Custom Elections and Local Policies: the case of Canada's First Nations

By FERNANDO M. ARAGON AND ANKE KESSLER*

Since the late 1800s, the selection of leaders in Canadian First Nation communities has been governed by the federal Indian Act (R.S.C. 1985, c.I-5), which stipulates chief and council as heads of band government, and replaces traditional selection methods with local elections supervised by the Ministry of Indian Affairs. Contemporary First Nation leaders and other stakeholders criticise the electoral system laid out the Indian Act as a legacy of colonial assimilation that calls the legitimacy of elected officials into question (Senate of Canada, 2010, p.18) and "neither reflects nor respond to [their] needs and values" (*Ibid*, p. 15). The main perceived shortcomings of the Indian Act system are: a short 2-year electoral cycle, ministerial interventions, a lack of accountability to community members, and a weak appeals process.

First Nation communities have addressed these limitations by opting out the Indian Act electoral system through the creation of community-designed election codes (also called custom electoral systems).¹ Even though these custom systems do not revert to traditional forms of governance such as the hereditary chief model, they allow tailoring the existing code to a community's needs. Possible changes include, among others, lengthening term duration, creation of local appeals and supervisory bodies, alternative nomination procedures, and blending of traditional and contemporary governance structures. The majority of First Nations in Canada now operate under custom election systems.

This paper examines the role of custom electoral systems in First Nations' local policies and on-reserve living conditions. Our main hypoth-

esis is that changes in accountability or political representation associated with this institutional reform may have led to differences in policy outcomes. This is a relevant question given the existing evidence, mostly from U.S. American Indians, linking governance to economic development (Jorgensen, 2007; Dippel, 2014).

We focus on indicators of policy outcomes such as composition of band expenditure, chief's remuneration, and quality of water and wastewater provision. This information was obtained from bands' financial statements and national assessments of water quality on Indian reserves. We also use confidential Census microdata to examine possible effects on reserve income and housing conditions.

To explore effects on policy outcomes, we exploit cross-sectional variation comparing bands with custom codes to bands using the Indian Act system. To reduce endogeneity concerns, we include a rich set of control variables and restrict the sample to bands that eventually opted out of the Indian Act. When examining effects on income and housing conditions, we exploit withinband variation in the timing of conversion to a custom electoral system.

We find evidence of important policy differences associated with custom electoral systems. Bands that use a custom system pay lower remunerations to their chiefs and differ in their budget composition in that they spend more on education and training, and less on economic development (job creation) programs. They also have better wastewater services, with no significant differences on drinking water provision.

One way to interpret these findings is that chiefs and councils selected through customs systems tend to be more accountable, have a more long-term focus in their discretionary spending decisions, and invest more in public infrastructure. These conclusions would be in line with the predictions of the theory, which stipulate that better governance is reflected in more accountability and avoids the short-termism as-

^{*} Aragon: Simon Fraser University, 8888 University Dr, Burnaby, BC V5A 1S6, Canada, faragons@sfu.ca. Kessler: Simon Fraser University, 8888 University Dr, Burnaby, BC V5A 1S6, Canada, akessler@sfu.ca.

¹First Nations with self-government agreements have their own leadership selection processes and are not subject to the electoral provisions of the Indian Act.

sociated with frequent elections.

Our results regarding income and housing conditions are inconclusive, however: we find no evidence of a positive effect of governance through custom system on long-term household income or the quality of housing on reserve. If anything, there is some evidence of a short-term negative effect (within 4 to 8 years after converting to a custom system), which may be associated with the costs of transition of the electoral reform.

I. Data

The data we employ are largely dictated by availability. The three broad measures of band government's policies for which we were able to obtain data are chief's remuneration, band's expenditure composition, and quality of community water and wastewater services.

The observations on band's expenditures and chief remuneration are lifted from band financial statements. The First Nations Financial Transparency Act requires public disclosure of bands' financial information for fiscal years 2013-2014 and 2014-2015. Since this requirement was deemed voluntary after 2015, we focus on statements from the first available year to mitigate concerns of selective attrition.

The quality of community water and wastewater services is measured through risk indices from a national assessment carried out between 2009-2011 in order to identify deficiencies and operational needs of water systems in First Nation communities (Indigenous and Northern Affairs Canada, 2011b). We use the final risk index, which takes a weighted average of several components such as operation, source, and design risk. The index ranges from 1 to 8, with values above 4 indicating medium to high risk. Water and wastewater risk are informative indicator of quality of public services provision given that band governments have an important role on designing and operating water and wastewater systems, and that lack of clean water on reserve is a serious problem affecting many rural First Nation communities.

We complement these data with information on individual income and socioeconomic characteristics of on-reserve populations, drawn from the confidential long-form Canadian Census in the years 1991 to 2011. See Aragón

(2015) for details on Census data description and linkage to Indian reserves.

