

Sovereignty, Credible Commitments, and Economic Prosperity on American Indian Reservations

by

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Abstract: American Indian reservations are islands of poverty in a sea of wealth. Because this poverty cannot be explained solely by natural resource and physical and human capital constraints, institutions must be part of the explanation. One of the institutional variables is the sovereign power of tribes. This sovereign power allows tribal governments to act opportunistically by selectively enforcing contracts for short-term benefit to the tribe or certain tribal members. The potential for such opportunistic behavior can thwart economic development if tribes are unable to make credible commitments to stable contract enforcement.

One avenue for credible commitments is Public Law 280. This law was passed by Congress in 1953 and implemented during the 1950s and 1960s, requiring some tribes to turn judicial jurisdiction over civil disputes to the states in which they reside. Using data for 1969 to 1999, we find that per-capita income for American Indians on reservations subjected to state jurisdiction grew significantly more than it did for Indians who were not. The findings are consistent with cross-country studies of economic growth that emphasize the role of stable institutions in promoting development. (JEL B52 or JEL O13 or JEL O17)

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A robust explanation of why reservation Indians are amongst the poorest of America's minorities has remained elusive. Despite recent economic growth partly due to casino gaming, per-capita income for Native Americans living on reservations in 1999 was \$7,846 compared to \$14,267 for Indians living off reservations and to \$21,587 for the average U.S. citizen. As with many explanations of economic development, the poor performance of reservation economies has been mainly attributed to poor land, geographic isolation, and inadequate human capital to manage what few assets Indians have.

Recently, however, scholars have focused more on institutions. Anderson and Lueck (1992), for example, considered the impact of land tenure on agricultural productivity and found that trust constraints imposed by the federal government significantly reduced the value of agricultural output on reservation land. Using proxies to measure institutions, Cornell and Kalt (2000) found that the design of tribal governments explained some of the differences in 1989 unemployment levels and in income growth from 1977 to 1989 for a cross-section of large reservations. Most recently, a volume edited by Anderson, Benson, and Flanagan (2006) brought together studies comparing the institutional environments of United States and Canadian reservations and identifying a number of specific political and legal obstacles to greater development.

None of the aforementioned studies, however, specifically consider the impact of credibly committing to a consistent rule of law despite the fact that cross-country studies find this to be a significant explanatory variable. For example, Acemoglu, Johnson, and Robinson (2001), Hall and Jones (1999), Barro (1997), and Keefer and Knack (1997) all find that proxies for a stable rule-of-law and restraints on the government's ability to expropriate property are necessary conditions for growth. As North and Weingast (1989, p. 803) put it, "The more likely

it is that the sovereign will alter property rights for his or her own benefit, the lower the expected returns from investment and the lower in turn the incentive to invest. For economic growth to occur the sovereign or government must not merely establish the relevant set of rights, but must make a credible commitment to them.”

This paper specifically controls for the ability of tribes to credibly commit to an institutional environment conducive to investment on reservations. Public Law 280 (P.L. 280), passed in 1953 and implemented in the 1950s and 1960s, forced some reservations to turn over their judicial systems to the states in which they reside while other reservations retained their judicial sovereignty. We hypothesize that having contract disputes decided in state courts credibly commits tribes and tribal members in a way that tribal jurisdiction cannot and therefore leads to higher economic growth.

With approximately one-third of the 81 largest Indian reservations in the United States under the judicial jurisdiction of state courts, we are able to estimate the effect of a more stable rule of law on economic development. Importantly, the reservations under state jurisdiction were not selected because of their potential for economic growth but for their “lawlessness,” to use the description of the U.S. Congress. Furthermore, the transfer of civil jurisdiction to states “was an afterthought in a measure aimed primarily at bringing law and order to the reservations, added because it comported with the pro-assimilationist drift of federal policy” (Goldberg-Ambrose 1997, p. 50). For these reasons we view P.L. 280 as a natural experiment for testing the hypothesis that tribes credibly committing through state courts will experience more economic growth, which we do with data from 1969 to 1999.

We recognize at the outset that our hypothesis contrasts sharply with the legal and sociology literature emphasizing the negative effects of limiting tribal sovereignty by giving

criminal judicial jurisdiction to states. Goldberg-Ambrose (1997), for example, argues that P. L. 280 has exposed American Indians to bias in state courts, created gaps in jurisdiction that states are reluctant to fill, and reduced Bureau of Indian Affairs funding for affected tribes. For these reasons, she argues that “tribes in P.L. 280 states are at a disadvantage compared with tribes elsewhere in the United States” (p. 37). We acknowledge that tribal judicial sovereignty has its benefits and make no claim as to whether the benefits are greater or less than the benefits of a more stable contracting environment under P. L. 280. We simply test whether the greater degree of credible commitment available under P. L. 280 promotes more economic growth.

The paper is organized as follows. The next section describes the judicial sovereignty of Indian tribes and Public Law 280. It also lays out the congressional motivation for passing the law, a crucial determinant of which reservations were forced to submit to state judicial jurisdiction. The third section articulates our hypothesis that state jurisdiction credibly commits reservation Indians to contracts and thus promotes economic growth. We then provide empirical tests of the hypothesis using per-capita income growth of American Indians on reservations between 1969 and 1999 as the dependent variable, with this period measuring economic performance since P.L. 280 was uniformly enforced across states. The concluding section puts these findings in the context of cross-country studies with similar results.

