Lessons in Fiscal Federalism from Indian Country

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Fiscal federalism focuses on the tradeoffs inherent in comparing which governmental functions "are best centralized and which are best placed in the sphere of decentralized levels of government" (Oates 1999, 1120).[3] On the side of decentralization are agency costs between citizens (principals) and public officials (agents) which can be reduced by local norms which constrain agents and transmit information. Indeed, the advantage of local information is one of the classic arguments in favor of decentralization, dating back at least to Hayek (1945). As North (1981) and Alesina and Spolare (2003) point out, local control allows rules, laws, and property rights befitting local culture to evolve without interference from outsiders.

On the side of centralization are scale economies in the provision of "market-supporting public goods" (Besley and Ghatak 2006, 286). One of the market-supporting public goods of interest here is the provision of a law and order system that makes it "feasible for the poor to participate in markets and hence benefit from gains from trade" (Besley and Ghatak 2006, 286).

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[3] What is "best" for tribes is, of course, difficult to define and measure just as it is difficult to define and measure what is "best" for populations within municipalities, counties, or states. In the public finance literature the typical approach has been to study the optimal division of responsibilities in a federal system assuming the goal is to maximize the public's welfare within a particular jurisdiction (see McKinnon and Nechbya 1997). Applying this reasoning to reservations, we can imagine a division of responsibilities that maximizes the welfare of a representative tribal resident.

Scale economies exist in its provision because of the large fixed costs associated with organizing police forces, operating courts, writing legal codes, and compiling legal precedent.

Fiscal federalism provides an excellent lens through which to view the rule of law on American Indian reservations. The centralized sphere is the U.S. federal government and, in some cases, the law enforcement system of states surrounding reservations. Relative to tribal governments, the centralized spheres can better exploit scale economies in the provision of police, courts, and laws because federal and state populations are large but populations on Indian reservations are sparse.[4] The decentralized spheres of governments wielding authority on reservations are tribal councils and tribal courts. Cornell and Kalt (2000) argue that local sovereignty for Indian nations is an asset on reservations because it lets tribes make collective decisions in ways that match indigenous norms of legitimacy. The benefits of local control are potentially greater when indigenous norms differ among Indian nations and when they differ substantively from those of non-Indian cultures.

Fiscal federalism also provides a lens through which to view reservation property rights to land and natural resources. Individual tribes have time and place specific knowledge of local resource values and an incentive to capture those values. On the other hand, larger spheres of government are perhaps better equipped to protect against the alienation of property rights in a way that helps to preserve customs and culture.

In other settings the tensions between local and central control are presumably resolved through the endogenous process of letting an efficient division of governmental responsibilities emerge; but on Indian reservations, responsibilities have often been exogenously determined by U.S. governmental policy. For example, tribal jurisdiction over contracts and crimes was stripped

[4] According to the 2000 U.S. Census, only four reservations had American Indian populations exceeding 10,000 and approximately 75 percent of 327 reservations had Native populations smaller than 1,000.

from some tribes during the 1950s and 1960s and given to the states surrounding reservations without tribal consent. Federal policy has since then made it difficult for tribes to get their jurisdiction back. There are also barriers to tribes wanting to waive their local jurisdiction over certain subject matter to larger spheres of government or on a case-by-case basis. The federal government has throughout history also exerted control over property rights to reservation land and natural resources against the wishes of tribes. Here, too, it has been difficult for tribes to reassert local control.

The exogenous changes in tribal, state, and federal control on reservations have created experiments from which social scientists can learn about fiscal federalism, but the experiments have often brought detrimental consequences for American Indians. In what follows, we will examine the distribution of centralized and decentralized control and argue that the muddy division of federal, state, and tribal control that exists on today's reservations is far from optimal for American Indians and reservation economies. Single tribal units are typically responsible for their legal infrastructure, and this local jurisdiction over contracts has not promoted economic development. The problem is that tribal legal systems have not encouraged trade with outsiders. The mis-match runs in the other direction with respect to federal control over land and natural resources. Here the available evidence implies that centralized control has stunted reservation development. We conclude by arguing that tribes should be free to choose a different system of federalism than they are currently under and by suggesting how barriers to a freer choice might be removed. Many of the barriers are legal and political, but we emphasize tribal distrust of state and federal governments is also a major barrier for getting from here to there.

Crime and Contracts

The main doctrine governing tribal sovereignty comes from *Cherokee Nation v. Georgia* (30 U.S. 1 [1831]). In that case, the U.S. Supreme Court ruled that a tribe is "a distinct political society separated from others, capable of managing its own affairs and governing itself," but also that reservations are "domestic dependent nations," making the relationship between tribes and the federal government like that of "a ward to his guardian." Under this doctrine, tribal authority to create and enforce laws governing reservations is exclusive unless the federal government exercises its "guardian" power by extending federal or state jurisdiction to reservations.

