

# Indigenous Self-Governance and Development on American Indian Reservations

*By* DUSTIN FRYE AND DOMINIC P. PARKER\*

\* Frye: Vassar College (email: [dufrye@vassar.edu](mailto:dufrye@vassar.edu)). Parker: University of Wisconsin-Madison (email: [dominic.parker@wisc.edu](mailto:dominic.parker@wisc.edu)).

The UN Declaration on the Rights of Indigenous People emphasizes self-determination. It states that indigenous people should have autonomy in governing internal and local affairs, as well as ways and means for financing their autonomous functions.<sup>1</sup> The Declaration promotes self-government as a matter of justice.

But is self-determination advantageous for economic development? On one hand, it may promote development because, as North (1981) and Alesina and Spolaore (2003) point out, self-government allows rules, laws, and compliance procedures befitting local culture to evolve without interference from outsiders. On the other hand, self-government is a liability if local governments cannot effectively provide public goods, or credibly commit to rules on which investment depends (Bardhan 2016).

We evaluate the link between self-government and development on American Indian reservations. Our analysis focuses on important legislation governing reservations, the 1934 Indian Reorganization Act (IRA), which initiated modern tribal governments. If adopted by majority vote, tribes organizing under the IRA were eligible for development programs administered by the Bureau of Indian Affairs (BIA) and, ultimately, subjected to more extensive federal oversight. Tribes not organized under the IRA maintained more autonomy but had less access to federal resources. This paper compares long-run economic growth under IRA and non-IRA status across all tribes, and for a subset with narrowly determined IRA elections. The evidence suggests that having more complete self-governance – by opting out of the IRA – improved economic conditions for the average tribe but also caused higher variance thereby exposing some tribes to more downside risk.

<sup>1</sup> See [www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP\\_E\\_web.pdf](http://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf)

## **I. IRA and Reservation Governance**

The IRA, passed in 1934, created a governance blueprint. Tribes had 18 months to vote to either adopt the blueprint, or to reject it and create their own governance regime. Adopting the IRA meant accepting a BIA model of tribal constitutions and charters based on principles often bearing little resemblance to traditional tribal governance systems (Mekeel 1944, Rusco 2000).

The debate among tribal leaders prior to voting raised questions about how the IRA would work in practice. There was uncertainty about the extent to which IRA acceptance would cause tribes to surrender governing authority to the federal government (Deloria 2002). For most tribes, the IRA's key attraction was access to a revolving federal credit fund that could be leveraged for local development projects.

Following the IRA votes, roughly two-thirds of reservations were irreversibly organized under the IRA. Figure 1 plots the reservations by IRA status based on voting results from Haas (1947). There is some regional clustering of IRA reservations in the Southwest and Plains states, and of non-IRA reservations in New York, but IRA status is not strictly correlated with geography and there are neighboring reservations under IRA and non-IRA governance.

[ Insert Figure 1 Here]

Only after IRA adoption did it become clear that IRA acceptance meant extensive federal oversight. For IRA tribes, most business transactions were ultimately deemed to require federal approval as were all transaction involving land or natural resources (Clow 1987). Any tribal project using revolving credit was subject to close supervision from BIA officials who were supposed to manage funds and minimize losses (Mekeel 1944).

Historical research, anecdotes, and statistical comparisons reveal stark differences in federal oversight across IRA and non-IRA reservations, especially from the 1930s through the 1970s (Legters and Lyden 1994, Lemont 2006). Accounts from tribal government meetings indicated that "Indian service personnel consider the new tribal governments ... mere advisory bodies to the Office of Indian Affairs" (Clow 1987, 132). Our statistical comparisons, based on annual BIA press releases between 1953 and 2000, indicate that BIA involvement in tribal projects was 42 percent higher on IRA reservations. Self-determination legislation during the 1970s mitigated this difference and, by the 1980s, the BIA was involved in an equal proportion of

projects on IRA and non-IRA reservations (Frye and Parker 2016).

## **II. Theoretical Intuition**

How might IRA adoption affect development on reservations? The recent literature on decentralization hints at costs and benefits of self-government (Enikolopov and Zhuravskaya 2007, Weingast 2009, Faguet 2014, Bardhan 2016, Huang et al. 2017). Decentralized government is advantageous because it is easier for citizens (principles) to hold local public officials (agents) accountable. It is also easier for citizens to create rules, laws, and procedures that match local customs, cultures, and norms through small units of governance. By contrast, centralized governments are less responsive to – and less knowledgeable of – local heterogeneity in preferences and resources. Moreover, the transaction costs of dealing with local governments tend to be lower than those of dealing with bureaucracies of centralized governments.