Tribal Judicial Sovereignty and Public Law 280

Since 1831, when Chief Justice Marshall wrote his famous *Cherokee Nation v. Georgia* (30 U.S. 1 [1831]) decision, tribes have struggled to assert their sovereignty.¹ Justice Marshall ruled that a tribe is “a distinct political society separated from others, capable of managing its

¹ The laws and court cases discussed in this section are described in further detail by Getches, Wilkinson, and Williams (1998) and Strickland and Wilkinson (1982).

own affairs and governing itself,” but also that reservations are not a “foreign state.” The decision referred to reservations as “domestic dependent nations” and the relationship with the federal government as “that of a ward to his guardian.” Under this doctrine, tribal authority to create and enforce laws on reservations is exclusive unless the federal government exercises its “guardian” power by extending federal or state jurisdiction on to reservations.

One of the earliest federal statutes attenuating tribal judicial sovereignty was passed in 1817 and amended several times, last in 1854.² It gave the federal government powers to prosecute serious “interracial” crimes committed in Indian Country. Crimes committed by “one Indian against another, within an Indian boundary” were exempted, so that tribes retained judicial sovereignty over these offenses and essentially all other criminal cases and civil disputes arising on reservations.

Tribal sovereignty over Indian-on-Indian crimes eroded with the passage of the Indian Major Crimes Act in 1885. The act spawned from non-Indian outcry over the tribal resolution of the murder of Spotted Tail by Crow Dog, both Brule Indians, on the Great Sioux Reservation in 1881. The Brule justice system required Crow Dog’s family to compensate Spotted Dog’s family for the death with money and property, but allowed Crow Dog to remain at large. Shortly after the U.S. Supreme Court denied attempts by U.S. territorial courts to prosecute (and hang) Crow Dog, Congress responded by passing the Major Crimes Act. It gives the federal government jurisdiction to prosecute serious criminal offenses (e.g., murder and rape) committed on reservations regardless of the race of the perpetrator or victim.

After a hiatus in the erosion of tribal judicial sovereignty, Congress passed Public Law 280 in 1953 extending substantial jurisdiction over Indian Country to states. This law was passed

² The statute has no official title. It is also known as the General Crimes Act, the Interracial Crime Provisions, and the Federal Enclave Act.

during the height of the termination period of U.S. policy spanning roughly from 1940 to 1960.³ During this period it was the official resolution of Congress to make all Indians “subject to the same laws and entitled to the same privileges” afforded to all U.S. citizens “as rapidly as possible” (Clinton, Goldberg, and Tsosie 2003, p. 40).

P.L. 280 required that jurisdiction over criminal offenses and civil disputes on some reservations be turned over to the states.⁴ The law initially mandated the transfer of jurisdiction to the states over most Indian reservations located in Alaska, California, Minnesota, Nebraska, Oregon, and Wisconsin (see Table 1). These states are known as the “mandatory” P.L. 280 states because Congress, not the state legislatures, initiated the transfer of jurisdiction and did so without tribal consent.

Congressional records indicate that P.L. 280 was advanced as an opportunity to improve criminal law enforcement on reservations perceived to lack adequate tribal forums. This rationale is articulated in the 1953 Senate Report on the law:

As a practical matter, the enforcement of law and order among the Indians in the Indian country has been left largely to the Indian groups themselves. In many States, tribes are not adequately organized to perform that function; consequently, there has been created a hiatus in law enforcement authority that could best be remedied by conferring criminal jurisdiction on States indicating an ability and willingness to accept such responsibility.

A further indication that P.L. 280 was aimed at removing lawlessness is the fact that Congress

³ Strickland and Wilkinson (1982) date the termination era from 1943 to 1961 while Clinton et. al. (1998) date it from 1940 to 1962.

⁴ Prior to P.L. 280, criminal jurisdiction on the affected reservations was shared by tribes and the federal government and civil jurisdiction was held by tribes.

specifically exempted some reservations in Minnesota, Oregon, and Wisconsin (see Table 1) on the grounds that they had satisfactory law and order and well-functioning tribal criminal courts.

The Senate Report gives only a terse reference to civil jurisdiction, which was also extended to the mandatory states through P.L. 280. Goldberg-Ambrose (1997, p. 50) argues that the extension of civil jurisdiction was an “afterthought in a measure aimed primarily at bringing law and order to the reservations, added because it comported with the pro-assimilationist drift of federal policy and because it was convenient and cheap” (Goldberg-Ambrose 1997, p. 50).

Given the pro-assimilation drift of federal policy during the 1950s, it is surprising that more reservations were not placed under P.L. 280. One reason there were not more was that many state constitutions had disclaimers of jurisdiction over Indian Country. The states that had constitutional disclaimers when P.L. 280 was passed were Arizona, Idaho, Montana, New Mexico, North Dakota, Oklahoma, South Dakota, Utah, Washington, and Wyoming. Congressional debates indicate that congressional delegations from some of these states were interested in obtaining this jurisdiction but were advised that their disclaimers would preclude them from legally doing so. Thus it appears that jurisdictional disclaimers put in place in the nineteenth and early twentieth centuries explain why some states were not selected for mandatory P.L. 280 jurisdiction.⁵

All states were eventually given the option to assume P.L. 280 jurisdiction through state legislative action and some exercised this option (see Table 1). Among the non-disclaimer states, Florida and Iowa assumed the full amount of jurisdiction available under P.L. 280. Despite legal uncertainties, some of the disclaimer states also assumed jurisdiction without amending their