The Imposition of Federal and State Jurisdiction

Tribal sovereignty over crimes and contracts eroded with the passing of two major acts of the U.S. Congress. The first was the Indian Major Crimes Act of 1885, in response to the trial of a Lakota Indian who killed another Lakota man on a reservation in South Dakota. In that case, the Lakota tribal court, using traditional methods of dispute resolution, required the perpetrator to compensate the family of the victim with goods and property but allowed him to go free. Non-Indian observers, arguing that tribal decisions such as this encouraged lawlessness on reservations, successfully lobbied Congress to pass the Indian Major Crimes Act. The act gave 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 (Harring 1994).

The other major act was Public Law 280, passed in 1953 during the termination era. Between 1945 and 1961 the federal government's explicit goal was to place reservation Indians under the same laws as other U.S. citizens as rapidly as possible (Getches et. al. 1998). P.L. 280 can be viewed as a first step towards achieving this goal.

It required that jurisdiction over all criminal offenses (major and minor) and over civil disputes on some reservations be turned over to the state surrounding those reservations. P.L. 280 initially mandated that the transfer apply to most reservations located in Alaska, California, Minnesota, Nebraska, Oregon, and Wisconsin.[5] These states are known as the "mandatory" P.L. 280 states because Congress, not the state legislatures, initiated and required the transfer. All states were eventually given the option to assume P.L. 280 jurisdiction through legislative action, and some exercised the option. Table 1 lists the states that ultimately assumed jurisdiction. Today, more than half of the 327 federally recognized reservations are in states that assumed most or all of the jurisdiction available under P.L. 280. P.L. 280 added a layer of complexity to reservation jurisdictional authority which is summarized in Table 2.[6]

[Table 1 here]

[Table 2 here]

Congressional records indicate that P.L. 280 was advanced as an opportunity to improve criminal law enforcement on reservations. The 1953 Senate report on the law stated:

[5] Some reservations within Minnesota, Oregon, and Wisconsin were excluded from P.L. 280 and therefore retained tribal jurisdiction.

[6] With respect to the assumption of civil jurisdiction, it is important to note that P.L. 280 did not give states authority to impose taxes on reservations nor did it give states the authority to regulate reservation land use (Goldberg-Ambrose 1997). Regardless of whether or not a reservation is subject to P.L. 280 legislation, tribes retained their authority to impose taxes on tribal members, and to regulate land use within reservations. A tribe's flexibility to regulate land use, however, may be restricted by U.S. federal trust constraints on land as described in the following section.

> As a practical matter, the enforcement of law and order among the Indians in 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 the States indicating a willingness to accept such responsibility. (U.S. Senate 1953, 5)

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, 50) argues that the extension of civil jurisdiction was "an afterthought in a measure aimed primarily at bringing law and order to reservations, added because it comported with the pro-assimilationist drift of federal policy and because it was convenient and cheap." More generally, Goldberg-Ambrose (1997) argues that the paramount legislative purposes of P.L. 280 were to bring law and order to reservations and to save the federal government money (by unloading the jurisdictional obligations of major crimes onto states). If Goldberg-Ambrose's assertion is correct, we might expect the pro-assimilation drift of federal policy during the 1950s to have placed more reservations under P.L. 280.

One reason more reservation were not placed under P.L. 280 is that they were in states with constitutions that had disclaimers of jurisdiction over Indian Country. These states were Arizona, Idaho, Montana, Nevada, New Mexico, North Dakota, Oklahoma, South Dakota, Utah, Washington, and Wyoming.[7] Given the option of assuming P.L. 280 jurisdiction, many states

[7] These disclaimers were required by the federal government as prerequisites to gaining statehood for any state not part of the Union as of 1881 (Wilkins 2002). The disclaimers were apparently in response to a U.S. Supreme Court ruling that states could adjudicate crimes committed on reservations by non-Indians against non-Indians. The forced disclaimers were meant to ensure federal jurisdiction over such crimes (Wilkins 2002).

declined, apparently because it would have been costly to amend their constitutions. As shown in table 1, the only disclaimer state that acquired major P.L. 280 jurisdiction was Washington. It did so without amending its constitution making the legal validity of its assumption uncertain.

For the purposes of this paper, we view P.L. 280 as an experiment in fiscal federalism. Importantly, tribes did not self-select state jurisdiction thus reducing the likelihood that the jurisdiction was imposed on those reservations best positioned to benefit. Although Congress did not roll dice to determine P.L. 280 status, the selection of tribes allowed to retain their jurisdiction was largely determined by U.S. history and geography rather than by the relative economic conditions of reservations. Although there are clear differences in P.L. 280 and non-P.L. 280 states and the reservations therein, the selection criteria did not target reservations that were already economically advantaged or disadvantaged based on per capita incomes. As table 3 shows, there is no statistically significant difference between the mean per-capita incomes of P.L. 280 and non-P.L 280 reservations prior to the passage of the law.

