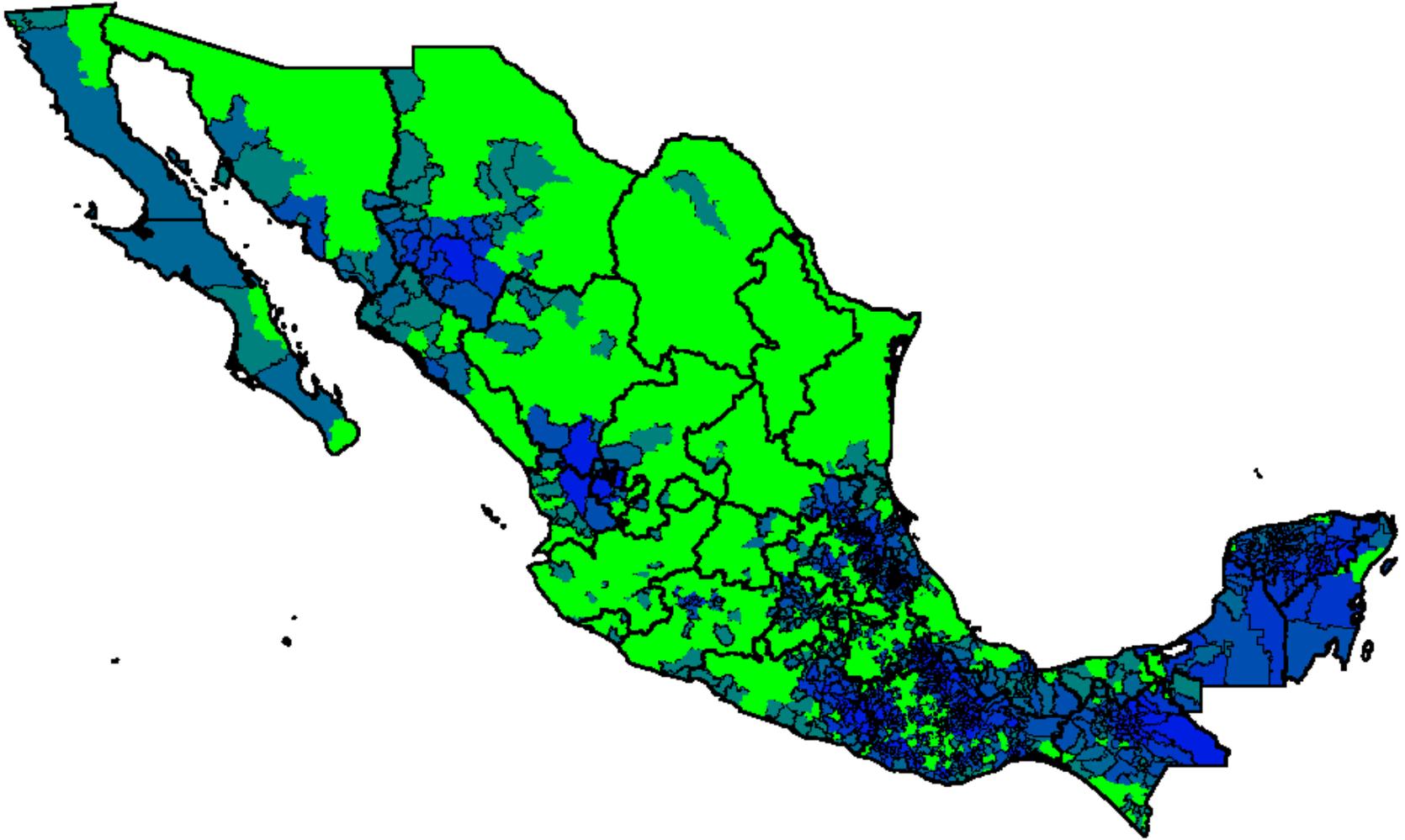
- Difference in Difference (D - D) Approach. Compare performance indicators prior to 1995 with post-reform
- Problem is that many municipalities informally were ruled by “usos y costumbres”
- Propensity Score Matching:
Match basically identical municipalities in terms of geographic, demographic AND indigenous composition, one ruled by “usos” and the other not