Centralized control can generate benefits through scale and uniformity. It creates uniformity because a single set of rules – for example, constitutions, bylaws, and uniform codes – govern private commerce. When rules are uniform, outside businesses, creditors, and consumers know what to expect and do not have to learn different rules for each local

jurisdiction. Relative to local governments, central governments also have access to more creditors (through taxation or borrowing) and hence can undertake projects at larger scale.

Applying this analysis to reservation economies, the main advantage of the IRA is that it gave tribes access to centralized funding, and it perhaps better connected them to a uniform network of federal resources and potential business partners. These advantages of BIA oversight would be most acute for tribes that were relatively dysfunctional, or that were relatively disrupted by assimilation policies prior to the IRA. IRA adoption might have helped such tribes avoid worst-case, economic collapse.

However, the literature suggests that IRA status would mitigate downside economic risk at the expense of suppressing higher growth potential under self-government for the average tribe. This is because BIA agents were unlikely to understand local conditions well enough to identify profitable development projects, nor could they be held accountable to locals when pursuing bad projects or failing to capitalize on good opportunities. Under the IRA, tribes were delayed by transaction costs of dealing with the BIA, particularly because IRA constitutions did not put a time limit on bureaucratic approval (Clow 1987, 131).

### III. Empirical Comparisons

To study the implications of IRA adoption, we utilize cross-sectional data of income per capita for American Indians on reservations during 2016, 1980, and 1938.<sup>2</sup> We choose 1938 as a beginning period measure because it is the closest time to IRA adoption for which income data are available. We choose 1980 because it represents the first full decade after a federal policy shift towards self-determination (Lemont 2006), and 2016 is the most recent year of data.

Table 1 shows OLS estimates. The dependent variable is the log of inflation-adjusted income, measured in 2016 in the first four columns and in 1980 in the last four columns. The estimating sample is all federally recognized reservations for which 1980 and 2016 income data were published by the U.S. Census Bureau, and that had a minimum American Indian population of 250 in 2000.<sup>3</sup> All specifications control for factors found to correlate with reservation income in an earlier cross-sectional assessment of reservation income (Anderson and Parker 2008). Table A1 in the online appendix shows summary statistics.

[ Insert Table 1 Here]

Column 1 in Table 1 shows that, after controlling for other factors, IRA tribes had 11 percent lower income when compared to non-IRA tribes in 2016. Column 5 reports the difference in 1980, when IRA tribes had 14 percent lower income. These results suggest that any negative effect of IRA status was strong through 1980, when federal policy was most interventionist, and weaker from 1980-2016, as self-determination policies took hold and differences in federal oversight over IRA versus non-IRA reservations waned.

The key identification challenge, not addressed in Columns 1 and 5, is that IRA adoption was not randomly selected. Columns 2 and 6 begin to address this problem by controlling for 1938 income. Doing so reduces the sample size to 71, due to data availability, but it accounts for any systematic differences in starting income between IRA and non-IRA reservations around the time the IRA was passed. The point estimates of -0.12 and -0.14 are similar to those in Columns 1 and 5, indicating the differences in 1980 and 2016 do

<sup>2</sup> The “2016” data are from the 2014-2018 American Community Survey (ACS). The 1980 data are from the decennial US census. The 1938 data are from BIA annual reports housed at U.S. National

Archives in Washington D.C. [Add something about who is counted as “American Indian” in each survey.]

<sup>3</sup> This is the same population threshold used in Anderson and Parker (2008).

not simply reflect differences in income that pre-dated IRA implementation.

The remaining columns address the identification challenge by limiting the sample to reservations for which the vote for IRA status was “close.” We do so by constructing an index that is (yes – no)/eligible voters. As the index approaches zero, the vote becomes closer. We define a narrowly reported election following the optimal bandwidth choice methodologies developed in Calonico et al. (2020). This is the set of tribes that would have been governed by an alternative regime had just a small proportion of eligible families voted differently. The idea is that IRA designation within this subsample is therefore quasi-random because it likely reflects idiosyncratic differences in preferences across a few families. Turning to the results, the evidence from this subsample suggests the IRA had a larger negative effect on long-run income, especially when we control for 1938 income in Columns 4 and 8.