⁵ The federal government required new states to include disclaimer clauses as prerequisites to gaining statehood after a 1881 Supreme Court ruling held that states could adjudicate crimes committed on reservations by non-Indians against non-Indians (Wilkins 2002). The forced disclaimers were meant to ensure federal jurisdiction over such crimes.

constitutions and without gaining tribal consent. Washington is the most notable. Other disclaimer states, such as Nevada, North Dakota, and Utah attempted to obtain jurisdiction over reservations through the consent of tribes, but with the exception of some small reservations in Nevada, no tribes consented.⁶

Although P.L. 280 was initially passed in 1953, it was not until 1971 that the last optional state took action, and it took a series of court rulings starting in 1959 and running well into the 1970s to clarify the implications for civil jurisdiction on reservations (see appendix). In summary, these court rulings clarified two effects of P.L. 280 on jurisdiction over civil disputes. First, P.L. 280 gives non-Indian plaintiffs the right to file suits over contract disputes with Indian defendants in state courts, cases otherwise under the exclusive jurisdiction of tribal courts. Second, tribes governed by P.L. 280 are apparently better able to waive sovereign immunity in business dealings, thus enabling parties contracting with such tribes to sue tribal business entities in the state court.⁷

Credible Commitments through State Jurisdiction

Sovereign powers for governments are a two-edged sword, creating what Haddock (1994) calls “the sovereign’s paradox” (though a more appropriate term would be sovereign’s dilemma). On one side of the sword, sovereign powers give government the power to tax, to set the rules under which economic decisions are made, and to enforce those rules. These powers

⁶ Because the initial version of P.L. 280 made no provision for states to return criminal jurisdiction to the federal government or civil jurisdiction to the tribes, Congress amended the legislation in 1968 to allow states to return all or part of the jurisdiction assumed under P.L. 280. However, the tribes themselves had no mechanism for securing retrocession if the state was unwilling, and tribes could not veto state-initiated retrocession (see Goldberg-Ambrose 1997). Since 1968, retrocession has affected criminal jurisdiction over some reservations, but retrocession of civil jurisdiction has been rare (see Table 1).

⁷ Although P.L. 280 gives litigants access to state courts in private civil disputes, courts have also ruled that it does not extend regulatory authority over reservations to states (see Ambrose-Goldberg 1997).

enable the sovereign to produce public goods and provide third-party contract enforcement, both of which can increase economic productivity. On the other side of the sword, the same power can be used to restrict competition and to redistribute rents. Hence the dilemma for political agents is whether to use sovereign powers to produce public goods and increase productivity or to use them to encourage rent seeking with its concomitant expenditure of effort to acquire or defend rents.

One of the more egregious examples of a tribal government succumbing to the abuse of its sovereign power to redistribute rents is found in *Merrion v. Jicarilla Apache Tribe* (455 U.S. 130 [1982]). In this case, the tribe contracted with Phillips Petroleum to search for oil and natural gas on the reservation. The company agreed to pay a fixed sum to the tribe for the exclusive 10-year exploration right and to pay a royalty for oil and gas produced. Subsequently, the tribe exercised its sovereign power by imposing a severance tax on Phillips' oil and gas production. Not surprisingly, Phillips and other companies with immobile investments in exploration and development capital sued claiming that the tribe was changing the contract through taxing powers. Eventually the case went to the U.S. Supreme Court where the tribe's taxing power was upheld as essential for financing tribal government. No attention was paid to the potential impact on future gains from trade for the tribe with outside parties (see Haddock 1994).

Tribal judiciaries can also discourage gains by selectively enforcing contracts between non-Indians and Indians. The 1971 case of *Kennerly v. District Court of Montana* (400 U.S. 423 [1971]) exemplifies this problem as it relates to credit on reservations. Therein, the Montana Supreme Court ruled that the courts of Montana could not intervene to enforce payment of a debt owed by a Blackfeet tribal member to a non-Indian store owner on the reservation. The doctrine applied in *Kennerly* followed precedent from earlier decisions regarding tribal sovereignty

arguing that, absent governing acts of Congress (e.g., P.L. 280), states cannot infringe on the right of tribes and their members to make and adjudicate their own laws. Reflecting on this precedent in the related case of *Security State Bank v. Pierre* (162 Mont. 298 [1973]), Montana Supreme Court Justice John C. Harrison observed: “A result of the *Kennerly* decision was to dry up credit sources throughout the state to responsible Indian citizens”⁸

Perceptions of the abuse of sovereign power also stem from tribal court proceedings over tort cases pitting Indians against non-Indians. The 1996 case of *Redwolf v. Burlington Northern Railroad* (Crow Court of Appeals No. 97-010 [1996]) heard by the Crow tribal court is an oft-cited example. In that case, Burlington Northern was held liable for the deaths of three Indian women who were killed when their car was hit by a train on tracks that crossed through the Crow Reservation in Montana. According to a detailed account of the events transpiring from the time of the accident through the trial, the court deliberations involved a “series of procedural hurdles and almost comic mishaps” (Barker 1997, p. 53). There were difficulties in finding jurors who did not have hostile feelings towards the railroad, and evidence that the deceased were intoxicated was deemed irrelevant. The jury, comprised entirely of tribal members, awarded damages of \$250 million to the plaintiffs’ five heirs despite the plaintiffs’ attorneys request for a \$25 to \$50 million settlement.