Data and measurement

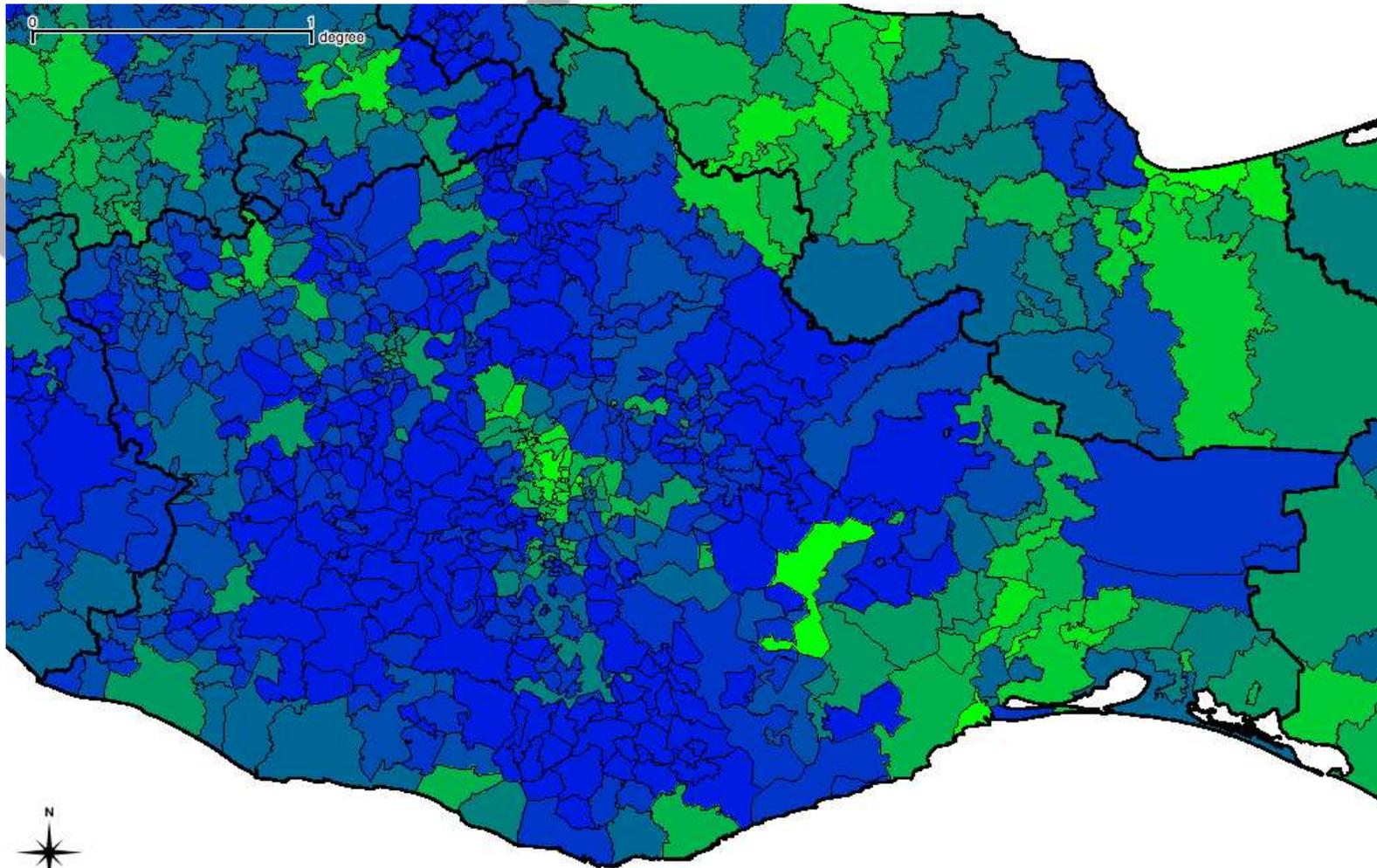
- Dependent Variable: Sistema Nacional de Informacion Municipal (SNIM), cross checked with State Electoral Commission
- 1990 and 2000 Census (INEGI) for indicators of public services and socioeconomic status
- Federal Electoral Results (IFE) at municipal level for 1994 and 2000 elections
- 2001 Survey to Mayors on municipal social development (SEDESOL)
- GIS estimation of rugged terrain on basis of USGS raster

Indigenous municipalities

0 10 degrees



Extreme poverty in the state of Oaxaca



Propensity scores calculated Nationwide and for Oaxaca

	National	Oaxaca
Indigenous Language (%)	1.395*** -0.17	1.582*** -0.23
Population (log)	-1.217*** -0.079	-1.051*** -0.12
Land Area (thousand sqkm)	0.300*** -0.069	1.252*** -0.4
Latitude (Degrees)	-1.073*** -0.085	-0.855*** -0.14
Rugged Terrain (sd meters)	0.877*** -0.098	1.099*** -0.12
Constant	26.55*** -1.74	21.33*** -2.76
Observations	2374	568
Pseudo R2	0.7588	0.4632

