

Appropriate Institutions? Traditional Governance and Public Goods Provision in Oaxaca, Mexico[†]

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Since the mid-1980s, indigenous populations across the Americas have increasingly demanded and obtained greater autonomy over local affairs (Yashar 2005, Eisenstadt 2011). Indigenous groups in the state of Oaxaca, Mexico, have played a prominent role in this movement. In 1995, the state's government reformed its municipal law to recognize the rights of indigenous groups to use traditional governance institutions in local government affairs through *Usos y Costumbres* (UyC) legislation (Anaya Muñoz 2005). Since then, more than 400 of the state's 570 municipalities have become legally administered under this traditional municipal governance system.

This paper examines what changes occurred in Oaxaca's municipalities after the passage of such potentially transformative reform. We combine the 1995 census of UyC electoral and administrative rules with quinquennial population census data of approximately 2,500 Oaxacan localities and annual school-level census data to examine changes in political representation and access to public goods between 1990 and 2005.

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The UyC system's consequences for development have been much debated.¹ One of the main sources of restrictions to political representation in Oaxaca's traditional governance regimes is the forced administrative integration of distinct preexisting communities within the state's municipalities. In a large number of UyC municipalities, the government of the community designated as the municipal capital enjoys the sole decision-making authority regarding the allocation of local public goods and services for all residents of the municipality. In approximately 30 percent of localities, residents of outlying communities do not have rights to vote or run for office in local elections (Eisenstadt 2011).

We document that the degree of ethnolinguistic difference between residents of outlying communities and those of municipal capitals is an important predictor of the former's representation in local affairs. That is, because indigenous municipalities are oftentimes composed of heterogeneous groups fragmented along these lines, the reforms can have unintended consequences for indigenous minorities.

We find that the reform's impact on the provision of public goods is mixed. Villages composed of indigenous minorities are less likely to gain access to electricity than those coethnic to the municipal capital population; however, they are more likely to gain access to sewerage and public schooling services. This is consistent with a change in the degree of responsiveness of local governments to the needs of outlying communities within customary law regimes but one that is not necessarily detrimental to communities with

¹To its supporters, it is compatible with democratic functioning as it is based on public participation and consensual decision-making (Magaloni, Díaz-Cayeros, and Ruiz Euler 2019). Critics argue that such institutions may limit political representation because they might disregard standard democratic procedures, gender equality, and human rights (e.g., Recondo 2007, Eisenstadt 2011).

weaker political representation. In sum, the evidence suggests that mechanisms of preference elicitation outside of the electoral process are playing an important role in these communities, but concerns remain regarding restrictions on formal representation in municipal affairs.

I. The UyC Reform and Fiscal Decentralization

The UyC reform in 1995 made official indigenous communities' traditional governance rules in local elections and administrative affairs. The set of municipalities under UyC was determined in 1995 through a negotiation between state-level representatives and the State Electoral Institute.²

Governance in UyC municipalities is based on the principles of communal decision-making, communal service, and the absence of political parties. Governments are composed of a local assembly, which makes the most important budgetary decisions.³

Formal representation practices vary significantly across communities. According to the 1995 census of UyC municipal governments, governance rules in some municipalities have been adapted to the ideals of representative democracy: universal suffrage, vote secrecy, and the promotion of electoral competition. However, they represent a minority of cases. As highlighted previously, an important restriction to political representation is the limited enfranchisement of residents of outlying localities. This is the result of the historical establishment of municipal boundaries throughout the nineteenth and early-twentieth centuries, which overlaid these onto preexisting historical indigenous communities organized along ethnolinguistic lines. In 277 out of the state's 570 municipalities, more than two indigenous groups live under the same municipal jurisdiction.

²Indigenous groups in the state had long deemed this a core demand, for which they frequently mobilized. The 1994 Zapatista revolt in the neighboring state of Chiapas prompted the passage of this legislation in order to maintain political stability and prevent similar uprisings in Oaxaca (Recondo 2001, Juan Martínez 2013).

³Citizens are compelled to carry out tasks or duties for the provision of public goods through a traditional cargo system, and local leadership can take various forms including elections and rotating appointments. See Eisenstadt (2011) and Magaloni, Díaz-Cayeros, and Ruiz Euler (2019) for a detailed discussion of the various dimensions of the forms of traditional governance in this context.

The UyC reform coincided with the national-level fiscal decentralization reforms that started in 1993. Essentially expanding local government resources by a factor of seven, these gave more prominence to municipal authorities in the delivery of public goods and services.⁴ This generated a new and unforeseen tension between traditional authorities and municipal residents. In many instances, because traditional authority is vested in the assembly of the municipal capital, only members of those communities can vote and serve as local representatives (i.e., mayors and local assemblypersons). As a consequence, residents of outlying localities can be formally disenfranchised from formal electoral procedures. Specifically, outlying localities that maintained a strong community identity with differentiated systems of communal organization remain subsumed by the municipal governments, but their autonomy is not necessarily recognized in the UyC system.