In terms of robustness, the empirical patterns are similar to those in Table 1 when we measure income in levels, or when we add Dippel’s (2014) control for whether or not multiple bands were forced onto the same

reservation (see Appendix Table A2).<sup>4</sup> In the same table we show the result is not driven by differences in population sizes across IRA and non-IRA reservations. The findings suggest that greater self- governance improved long-run development for the average tribe not only because IRA status is associated with lower average growth, but also because the differences in average development between the two types of reservations disappears after all tribes were given more governing independence through self-determination policies beginning in the mid to late 1970s.

Was the federal oversight through the IRA an economic benefit to some tribes? To gain insight, Table 2 shows standard deviations for growth rates among IRA and non-IRA reservations and tests for differences. There is no statistical difference in the variance over the full time period, from 1938-2016. However, over 1938-1980 the variance in growth was higher for the non-IRA tribes, especially when comparing reservations with narrow IRA voting results.

[ Insert Table 2 Here]

<sup>4</sup> We do not include this control in Table 1 because doing so markedly decreases sample size.

The lower relative variance in growth across IRA reservations (prior to self-determination policies) suggests the IRA may have succeeded in helping at least a handful of tribes avoid the worst outcomes. The 5<sup>th</sup> percentile of IRA reservations grew by 317 percent over 1938-1980 compared to the 287 percent for the 5<sup>th</sup> percentile non-IRA tribes. Still, the evidence suggests this insurance against low-end outcomes came at a high price because the IRA appears to have suppressed growth for the majority of tribes.

#### IV. Conclusion

This study provides economic support for the UN Declaration of self-determination for indigenous people. If the experience of Native Americans with the IRA generalizes to other settings, self-governance should lead to higher average economic well-being albeit with higher variance when compared to oversight from colonial governments.

Though our study focuses on a single piece of legislation, the findings align with results from previous studies of American Indian reservation governance. Cornell and Kalt (2000) and Akee et al. (2015) also find that conclude that, on average, robust economic development benefits from self-governance that is free from federal political influences. We hope that future research will add to our

understanding about how self-determination affects indigenous people not only in the United States, but throughout the world.

#### REFERENCES

- Akee, Randall, Miriam Jorgensen, and Uwe Sunde. 2015. Critical Junctures and Economic Development: Evidence from the Adoption of Constitutions among American Indian Nations. *Journal of Comparative Economics* 43: 844-861
- Alesina, Alberto and Enrico Spolaore. 2003. *Size of Nations*. Cambridge, MA: MIT Press.
- Anderson, Terry L. and Dominic P. Parker. 2008. "Sovereignty, Credible Commitments, and Economic Prosperity on American Indian Reservations." *Journal of Law of Economics* 51(4): 641-666.
- Bardhan, Pranab. 2016. "State and Development: The Need for a Reappraisal of the Current Literature." *Journal of Economic Literature* 54(3): 862-892.
- Enikolopov, Ruben and Ekaterina Zhuravskaya. 2007. "Decentralization and Political Institutions." *Journal of Public Economics* 91: 2261-2290.
- Calonico, S., Cattaneo, M.D. and Farrell, M.H., 2020. "Optimal Bandwidth Choice for Robust Bias-Corrected Inference in Regression Discontinuity Designs. *The Econometrics Journal*, 23(2): 192-210.
- Clow, Richmond L. 1987. "The Indian Reorganization Act and the Loss of Tribal Sovereignty." *Great Plains Quarterly* 7(2): 125-134.
- Conley, T.G., 2010. Spatial econometrics. In *Microeconometrics* (pp. 303-313). Palgrave Macmillan, London.
- Cornell, Stephen, and Joseph S. Kalt. 2000. Where's the Glue? Institutional and Cultural Foundations of American Indian Economic Development. *Journal of Socio-Economics* 29: 443-470.
- Deloria, Vine Jr. 2002. *The Indian*