Identification Strategy

- Match municipalities nationwide and within Oaxaca
- Test of means (Average Treatment on the Treated)
- When available, D - D:
 - Socio-economic indicators
 - Public services delivered
 - Local public finance
 - Local governance
 - Electoral consequences

Little (if any) evidence of direct socioeconomic effects

	Mean	ATT	Std Error	t statistic
NATIONAL				
Δ Illiteracy	-0.0465	0.016	0.008	1.919
Δ Extreme Poverty	-0.2935	-0.066	0.041	-1.612
Δ Moderate Poverty	-0.0589	0.02	0.018	1.082
Δ Religious Fractionalizati	0.0132	-0.015	0.019	0.793
Δ Bilingual	-0.0121	0.025	0.019	1.322
Δ Indigenous	-0.0099	0.01	0.009	1.135
OAXACA				
Δ Illiteracy	-0.0605	0.017	0.014	1.235
Δ Extreme Poverty	-0.4985	-0.061	0.051	1.2
Δ Moderate Poverty	-0.0309	0.017	0.024	0.674
Δ Religious Fractionalizati	0.0122	0.004	0.01	0.385
Δ Bilingual	-0.0185	0.0001	0.021	0.015
Δ Indigenous	-0.0181	0.018	0.015	1.233

Kernel Matching (0.06 bandwidth) with bootstrapped standard errors
 n Treated = 417; n Control National = 397; n Control Oaxaca = 123

Some mixed findings in public goods provision in Oaxaca

	Mean	ATT	Std Error	t statistic
NATIONAL				
Δ No Drinking Water	-0.0673	0.019	0.038	0.507
Δ No Sewerage	-0.1764	0.061	0.041	1.47
Δ No electricity	-0.1233	0.039	0.038	1.034
OAXACA				
Δ No Drinking Water	-0.0657	0.025	0.04	0.629
Δ No Sewerage	-0.1318	0.086	0.047	1.827
Δ No electricity	-0.1204	-0.068	0.019	3.608

Kernel Matching (0.06 bandwidth) with bootstrapped standard errors
n Treated = 417; n Control National = 397; n Control Oaxaca = 123

- Sewerage is worse: this might be due to neglect from other levels of government, due to scale of projects

Greater tax effort and grantsmanship in Oaxaca

	Mean	ATT	Std Error	t statistic
NATIONAL				
Tax Collection	70.185	4.736	2.662	1.778
Revenue Sharing	987.744	-299.564	178.468	-1.679
Public Works Transfers	181.529	5.149	15.552	0.331
Public Works	317.153	79.476	58.096	1.368
OAXACA				
Tax Collection	18.139	9.38	1.772	5.293
Revenue Sharing	787.07	208.081	112.395	1.851
Public Works Transfers	35.111	27.856	5.607	4.968
Public Works	287.67	-23.154	71.847	0.322

Kernel Matching (0.06 bandwidth) with bootstrapped standard errors
 n Treated = 417; n Control National = 397; n Control Oaxaca = 123

Governance: transparency, no entrenchment

	Mean	ATT	Std Error	t statistic
NATIONAL				
Reelected Mayor	0.0722	-0.056	0.046	1.226
Sessions	24.96	-0.982	2.476	0.397
Share Open Sessions	0.3909	0.171	0.056	3.064
OAXACA				
Reelected Mayor	0.0316	-0.065	0.055	1.182
Sessions	25.1	2.583	1.909	1.353
Share Open Sessions	0.3724	0.113	0.065	1.733