II. Data

We use three datasets to investigate changes in political representation, public goods provision, and household socioeconomic outcomes pre- and post-reform according to the degree of preexisting ethnolinguistic differentiation in the municipality.⁵ The 1995 census was collected to document the governance practices of municipalities under UyC (Velásquez Cepeda and Méndez Lugo 1997). It describes the electoral and administrative rules employed in each municipality. We use a dummy variable for municipalities in which residents of outlying communities have rights to either vote or run for office in municipal elections.

We also use quinquennial Mexican population census data of all Oaxacan localities spanning the period 1990–2005 (INEGI 2010). We measure the ethnolinguistic composition at the locality level in 1990, the share of residents (five and older) who speak each of the main languages of Oaxaca's indigenous groups.⁶ Our measure

⁴Federal transfers per capita increased from \$152 in 1990 to \$1097 in 2000 (2010 Mexican pesos). See Hernández-Trillo and Jarillo-Rabling (2008) for a discussion of these reforms.

⁵See Bobonis, Chaparro, and Gonzalez-Navarro (2021) for greater details about the data and summary statistics.

⁶The state's main indigenous groups are Zapotecos, Mixtecos, Mazatecos, Mixes, Chinantecos, and Chatinos.

of ethnolinguistic distance (ELD) between residents of any outlying locality l in municipality m and its municipal capital l^c is defined as the Euclidean distance of the ethnolinguistic composition of their populations:

$$(1) \quad ELD_{lm} = \|Idiom_{l,m} - Idiom_{l^c,m}\|,$$

where $Idiom_{l,m}$ is the vector of shares of outlying locality residents belonging to each ethnolinguistic group in 1990, and $Idiom_{l^c,m}$ is the analogous vector for municipal capital residents. Table 1 reports summary statistics of our measures of ELD. The degree of ethnic differences between outlying localities and municipal capitals is slightly lower in UyC municipalities compared to non-UyC municipalities (p -value = 0.043). Only 6 percent of outlying localities are perfectly coethnic with municipal capitals in UyC municipalities.

We also build a locality-level panel of household demographic characteristics, public goods access (i.e., electrification and sewerage rates), and children's literacy rates for the years 1990–2005 using the quinquennial census data. Finally, we use the public schools census conducted annually by the Ministry of Public Education (SEP 2003) from 1990–2002, which allows us to construct an indicator variable for the presence of a secondary school in each locality per year. Our sample consists of 2,801 outlying localities with available census data in the 319 UyC municipalities (out of a total of 418 UyC municipalities) with at least one such locality in addition to its municipal capital.

III. UyC Reform and Political Representation

We investigate the relationship between outlying communities' ethnolinguistic differences to residents of the municipal capital and the former's political representation in the UyC system. Figure 1 depicts the semiparametric relationship from the following model:

$$(2) \quad y_{lm} = \beta_1 ELD'_{lm} + \beta_2 \ln(Pop_{lm}) + \gamma_m + \varepsilon_{lm},$$

where y_{lm} is an indicator variable denoting the enfranchisement of residents of outlying localities in the (UyC) municipality, ELD_{lm} is a vector of indicator variables for each decile of the distribution of ELD between locality l and municipal capital m in the year 1990, $\ln(Pop_{lm})$ is the

TABLE 1—ELD IN UYC AND NON-UYC MUNICIPALITIES

Mean ELD for:	All (1)	UyC (2)	Non-UyC (3)
Outlying localities	0.193 [0.264]	0.170 [0.265]	0.218 [0.260]
Observations	5,240	2,801	2,439

Note: ELD between each outlying locality and its corresponding municipal capital follows equation (1); we report the average and the standard deviation (in square brackets).

logarithm of the locality's population in 1990, and γ_m represents fixed effects by municipality. Standard errors are clustered at the municipality level. The vector β_1 is the object of interest, which represents the relationship between a locality's ELD to the municipal capital and its degree of political enfranchisement. These coefficient estimates, together with 95 percent confidence intervals, are plotted in Figure 1.

UyC locality residents with greater ELD to the municipal capital were less likely to be enfranchised following the 1995 UyC political reform (Figure 1). The linear relationship is negative (slope coefficient = -0.239 (0.106)). Localities with the average level of ELD were approximately 4 percentage points (5.7 percent) less likely to be enfranchised than coethnic ones.

IV. UyC Reform and Public Goods Provision

We proceed to study the consequences of the UyC reform for public goods provision among outlying localities by estimating the following model:

$$(3) \quad y_{lmt} = \theta_1 ELD_{lm} \times PRE_t + \theta_2 ELD_{lm} \times POST_t + \beta \ln(Pop_{lmt}) + \gamma_m + \delta_t + \varepsilon_{lmt},$$

where y_{lmt} is the public good outcome (i.e., electrification, sewerage, and school provision) in locality l , municipality m , and year t . In this specification, PRE_t and $POST_t$ are indicators that take the value 1 in the periods prior to and post introduction of the UyC reform in 1995, respectively. The θ_1 coefficient captures pre-reform differences in the level of public goods provision of outlying localities with varying degrees of ethnolinguistic differences to the capital