- Reorganization Act: Congresses and Bills*. University of Oklahoma Press.
- Dippel, Christian. 2014. Forced Coexistence and Economic Development: Evidence from Native American Reservations. *Econometrica* 82(6): 2131-2165.
- Faguet, Jean-Paul. 2014. "Decentralization and Governance." *World Development* 53: 2-13.
- Frye, Dustin and Dominic P. Parker. 2016. "Paternalism versus Sovereignty: The Long-Run Economic Effects of the Indian Reorganization Act." In *Unlocking the Wealth of Indian Nations*, ed. T.L. Anderson. New York: Lexington Books.
- Haas, Theodore. 1947. *Ten Years of Tribal Government after the IRA*. Washington D.C. United States Indian Service.
- Huang, Zhangkai, Lixing Li, Guangrong Ma, and Lixin Colin Xu. 2017. "Hayek, Local Information, and Commanding Heights: Decentralizing State-Owned Enterprises in China." *American Economic Review* 107(8): 2455-2478.
- Legters, Lyman H. and Fremont J. Lyden. 1994. *American Indian Policy: Self-Governance and Economic Development*. Greenwood Press.
- Lemont, Eric D. 2006. *American Indian Constitutional Reform and the Rebuilding of Native Nations*. University of Texas Press.
- Mekeel, Scudder. 1944. "An Appraisal of the Indian Reorganization Act." *American Anthropologist* 46(2): 209-217.
- North, Douglass C. 1981. *Structure and Change in Economic History*. New York: Norton & Co.
- Rusco, Elmer R. 2000. *A Fateful Time: The Background and Legislative History of the Indian Reorganization Act*. Reno: University of Nevada Press.
- Weingast, Barry. 2009. "Second Generation Fiscal Federalism: The Implications of Financial Incentives." *Journal of Public Economics* 65: 279-293.

## FIGURES AND TABLES

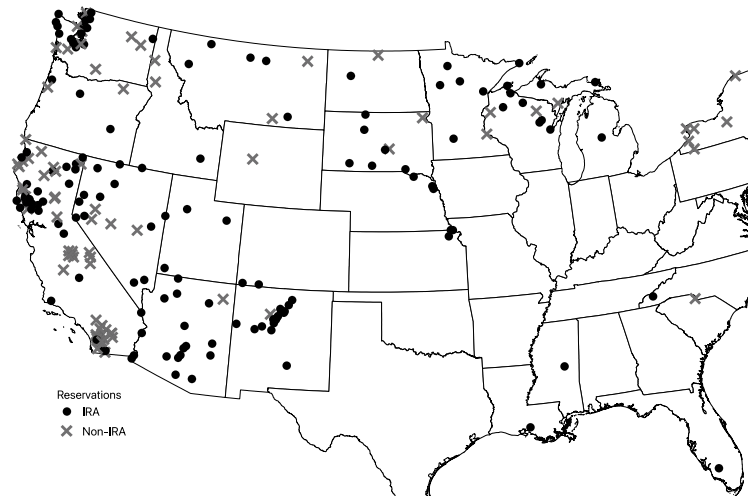


FIGURE 1: IRA AND NON-IRA RESERVATIONS

*Note:* Map shows reservation centroids by reported IRA status from Haas (1947).



TABLE 1— OLS ESTIMATES OF THE LOG PER CAPITA INCOME OF AMERICAN INDIANS ON RESERVATIONS

	2014 – 2018 ACS				1980 Census			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
IRA	-0.1180 (0.0777)	-0.1237 (0.0807)	-0.1473 (0.0401)	-0.1502 (0.0442)	-0.1486 (0.0604)	-0.1487 (0.0620)	-0.1826 (0.0855)	-0.2927 (0.0693)
Reservations	113	71	41	30	113	71	41	30
Controls	Base	Base + 1938 Inc	Base	Base + 1938 Inc	Base	Base + 1938 Inc	Base	Base + 1938 Inc
Sample	Full	Full	Narrow	Narrow	Full	Full	Narrow	Narrow

*Notes:* This table shows coefficients of OLS estimates of log per capita income on indicator of IRA status. Columns (1) – (4) are from the 2014 – 2018 ACS and columns (5) – (8) are from the 1980 Census. Standard errors are estimated following Conley (2010) and are reported in parentheses. The base controls include adjacent county income and population density (measured in the same year as the dependent variable), distance to nearest metropolitan area, reservation size, land tenure mix, and an indicator for Public Law 280 status (measured in 2000). These control variables come from Anderson and Parker (2008).