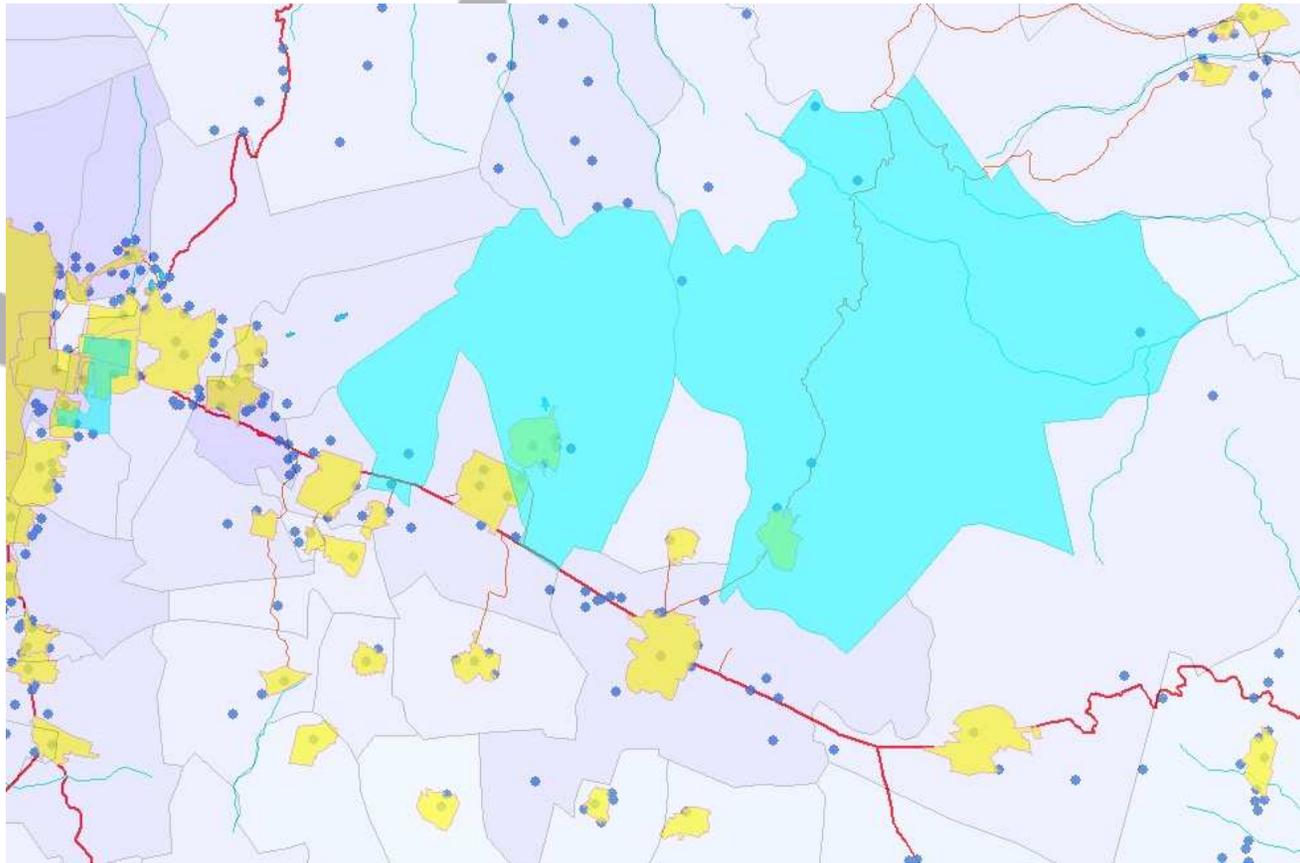
Kernel Matching (0.06 bandwidth) with bootstrapped standard errors
n Treated = 417; n Control National = 397; n Control Oaxaca = 123

Empowerment: competition in federal elections

	Mean	ATT	Std Error	t statistic
NATIONAL				
Δ Margin Victory	-0.1234	-0.022	0.035	0.637
Δ PRI Vote	-0.0752	0.001	0.021	0.035
Δ PAN Vote	0.1261	0.022	0.009	2.397
Δ Number Parties	0.8575	0.233	0.058	4.01
OAXACA				
Δ Margin Victory	-0.0668	-0.046	0.036	1.271
Δ PRI Vote	0.0096	-0.031	0.022	1.38
Δ PAN Vote	0.0757	0.036	0.014	2.556
Δ Number Parties	0.7736	0.283	0.046	6.152

Kernel Matching (0.06 bandwidth) with bootstrapped standard errors
n Treated = 417; n Control National = 397; n Control Oaxaca = 123

In-depth field work: focus groups in three municipios



Variance was too correlated with development levels

- San Sebastian Tutla
 - Richest municipality engulfed by urban sprawl
 - Disempowerment of professional “newcomers”
- Teotitlan del Valle
 - Information flows regarding use of public funds
 - Tension between support commercialization vs. water and environment projects
- Villa Diaz Ordaz
 - Corrupt mayor, dismal performance
 - Women in charge of health

Next steps

- Gender specific indicators of performance
- Detecting informal usos y costumbres
- D - D estimation of public finance and administrative performance
- Tease out mechanisms: information --> decision making --> budgeting --> public works --> public service delivery --> outcomes