Stable and unbiased contract enforcement could make commerce on reservations more attractive to outsiders, but this does not mean that tribal governments will voluntarily refrain from sovereign opportunism. There are two reasons for this. First, such refrain is a public good with benefits accruing to the many who gain from increased economic activity and the costs falling on the few who gain from the exercise of opportunistic behavior. Although the exercise of sovereign opportunism could immediately benefit all tribal members at the expense of outsiders

⁸ Trosper (1978) and others have raised the possibility that tribal judicial sovereignty deters lending on reservations.

(as with *Merrion*), future gains from trade with outsiders will be negatively affected. Second, to the extent that opportunism by one tribe is perceived by outsiders to imply that opportunism will be exercised by other tribes, investment in restraint to create reputation capital will pay low returns (see Haddock and Miller 2006). Under these conditions, the public choice literature suggests that voluntary refrain from opportunistic behavior is unlikely.

Tribes may attempt to create credibility by waiving sovereign immunity and allowing disputes to be adjudicated by an outside court, but this option is limited and fraught with legal uncertainties. First, waivers of sovereignty must be explicit, as courts have held that commercial activities of tribes do not in themselves constitute implied waivers (McLish 1988). Second, as McLish (p. 179) also notes, there is “debate as to whether tribes can expressly waive their own immunity without congressional authorization.” This means that federal courts might rule that a tribe had no authority to waive its immunity in a contract and thus disallow suits against the tribe for breach of contract in an outside court. More generally, federal courts have a record of ruling that tribal immunity from suit is always retained except when the tribe’s ability to waive immunity is patently apparent (see Haddock and Miller 2006). According to both McLish (1988) and Haddock and Miller (2006), less stringent waiver requirements would help tribal businesses compete more effectively in the non-Indian business world.

Individual tribal members also have trouble making credible commitments in light of cases such as *Kennerly*. Tribal courts are not known for impartiality, and, as Getches, Wilkinson, and Williams (1998, p. 528) note “there is a widespread feeling held by many non-Indians that tribal judges are biased against them. There are also complaints of incompetence, and even corruption in some tribal courts.” Even if a tribal member is aware of this problem, U.S. courts

have ruled that he or she cannot individually choose an alternative jurisdiction.⁹ Moreover, even if individual tribal members could credibly contract-out adjudication on a case-by-case basis, it would be costly for each member to go through this process prior to engaging in each contract. And this approach would fail to provide security over implicit contracts (such as torts).

A way out of the credible commitment problem for both tribal governments and for tribal members is for the tribe to categorically cede its sovereign judicial authority to a sovereign power with reputation capital (Haddock 1994). As discussed above, this was done without tribal consent when Congress passed P.L. 280. Assuming that the state courts have a reputation for impartiality or at least stability, this avenue increases the willingness of outsiders to contract with reservation Indians.¹⁰ That is, P.L. 280 is a credible commitment mechanism of the type described by Kydland and Prescott (1977) and North and Weingast (1989). Evidence that state judicial jurisdiction provides a more credible commitment to contracts is found a report published by Fitch Ratings in 2004 prepared for investors wanting to evaluate the security of contracting on American Indian reservations. The report notes that investors should take “added comfort by those tribes that submit to state jurisdiction.”

The hypothesis that follows from this reasoning is that 1) state judicial jurisdiction provides tribes and tribal members with a way of making credible commitment in contracting with non-tribal entities, and 2) American Indians under P.L. 280 jurisdiction experience greater economic prosperity because of this commitment. We expect this greater prosperity to result from investors being willing to invest more in physical capital on the reservation, to provide

9 In *Nelson v. Dubois* (232 N.W.2d 54 N.D. [1975]), individual acceptance of state jurisdiction was held to be invalid under the supremacy clause of the U.S. constitution.

10 To be sure, P.L. 280 may make Indians more uneasy about doing business with non-Indians. However, Indians on reservations have fewer alternative business partners than non-Indians living outside reservations. If they refuse to contract with non-Indians for fear of impartial court judgments, American Indians will forgo a greater number of potentially beneficial transactions (see Haddock and Miller 2006).

credit to reservation Indians, and, to a lesser degree, to engage in more spot-market transactions on reservations under state jurisdiction.¹¹

Empirical Analysis

We employ several empirical procedures to test the hypothesis that state jurisdiction under P.L. 280 improves economic growth on reservations. The empirical analysis uses a subsample of the most populated reservations, defined as those with 1999 American Indian populations exceeding 1,000. As Table 2 shows, this limits our analysis to 81 of the 327 Indian reservations in the United States. These 81 reservations are home to over 90 percent of the 512,431 Indians living on reservations.¹²

The primary dependent variable in our analysis is the 1969 to 1999 per-capita income growth of American Indians. Even though P.L. 280 was initially passed in 1953, testing the hypothesis with income growth data beginning in 1969 is suitable for three reasons. First, many optional P.L. 280 states did not enact enabling legislation until the 1960s with the last state taking action in 1971 (see Table 1). Second, it took time for courts to sort out the full civil jurisdictional effects of P.L. 280 and to determine which states actually had jurisdiction. Court rulings beginning in 1959 and ending in the early 1970s helped to clarify these questions (see appendix). Third, P.L. 280 was amended in 1968 to allow state-initiated retrocession, but tribes were given no mechanism for securing retrocession (Goldberg-Ambrose 1997). By 1968, it was clear that the jurisdictional status of P.L. 280 reservations could not be changed by tribes.