TABLE 2— VARIANCE IN INCOME GROWTH FOR  
IRA VS. NON-IRA RESERVATIONS

	(1)	(2)	(3)	(4)
Non-IRA	7.608	4.150	3.788	4.068
IRA	7.668	4.867	3.061	2.576
Prob. Diff.	0.987	0.618	0.230	0.088
Time Span	1938- 2016	1938- 2016	1938- 1980	1938- 1980
Sample	Full	Narrow	Full	Narrow
Reservation	71	30	71	30

*Notes:* This table compares standard deviations in the growth rates of IRA vs. Non-IRA reservations and tests for differences. The Prob. Diff shows the p-value for an F-test of variance ratios.

# APPENDIX: TABLES

TABLE A1— SUMMARY STATISTICS BY IRA STATUS

	Full Sample			Narrow Election		
	(1)	(2)	(3)	(4)	(5)	(6)
	Non-IRA	IRA	Difference	Non-IRA	IRA	Difference
Per Capita Income	23,009.373 (13,249.809)	18,038.369 (5,824.758)	-4,971.00 (2,521.221)	18,949.652 (3,919.638)	16,103.612 (4,444.606)	-2,846.04 (1,346.087)
Population	8,161.862 (30,529.541)	2,972.583 (3,261.984)	-5,189.279 (5,631.876)	13,875.929 (43,942.648)	3,365.370 (3,718.994)	-10510.559 (11,625.838)
Voting Margin	-0.286 (0.217)	0.404 (0.227)	0.69 (0.047)	-0.109 (0.083)	0.165 (0.083)	0.273 (0.027)
Ln(Dist. To MSA)	4.317 (0.836)	4.056 (1.239)	-0.260 (0.205)	4.385 (0.742)	4.277 (0.973)	-0.108 (0.272)
Ln(Adj. Cnty PCI)	10.399 (0.138)	10.372 (0.195)	-0.027 (0.033)	10.385 (0.159)	10.358 (0.157)	-0.027 (0.052)
Ln(Adj. Cnty Pop Density)	4.042 (1.650)	3.672 (1.442)	-0.370 (0.342)	3.842 (1.474)	3.529 (1.314)	-0.314 (0.465)
Ln(Res. Acreage)	11.233 (2.450)	11.636 (1.915)	0.403 (0.497)	11.641 (2.578)	11.659 (2.095)	0.018 (0.792)
PL-280 (0/1)	0.621 (0.494)	0.310 (0.465)	-0.311 (0.104)	0.571 (0.514)	0.407 (0.501)	-0.164 (0.167)
Pct. Indiv. Trust Land	15.260 (18.525)	11.054 (16.463)	-4.206 (3.857)	19.314 (20.793)	17.205 (18.582)	-2.109 (6.565)
Pct. Fee Simple Land	22.905 (29.417)	29.392 (34.268)	6.487 (6.587)	33.187 (35.036)	34.176 (31.194)	0.988 (11.049)
Reservations	29	84	113	14	27	41

Notes – The variables from per capita income to adjacent county population density are constructed from the 2014-2018 ACS. The adjacent county variables are constructed from U.S. Census and ACS data and take the weighted average of data from any county lacking reservation land that is adjacent to the county or counties containing reservation land. The variables from reservation acreage to percent fee simple land come from Anderson and Parker (2008).

TABLE A2— ALTERNATIVE SPECIFICATIONS

	Per Capita Income		Force Coexistence		Ln(Population)	
	(1)	(2)	(3)	(4)	(5)	(6)
IRA	-3352.5570 (2480.0702)	-2295.1147 (722.5061)	-0.1525 (0.0831)	-0.1271 (0.0424)	-0.0923 (0.1941)	0.1341 (0.2343)
Reservations	113	41	104	37	113	41
Controls	Base	Base	Base + FC	Base + FC	Base	Base
Sample	Full	Narrow	Full	Narrow	Full	Narrow

Notes - This table shows coefficients of OLS estimates of per capita income from the 2014 – 2018 ACS on indicator of IRA status. The dependent variable is as follows: Columns 1-2, the level of per capita income for American Indians on reservations; Columns 3-4 the logged income per capita for American Indians on reservations; Columns 5-6, the log of the American Indian population on reservations. Standard errors are estimated following Conley (2010) and are reported in parentheses. The base controls include adjacent county income and population density (measured in the same year as the dependent variable), distance to nearest metropolitan area, reservation size, land tenure mix, and an indicator for Public Law 280 status (measured in 2000). These control variables come from Anderson and Parker (2008). Columns 3-4 add a control for whether multiple tribes were forced to coexist on reservations (“FC”) based on Dippel (2014).