Finally, we collect information on band's electoral system in years 2011 and 2020 from publicly available First Nation profiles (Indigenous and Northern Affairs Canada, 2011a), and administrative records indicating the date when a band opted-out of the Indian Act and adopted a custom system.²

In 2011, 47.5% of bands had custom electoral codes, and almost 49% used the default Indian Act system, while the rest used electoral systems modified by self-government agreements or modern treaties. By 2020, the proportion of bands with custom electoral and Indian Act electoral systems systems was 53% and 28.6%, respectively; while 14% of bands used a new electoral system defined by the First Nations Election Act (S.C. 2014, c.5). The First Nations Elections Act (FNEA) came into effect in 2015, following close consultation with First Nation groups. If offers an "off-the-shelf" solution for those communities who wish to opt out of the Indian Act provisions, with similar provisions than many custom electoral codes (notably a fouryear term of office and and increased role of the local community) but has a less onerous application process.³

II. Results

A. Local policies

To shed light on how electoral systems affect local policy outcomes, we exploit cross-sectional variation, compare bands with and without custom electoral systems. To increase the comparability of these bands, we impose two sample restrictions. First, we exclude bands that have electoral systems modified by modern treaties or self-government agreements. These agreements reforms involve a broader set of institutional reforms and thus may confound the effect of changes in the electoral system. Second, we restrict the sample to bands that, by 2020, have opted-out of the Indian Act electoral

²See online Appendix for summary statistics and additional checks.

³Adopting a custom code requires drafting a new, legally sound, electoral code, approval vote by band members, and a potentially lengthy administrative procedure. In contrast, opting into the FNEA can be done by submitting a band council resolution.

system. These bands have adopted either a custom electoral system or the one defined under the 2015 First Nations Election Act.

In addition, we include a rich set of covariates (obtained from the 2011 Census microdata and aggregated at band level) as well as census division and province-by-geographic zone fixed effects. A band's geographic zone is based on Indian reserves' remoteness and it is used by Indigenous Service Canada (ISC) to calculate service provision costs and the amount of federal transfers to First Nation governments.

Table 1 presents our results. In summary, we find evidence that the electoral system are associated with differences in several measures of policy outcomes. The first specification (1) looks at chief salaries. We see that bands using custom electoral systems pay lower remunerations to their chiefs, on average. The coefficient is precisely measured and with around 30%, large in magnitude. While our identification strategy does not lend itself to make causal statements, this finding would be consistent with the idea that custom electoral codes provide for greater accountability of elected officials.

Specifications (2) - (5) consider differences in the composition of community budgets. Although the differences in budget allocation are not as precisely measured, some observations emerge. In particular, bands using custom systems appear to allocate a larger fraction of their budget to education and training (an increase of around 2.7 percentage points) while at the same time spending relatively less on expenditures labelled as band's economic development. This last category includes expenses on corporations owned by bands, capacity-building projects, as well as job creation programs, among others. There are no differences in funds allocated to band-owned housing but the point estimate on administrative expenses is negative, albeit measured very imprecisely.

The final columns (6) and (7) display our results on public infrastructure, specifically the quality of drinking water and waste water services. We find that using a custom electoral system is associate with significantly better better provision of waste water services: the reduction in the risk index (around 0.6) is equivalent to 0.3 standard deviations. There is, however, no significant difference on the risk index of drinking water provision.

Overall, we interpret these findings as evidence that custom electoral systems matter for local policy outcomes, echoing a large literature on the effects of electoral institutions (see, e.g., Panizza (2001); Persson, Tabellini and Trebbi (2003)). In particular, this kind of pattern would be expected if one subscribes to the view that, in comparison with custom systems, the regulations of the Indian Act electoral code promote more accountability towards the ministry (who likely emphasizes measurable indicators such as jobs) than towards the community, and encourage more short-termism (due to the 2-year electoral cycle). Due to data limitations, however, we are not in a position to investigate the possible mechanism in greater detail, nor rule out biases introduced by unobserved heterogeneity or reverse causality. Adressing both issues is left to future work.

B. Income and housing conditions

A natural follow-up question is whether the policy changes brought by custom electoral systems also affected band members' living conditions. We cannot satisfactorily answer this question due to lack of a sufficient statistic of welfare. Observable measures like income or housing conditions are only partially informative as they may fail to capture other relevant dimensions of human well-being. This is particularly true for Indigenous communities. With this caveat in mind, this section examines the effect of custom electoral systems on these outcomes.

To this end, we use confidential microdata from the Census long-form. Our dataset contains repeated cross-sections of all on-reserve residents for years 1991, 1996, 2001, 2006, and 2011. This time dimension allows us to implement a difference in difference (DiD) approach that exploits within-band variation in the timing of institutional reform. To increase comparability of treated and control groups, we restrict the sample to bands for which there is publicly available information on the date of adoption of a custom electoral system (n=104).