11 This hypothesis is an alternative to the writings of legal scholars and sociologists who argue that the transfer of jurisdiction through P.L. 280 has had deleterious effects on reservation Indians and economies (see e.g., Goldberg-Ambrose 1997; Tweeton 2000; Goldberg and Champagne 2005).

12. Anderson and Lueck (1992) and Cornell and Kalt (2000) also use only reservations with populations larger than 1,000. This approach has the advantage of preventing results from being strongly influenced by the incomes of a small number of Indians living on small reservations.

Data and Descriptive Statistics

Table A in the appendix gives summary statistics for Indian per-capita incomes and growth for the reservations with Indian populations exceeding 1,000. Per-capita Indian incomes in 1999 range from a low of \$4,043 on the Crow Creek Reservation in South Dakota to a high of \$17,436 on the Isabella Reservation in Michigan. Across the 81 reservations, the mean per-capita income in 1999 was \$8,814. Because the 1969 census does not report incomes for 10 reservations in our sample, we can only calculate income growth between 1969 and 1999 for 71 reservations.¹³ For those 71 reservations, the Makah Reservation in Washington had the lowest real income growth at negative 7.5 percent compared to the Fond du Lac Reservation in Minnesota with a high of 207 percent. Mean per-capita income growth across the 71 reservations was 73.5 percent.

Because jurisdiction is confusing when reservations sprawl across more than one state and because it is unclear whether the state of Washington assumed the relevant civil jurisdiction over some of the reservations in the state, we have used three definitions of state jurisdiction. Definition 1 omits the Washington reservations where there is ambiguity regarding state jurisdiction and omits reservations that sprawl P.L. 280 and non-P.L. 280 states. Definition 2 omits the same Washington reservations as definition 1, but assigns state jurisdiction on the basis of whether the state having the majority of the reservation's land is a P.L. 280 state. Definition 3 uses the same rule for multi-state reservations as definition 2, but assigns jurisdiction over all Washington reservations to the state.

¹³ However, most of the 81 reservations are included in the analysis of growth rates for periods between 1979 and 1999 as described later.

Comparison of Means based on Jurisdiction

Our hypothesis is supported by the simple comparison of means in tables 3 and 4. As Table 3 indicates, the mean 1969 to 1999 per-capita income growth for Indians was higher on reservations with state jurisdiction regardless of the jurisdictional definition used. The difference in means is most pronounced under definition 1, which shows that Indian per-capita income on reservations with P.L. 280 jurisdiction grew 85.7 percent compared to 71.5 percent on reservations with tribal jurisdiction. Higher growth on P.L. 280 reservations occurred despite the fact that per-capita incomes in states having P.L. 280 jurisdiction grew more slowly from 1969 to 1999 than incomes in states lacking jurisdiction.

Table 4 compares the mean per-capita income growth of reservations based on jurisdiction within the mandatory states of Minnesota, Oregon, and Wisconsin where some reservations were exempted from P.L. 280 because they were deemed to have viable tribal court systems. In both Minnesota and Wisconsin between 1969 and 1999, mean per-capita incomes on reservations under P.L. 280 jurisdiction grew over 60 percentage points more than mean per-capita incomes on exempted reservations. In Oregon, per-capita incomes on P.L. 280 reservations grew by over 100 percentage points more. Combining all three states, Table 4 shows that mean per-capita income for the eight reservations subjected to P.L. 280 grew over 75 percentage points more than the mean for the three exempted reservations.

Regression Analysis of 1969 to 1999 Growth

Regression analysis allows us to control more precisely for a number of factors, in addition to jurisdiction, that may affect income growth on reservations. The empirical model is similar to Barro's (1997), which uses cross-sectional analysis to explain differences in economic

growth across countries. It is also similar to Cornell and Kalt's (2000), which uses a cross-section of reservations with Indian populations of 1,000 or more to estimate the impact of differences in tribal constitutions on 1989 unemployment levels and income growth from 1977 to 1989. The main difference between ours and Cornell and Kalt's is that ours focuses on external adjudication rather than internal governance, while employing similar control variables.

Our model of growth is as follows:

$$\text{Indian pci growth} = \beta_0 + \beta_1 (\text{state jurisdiction}) + \beta_2 (\text{beginning period income}) + \beta_3 (\text{resource endowments}) + \beta_4 (\text{human capital}) + \beta_5 (\text{economic conditions in surrounding counties}) + \varepsilon$$

Letting \mathbf{X} denote the vector of controls, we assume that $\text{Cov}[\mathbf{X}, \varepsilon] = 0$ and that the $\text{Cov}[\text{state jurisdiction}, \varepsilon] = 0$ meaning that our controls and court jurisdiction are exogenous to income growth. This assumption is appropriate because tribes did not choose state jurisdiction and because they were not selected on the basis of their potential for economic growth as discussed above. The model makes no assumption about the form of $\text{Var}[\varepsilon | \text{state jurisdiction}, \mathbf{X}]$. The analysis employs White's correction to compute standard errors that are robust to heteroskedasticity and reports t-statistics computed using the Hubert-White cluster method to handle the possibility that errors are spatially correlated across reservations within states.