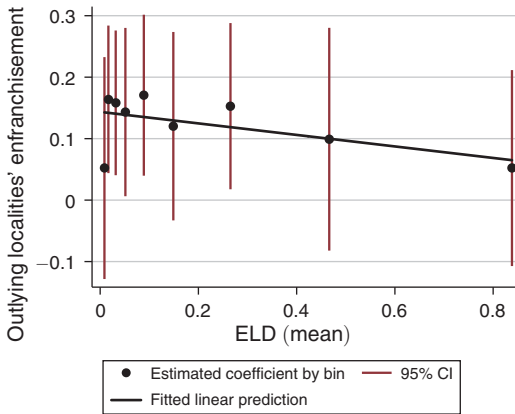


FIGURE 1. ELD AND POLITICAL REPRESENTATION OF OUTLYING LOCALITIES' RESIDENTS

Notes: This figure shows the vector β_1 from an OLS regression of equation (2) with the respective 95 percent confidence intervals; the first decile of the ELD distribution is the omitted category. See Section III for details of the specification. Standard errors clustered at the municipality level. The straight line represents the fit of the linear model.

within each municipality (i.e., a balance test), and θ_2 captures post-reform differences in the gradient between ELD and public good provision under the UyC regime. We control for the relevant locality population and include year (δ_t) and municipality (γ_m) fixed effects; ε_{lmt} is the error term, clustered at the municipality level.

The consequences of the UyC reform for the provision of public goods is mixed (Table 2). Villages composed of indigenous minorities are less likely to gain access to electricity than those coethnic to the municipal capital population (column 1). However, they are more likely to gain access to sewerage and middle school facilities than coethnic ones, respectively (columns 2 and 3).⁷

Finally, we measure whether these changes in access to public goods translate into improvements in human development outcomes. In particular, we find a modest improvement in the

gradient of ELD and the literacy rates of boys ages 9–11.⁸ In summary, these results are consistent with a change in the degree of responsiveness of local governments to the needs of outlying communities within the UyC regime, but one that is not necessarily detrimental to communities with weaker political representation.

V. Discussion and Conclusion

There is a growing debate regarding the role of mixed governance reforms—and of the UyC system in particular—for democracy, socioeconomic development, and conflict (e.g., Recondo 2007; Eisenstadt 2011; Magaloni, Díaz-Cayeros, and Ruiz Euler 2019; see the survey in Holzinger, Kern, and Kromrey 2016). Our findings indicate that although the reform legitimized the exclusion of minorities from traditional mechanisms of municipal decision-making, this is not necessarily detrimental to these groups. This supports a cautious optimism regarding the reform's welfare implications, in particular because minority groups within UyC municipalities have started gaining formal recognition in local affairs more recently.

Our findings are of broader interest for policy regarding the governance of indigenous communities in the Americas. Although a growing number of countries have passed similar legislation, there are limited analyses of their consequences. The experience of Oaxaca suggests that although local governance is organized along ethnolinguistic lines, it does not necessarily result in the perverse outcomes commonly observed in polarized societies (Padró-i-Miquel 2007; Burgess et al. 2015). Through a better understanding of the reform's implications, this type of work can inform policies to help sustain the devolution of power to indigenous minorities and to alleviate social fragmentation and persistent inequality in the region.

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⁷ Households in localities with the average ELD level are approximately 1.3 percentage points (2.4 percent) less likely to have access to electricity than coethnic ones but 1.0 and 1.3 percentage points (9.7 and 12.3 percent) more likely to have access to sewerage and middle school facilities. Given that noncoethnic localities had moderately higher electrification rates and lower access to other goods than coethnic ones pre-reform, the changes in public goods access are consistent with an equalization in access across outlying localities.

⁸ Boys from households in localities with the average level of ELD to the municipal capital have a 1.4 percentage point higher literacy rate than those in coethnic villages, a modest 1.7 percent improvement in proportional terms (Table 2, column 4). We find no effect for girls' literacy.

TABLE 2—UYC GOVERNANCE REFORM, ETHNOLINGUISTIC DIFFERENCES, AND LOCAL PUBLIC GOODS PROVISION

Outcome	Electrification rate (1)	Sewerage rate (2)	Secondary school [1/0] (3)	Boys' literacy (4)	Girls' literacy (5)
ELD × Pre-reform	0.057 (0.071)	-0.022 (0.021)	-0.017 (0.030)	-0.074 (0.054)	-0.047 (0.046)
ELD × Post-reform	-0.078 (0.041)	0.056 (0.024)	0.074 (0.033)	0.082 (0.031)	0.024 (0.029)
In (population) control	Yes	Yes	Yes	Yes	Yes
Municipality fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Mean dependent variable	0.559	0.098	0.102	0.802	0.796
Observations	10,140	10,140	30,474	10,140	10,140

Notes: Outcomes in columns 1–4 are based on the national censuses and national counts. The outcome in column 5 is based on the school census. All standard errors (in parentheses) are clustered at the municipality level.

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