In particular, we estimate the following regression model:

$$y_{ijt} = \beta^k C_{jt}^k + \delta W_{ijt} + \eta_j + \rho_t + \varepsilon_{ijt},$$

where the unit of observation is individual (or household) i in band j and year t. y is the out-

	ln(chief Band expenditure (as % of total)					Final risk index	
	remuner-	Education	Housing	Admin-	Band dev-	Water	Waste-
	ation)	& training		istration	elopment		water
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Has custom electoral system	-0.300*** (0.085)	2.761* (1.538)	-0.058 (1.214)	-3.761 (7.370)	-5.021* (2.805)	0.413 (0.433)	-0.662** (0.296)
Mean outcome		15.7	4.3	15.0	9.9	5.4	4.9
Observations	269	256	257	257	257	252	198
R-squared	0.666	0.836	0.617	0.515	0.663	0.646	0.809

Notes: Standard errors (in parenthesis) are clustered by province-by-geographic zone (n=26). Regressions used band-level data. All specifications include census division and province-by-geographic zone fixed effects, log of per capita band revenue and on-reserve population characteristics: log of population size, share of Aboriginal population, share of band housing dwellings, and labor force participation rate.

come of interest (i.e., log of individual income or an indicator of living in a dwelling in need of major repairs). $C_{j,t}^k$ is an indicator equal to 1 if the band adopted a custom electoral system at least k years before year t. This specification includes individual and household characteristics (W_{ijt}) , as well as province-by-year (ρ_t) and band (η_j) fixed effects. Standard errors are clustered at band level.

Figure 1 displays our estimates of β^k for different values of k. We find evidence of a reduction of individual income of around 10% in the years after adopting a custom electoral system. The reduction is sizable, around 10%, but temporary. There is no significant difference 12 or 16 years after the reform. Consistent with the similarity of pre-trends required in a DiD approach, there is also no significant effect of adopting a custom system on the years before the reform (k = -8, -4).

We observe similar pattern for the likelihood of dwellings needing major repairs, our proxy for housing conditions. There is a marginally significant increase of around 4 percentage points four years after the reform, but there is no sizeable differences before the reform or 8 to 16 years later. These transitory effects on income or housing do not seem to be driven by changes in population size or composition.⁴

We interpret these results as evidence that adopting a custom electoral reform create short-term transition costs, which manifest themselves in the form of lower income and worse housing conditions. However, these costs are temporary and there do not seem to generate observable long-term effects on these measures of living conditions.

III. Conclusion

This paper studies the effect of community-designed electoral codes on Canadian First Nation communities. Although these custom electoral codes do not revert to traditional forms of governance, such as hereditary chiefs, they are flexible enough to adapt the electoral process to a communities' needs.

Using cross-sectional variation with a rich set of controls and a meaningful sample to enhance comparability, we find evidence that custom systems are associated with differences in policy outcomes: lower chief's remuneration, changes in budget composition, and better quality of wastewater provision. To the extend that these policy changes reflect lower rent extraction and long-term targeted spending, these results could be interpreted as evidence of improvements in local governance. This could occur, for

find that the effect of private property rights on on-reserve income is driven by an increase of non-Aboriginal population.

⁴This finding contrasts with Aragón and Kessler (2020) who

0.10 0.06 0.05 0.04 0.00 0.02 -0.05 0.00 -0.10-0.02 -0.15-0.04 -0.20 -0.06 -0.25-0.08 16 Years since adoption of custom electoral system (k) Years since adoption of custom electoral system (k)

Figure 1.: Effect of custom electoral system on income and housing

(a) Log of income

(b) Dwelling needs major repairs

Notes: Figure displays the estimated effect of adopting a custom electoral system on the log of individual total income k years after adoption. Diamonds represent point estimates while lines represent 95% confidence intervals. Each estimate is obtained in a separate regression. Regressions use microdata from repeated cross sections, cluster S.E. at band level and include: band and province-by-year fixed effects, log of on-reserve population, household size, age, sex and indicators of high school attainment and being a registered Indian. Panel (a) uses individual-level data and adds indicators of employment and labor force participation. Panel (b) uses household-level and adds indicators of type of dwelling tenure (ownership, band housing or rented).

instance, if custom systems enhance political accountability, increase political representation of a broader electorate, or focus on longer-term improvements in well-being. Examining these issues in more detail is beyond the scope of this paper due to data limitations, and left to future work.

In our DiD regressions, we find some evidence of short-term costs due to institutional reform but no evidence that a transition to custom codes has any long-term impact band members' well-being, at least as measured by income and housing conditions. Some policy changes may benefit band members in other ways; for example, lower remuneration of chiefs will increase the available budget and improvements in wastewater systems are very important in remote communities without running water.

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