Table 5 shows the OLS estimates for 1969 to 1999 income growth under two specifications and three definitions of state jurisdiction. Columns 1, 3, and 5 only control for 1969 Indian income. Columns 2, 4, and 6 include reservation-level controls to account for differences in natural resource endowments, levels of education on reservations, and economic

conditions in counties surrounding the reservation. The summary statistics and definitions for each control variable are provided in Table A of the appendix.

Across all specifications, the effect of state jurisdiction on income growth is positive, statistically significant, and robust to the inclusion of control variables and to different definitions of state jurisdiction. The regression coefficients across the columns imply that state jurisdiction increased Indian per-capita incomes by at least 30 percent between 1969 and 1999.

Most control variables shown in Table 5 also perform as expected. Consistent with Barro's (1997) findings in a cross-country setting, the negative coefficients on the 1969 levels of Indian incomes imply convergence in reservation incomes. The negative coefficients on the log of reservation acres and on the distance of the reservation to metropolitan areas and the positive coefficients on adjacent county population density imply that proximity to urban centers improves economic opportunities for Indians living on reservations.¹⁴ The positive coefficient on adjacent county per-capita income growth implies that reservations tend to benefit from exogenous economic trends in the region. The positive coefficients on the energy-resources dummy imply that tribes endowed with significant fossil fuel and mineral resources grew faster than other tribes. The positive coefficients on the natural amenity variables suggest that increases in a reservation's endowment of water resources, pleasant climate, and scenic amenities increase growth.

Two control variables have weaker effects on Indian income growth than one might anticipate. First, the percentage of the adult Indian population with high school degrees in 1969 does not have a statistically significant positive coefficient in any specification.¹⁵ Second, the

14 These three variables are relatively highly correlated with each other, and this probably explains why some of the individual coefficients are not statistically significant in the regressions.

15 As shown in Table 7, however, education levels are positively and significantly correlated with income growth

percent of fee-simple land on a reservation does not have a positive, statistically significant effect on income growth. Though this appears to contradict Anderson and Lueck's (1992) finding that fee-simple land is more productive than trust land, the result here is likely due to the fact that most land held in fee-simple is owned by non-Indians and therefore productivity gains due to fee-simple ownership mostly benefit non-Indians.

Several additional empirical tests can be used to determine whether the results are driven by outliers in the sample or biased by omitted and non-observable variables. In all cases we find the positive effect of P.L. 280 on economic growth to be remarkably robust.

Table 6 provides evidence that the better performance of reservations with state jurisdiction from 1969 to 1999 was not due to unobservable factors that might have caused higher growth prior to P.L. 280. Under the full sample, the first row of the table shows that P.L. 280 reservations did start with higher average incomes, suggesting that state jurisdiction could be biased towards reservations poised for success without P.L. 280. However, within Minnesota, Oregon, and Wisconsin, P.L. 280 reservations began poorer on average in 1969 and grew faster by a wide margin than exempted reservations. A trimmed sample using P.L. 280 and non-P.L. 280 reservations with no statistical difference in mean incomes in 1969 yields a similar result. Furthermore, the coefficient on state jurisdiction (28.25) estimated with the trimmed sample (available at <http://www.bren.ucsb.edu/people/usernew.asp?user=dparker>) is essentially the same as in earlier specifications (31.06, Table 5, column 6). The consistency of the results between the trimmed and untrimmed sample suggests that unobserved factors responsible for growth before 1969 are not biasing our estimates on growth after 1969.

Second, to control for the possibility that reservations in a particular state might have unobservable cultural, institutional, or economic characteristics that would bias the estimates, we

between 1979 and 1989 and between 1989 to 1999.

ran regressions omitting all reservations within a state, one state at a time. The resulting coefficient estimates (available at www.bren.ucsb.edu/people/usernew.asp?user=dparker) on state jurisdiction range from a low of 23.15 (omitting South Dakota) to a high of 40.43 (omitting Washington), bracketing the coefficient estimated with all reservations are included (31.06). All coefficient estimates are statistically significant at least at a 5 percent level.¹⁶

Regression Analysis by Individual Decades

Table 7 shows the effect of state jurisdiction on Indian per-capita income in separate regressions for each of the three decades in the sample, 1969-1979, 1979-1989, and 1989-1999. All specifications employ definition 3 of state jurisdiction which yielded the weakest support for our hypothesis in the previous regressions.

We estimate separate regressions for each decade for several reasons. First, this allows us to examine the effects of P.L. 280 over time. Second, it lets us use reservations in our sample for which we lack income data for 1969. Third, it allows us to control for reservation gaming in the 1989 to 1999 regressions which, by and large, did not exist before the late 1980s (see Johnson 2006). To control for the effect of gaming in the third decade, we use the number of slot machines per-capita on reservations. Fourth, greater data availability in the later decades allows us to control for other measures of reservation institutions and culture as robustness checks.

Table 7 indicates that state jurisdiction has a positive effect on economic growth in all three decades, but it is only statistically significant in the first and third. The larger and significant coefficients between 1969 and 1979 suggest that the impact of P.L. 280 was greatest

¹⁶ We have run other tests for robustness eliminating reservation economies heavily dominated by gaming and found that the effect of state jurisdiction on 1969 to 1999 growth remains positive and significant (available at www.bren.ucsb.edu/people/usernew.asp?user=dparker).

when the law was first being implemented. The smaller and insignificant coefficients on P.L. 280 jurisdiction between 1979 and 1989 suggest that the effect of the law was tapering off with time. The renewed significant effect of P.L. 280 in the 1989 to 1999 decade is probably attributable to economic shocks due to gaming. It suggests that P.L. 280 tribes were better positioned to capitalize on gaming and the attendant demand for more commerce on reservations because they could credibly commit to contracts. The positive and significant coefficient on the number of slot machines per capita in 1989 is consistent with Evans and Topoleski's (2002) findings that reservation Indians benefit economically from gaming.

Additional regressions indicate that the results shown in Table 7 are robust to the inclusion of other controls and smaller reservations (see www.bren.ucsb.edu/people/usernew.asp?user=dparker). In particular, including measures of political institutions across reservations employed by Anderson and Parker (2006) does not significantly impact the effect of state jurisdiction. Controlling for acculturation with the total population of American Indians, the percentage of non-Indians living on reservations, or the percentage of reservation residents speaking a native language also has little effect on the state jurisdiction coefficients.¹⁷ The effects of state jurisdiction are also robust to the inclusion of reservations with Indian populations between 250 and 1,000.¹⁸

In summary, regardless of which control variables or which reservations are included in the regressions, the impact of P.L. 280 on Indian per-capita incomes is consistently positive and strong. The fact that it appears stronger in the initial decade after P.L. 280 is fully implemented suggests that credible commitments are quickly integrated into the institutional environment.

¹⁷ Kuhn and Sweetman (2002) also examine the effects of acculturation on the employment and wages of Aboriginals in Canada and find evidence that greater assimilation improves economic outcomes.

¹⁸ These results are available at: www.bren.ucsb.edu/people/usernew.asp?user=dparker.

When new investment opportunities, such as those stimulated by casino gaming, appear on reservations, a stable contracting environment allows Indian populations to better capitalize on those opportunities.

Conclusion

After controlling for a myriad of other variables, per-capita income for Indians on reservations subject to P.L. 280 jurisdiction grew by 30 percentage points more than per-capita income for Indians on non-P.L. 280 reservations between 1969 and 1999. A number of factors indicate that credible commitments through state jurisdiction caused the better performance of P.L. 280 reservations. First, there is anecdotal evidence that non-Indian investors and contractors prefer the relative security of state jurisdiction. Second, there is no evidence that Congress' selection of P.L. 280 tribes was biased toward tribes that would have had faster growth in the absence of the law. Third, state jurisdiction had its largest impact on Indian incomes in the decade period most immediately following the uniform implementation of P.L. 280.

The finding that P.L. 280 reservations have experienced higher income growth is consistent with numerous cross-country empirical studies that find a positive correlation between various indices of a stable rule of law and economic growth (see Acemoglu, Johnson, and Robinson 2001; Hall and Jones 1999; Barro 1997; Keefer and Knack 1997). The problem with cross-country analysis, however, is that the rule of law is endogenous, thus forcing scholars to use instrumental variables to draw casual inference (see, e.g., Acemoglu, Johnson, and Robinson 2001; Hall and Jones 1999). This procedure has been criticized by skeptics (see Glaeser et al. 2004) who argue that favorable indices of a rule of law do not truly measure fundamental differences in governance institutions.

Glaeser et al. (2004, p. 298) suggest that “researchers would do better focusing on actual

laws . . . that could be manipulated by a policymaker to assess what works,” which is precisely what a cross-reservation approach allows. By focusing on the “actual law” that imposed state jurisdiction on reservation, the data used here have two distinct advantages over cross-country comparisons. First, reservation economies operate in the relatively more homogenous institutional setting of the United States. This takes out much of the noise affecting growth rates across countries. Second, the reservation comparison is ideal for institutional analysis because tribal institutions are, in the main, determined by the federal government rather than the tribes themselves, therefore reducing the endogeneity problem.

This study provides a template for studying how a stable rule of law affects Indian reservation economies by focusing on an aggregate measure of economic activity, namely per-capita income. More disaggregate measures of investment, such as that used by Galiani and Schargrodsky (2006) to examine the effects of clear land titles on the housing investments made by poor Argentine landholders, or measures of the impact of P.L. 280 on consumer credit could shed light on what it will take to lift reservations from poverty. P.L. 280 by itself is not a magic elixir in the growth recipe, and it may have detrimental effects on the cultural sovereignty of tribes, but the results of this study suggest that the institutional environment on Indian reservations warrants more theoretical and empirical study.

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Appendix

In the precedent setting 1959 case of *Williams v. Lee* (358 U.S. 217 [1959]), the U.S. Supreme Court affirmed that civil suits by non-Indians against Indians could not be heard in state courts absent an Act of Congress (such as P.L. 280). In that case, a non-Indian man who operated a general store on the Navajo Reservation attempted to sue a Navajo man in the Arizona Court System to collect for goods he sold on credit. The Navajo man motioned to dismiss on the grounds that the Courts of Arizona had no authority to hear the case. The Courts of Arizona denied his request, but the U.S. Supreme Court reversed, ruling that exclusive jurisdiction was held by the Navajo Courts. The ruling affirmed that when a plaintiff brings an action against an Indian and the action arises in Indian Country, state courts cannot adjudicate unless the state has P.L. 280 or similar jurisdiction.¹⁹

In the 1971 case of *Kennerly v. District Court of Montana*, the U.S. Supreme Court insisted on exacting compliance with P.L. 280 procedures for optional states to assume jurisdiction in Indian Country. In 1967, the Blackfeet Tribal Council in Montana passed a resolution stating that the “Tribal Court and the State shall have concurrent . . . jurisdiction of all suits wherein the defendant is a member of the tribe.” After a state court adjudicated a debt collection matter brought by a reservation store owner against tribal members (the details of the case are remarkably similar to those in *Williams v. Lee*), the Montana Supreme Court professed to apply the rule set forth in *Williams* and held that there was no infringement of tribal self-

19 Rulings that rejected state court claims of authority based on the *Williams v. Lee* decision include *Valdez and United States Fidelity Insurance v. Johnson* (New Mexico Supreme Court, 1961), *Sigana v. Bailey* (Minnesota Supreme Court, 1969), *Security State Bank v. Pierre* (Montana Supreme Court, 1973), and *Schantz v. White Lightning* (U.S. Court of Appeals 8th Circuit, 1974). In addition, in the 1965 case of *Littell v. Nakai* (344 F.2d 486, 490 [9th Cir. 1965]), the U.S. Court of Appeals held that federal courts could also not adjudicate civil suits held by non-Indians against Indians. The Court of Appeals based their rationale on *Williams v. Lee*, arguing that “... federal court jurisdiction would be equally disruptive of the policy [laid out in *Williams v. Lee*] as would state court jurisdiction.”

governance because of the resolution. The U.S. Supreme Court reversed, saying the infringement test set forth in *Williams* applied only “absent governing Acts of Congress.” In *Montana*, P. L. 280 could be a “governing act,” but the required assumption of state jurisdiction needed to be based on affirmative state legislation, which was lacking.²⁰

Indian law is more nuanced in tort cases between non-Indians and Indians, but here too P.L. 280 has had an important effect. In *Schantz v. White Lightning* (368 F. Supp. 1070 [D.N.D. 1973]), the U.S. Court of Appeals entertained whether federal or state courts had any jurisdiction over a tort case involving a motor vehicle collision on the Standing Rock Indian Reservation in North Dakota. The defendants were enrolled members of the Standing Rock Sioux Indian Tribe, and the plaintiffs were residents of North Dakota, residing outside the reservation boundaries. When the state of North Dakota refused to hear the case for lack of P.L. 280 jurisdiction, the plaintiffs filed in federal court. The U.S. Court of Appeals ruled that the issues do not present a federal question and therefore could not be adjudicated in federal courts. Thus Standing Rock Sioux Indian Tribe was left with full jurisdiction absent enactment of P.L. 280 legislation by North Dakota.²¹

Another important class of cases involves those between tribal governments and non-Indian firms. The U.S. Supreme Court has ruled in a number of instances that tribal governments enjoy sovereign immunity from suit.²² For example, the court ruled in *Kiowa Tribe v.*

20 Further, the Supreme Court’s majority opinion noted that the tribal consent requirements required under the act as amended would not be satisfied if the Montana legislature now passed affirmative legislation because the amendments say that consent must be manifested in a majority vote of tribal members, not simply a resolution of the tribal council.

21. This is one of many examples of tort cases in non-P.L. 280 jurisdictions in which the general ruling was that an Indian defendant cannot be sued in a state court for a cause of action arising on the reservation even if there is no tribal forum available.

22. For other rulings upholding tribal sovereign immunity, see, for example, *Santa Clara Pueblo v. Martinez* (436 U.S. 49 [1978]) and *Oklahoma Tax Commission v. Citizen Band of Potawatomi Indian Tribe* (498 U.S. 505 [1991]).

Manufacturing Techs (523 U.S. 751 [1998]) that “as a matter of federal law, a tribe is subject to suit only where Congress has authorized the suit or the tribe has waived its immunity.”

Although P.L. 280 did not explicitly attenuate the sovereign immunity of a tribe, it did provide a legislative backdrop under which litigants wanting to sue tribal enterprises might obtain access to state courts. This point is made clear by contrasting a court ruling in Minnesota (a P.L. 280 state) with a similar case heard in Idaho (a non-P.L. 280 state). In *Duluth Lumber and Plywood Co. v. Delta Development, Inc.* (281 N.W. 2d 377 [Minn. 1979]), the courts of Minnesota ruled that the state had jurisdiction over a suit filed by Duluth Lumber against the Indian Housing Authority of the Fond du Lac Indian Reservation. The Minnesota courts argued that the Housing Authority did not have sovereign immunity from suit in a non-Indian court and that P.L. 280 authorized state courts to hear the case. Kane (2005, 12) describes a case very similar in facts, but in Idaho where a non-Indian owned construction company sued the tribally owned Duck Valley Housing Authority. In that case, contractual waivers of tribal immunity were struck down by the Idaho Supreme Court, which held that “a contractual clause waiving sovereign immunity did not rise to the level of a resolution accepting state jurisdiction of a contract dispute arising in Indian Country.” In other words, the Idaho court held that P.L. 280 jurisdiction was a necessary condition for the state to take jurisdiction. Rulings such as these explain why P.L. 280 has “significantly diminished tribal immunity” (Woodrow 1998).

Finally, it should be noted that P.L. 280 has not been construed by courts to extend regulatory and taxation powers over reservations. In the 1976 case of *Bryan v. Itasca* (426 U.S. 373 [1976]), the U.S. Supreme Court interpreted P.L. 280 as affecting civil jurisdiction “only as it may be relevant to private civil litigation in state court.” That is, P.L. 280 gives private litigants access to state courts in disputes arising on reservations, but it does not extend

regulatory authority over reservations to states.