[Table 3 here]

The Costs of State Jurisdiction

The passage of P.L. 280 was controversial, and much of the legal and sociology literature argues that the loss of sovereignty disadvantaged tribes. Goldberg-Ambrose (1997, ix-x), for example, refers to the federal legislation as a "calamitous event" and argues that tribes put under state jurisdiction had to "struggle even harder to sustain their governing structures, economies, and cultures." One of the major objections was that P.L. 280 was imposed upon Indian tribes without their consent in direct violation of the doctrine of tribal sovereignty. The other criticism

of the law is that states are not well suited to handle criminal incidents involving Indians given that tribal norms differ significantly as to what constitutes a crime.[8]

Although state jurisdiction binds tribes to a larger and more extensive system of law and order, it does so at the cost of assigning rules and compliance procedures that are unlikely to match tribal cultures. According to Goldberg-Ambrose (1997), Indian elders, in particular, have expressed concerns of not being able to cope with the different language and culture of state courts. Indians have also expressed concerns about facing racial discrimination in state criminal courts and being subject to culturally insensitive law enforcement systems.

Goldberg, et al. (2007) interviewed 350 reservation residents, law enforcement officials, and criminal justice personnel from a non-random sample of 17 "confidential reservation sites – 12 subject to state/county jurisdiction under Public Law 280, four operating under the more typical federal/tribal criminal jurisdiction regime, and one, a 'straddler' with some territory in a state covered by Public Law 280 and the remainder in a different state" (vi). They concluded that "reservation residents in Public Law 280 jurisdictions typically rate the availability and quality of law enforcement and criminal justice lower than reservation residents in non-Public Law 280 jurisdictions" (vi). In addition, some tribal members reported a reluctance to report crimes to non-tribal police because of fear, distrust, and disagreement with rules and values of non-reservation police and courts.

Their finding is an indication of the importance of local benefits of tribal control with respect to policing and criminal law enforcement. Benefits arise because indigenous norms and preferences differ substantially from those of non-Indian criminal law methods, which is one of our key arguments for local control in a federalist system.

[8] This helps explain why there is some controversy and objections to state jurisdiction over contracts and commercial activity, which also may lie outside tribal norms.

The Benefits of State Jurisdiction

The benefits from state jurisdiction emanate from having a legal system that binds tribes to a larger and more extensive system of contract enforcement, described by Besley and Ghatak (2006, xx) as a key "market-supporting public good." They argue that a well functioning legal system makes it feasible for the poor to participate in markets and hence benefit from gains from trade. External jurisdiction helps domestic governments credibly commit to a stable rule of law, and this type of credible commitment has helped former British colonies achieve faster economic growth (see Voight et al. 2007).

The gains from a stable legal system are also important for impoverished Indian reservations where tribal legal systems are much less complete, more difficult to access, and less constrained by judicial precedent (Cooter and Fikentscher 2008, Haddock and Miller 2006).[9] This creates an uncertain contracting environment, particularly for non-Indians attempting to do business on reservations. Moreover, the small number of cases on reservations makes it difficult to build a foundation of precedent.

Using cross-sectional growth regressions, our earlier research (2008) provides a measure of the benefits of a stable contracting environment by comparing per capita income growth from 1969 to 1999 for Native Americans on reservations under state versus tribal jurisdiction. Our analysis focused on the 71 reservations for which American Indian populations exceeded 1,000 in 1999. Using a bare-bones regression model that only includes 1969 per capita income as a control, we showed that growth was 35 percentage points higher on the 22 reservations under

[9] Cooter and Fikentscher note that written commercial laws are absent on some reservations and legal codes are often not available in public places when they exist. Where there is precedent, "tribal judges seldom document their decisions in writings that outsiders can access" (p. 31). Similarly, Haddock and Miller (2006, 211) note that "vastly fewer cases have been litigated under tribal law" giving investors less precedent to rely upon, and "tribal precedents often have been poorly recorded, making the relatively sparse body of tribal precedent difficult for investors to discover."

state jurisdiction. Controlling for land tenure, resource endowments, human capital, and economic conditions in surrounding counties, growth was still 31 percentage points higher under state jurisdiction. We also found higher rates of income growth on reservations under state jurisdiction which were not explained by differences in the amount of casino gaming and in acculturation.[10]

To assess the extent to which the relationship between state jurisdiction and growth is robust to pre-existing economic conditions, we have assembled a longer panel data set on reservation per capita incomes spanning 1915 to 1999. The 1915 and 1938 data come from reports of the Bureau of Indian Affairs, the 1938 data from the U.S. National Archives and the 1915 data are available online. The 1969, 1979, 1989, and 1999 data come from decadal U.S. Census reports and were employed in our earlier study. The 1915-1999 income panel, the longest studied in the Native American development literature, spans a longer time period than most cross-country studies of institutions and growth.

Table 4 compares the mean per capita incomes for reservations put under state jurisdiction for the years in which we have data. The left-hand side of the table makes the comparison for the 54 for reservations for which data are available for each of the six time periods. The right-hand side of the table makes the comparison for the larger set of reservations for which data are available for at least five of the six time periods. For both samples, there was no statistical difference in the mean incomes prior to P.L. 280, in 1915 and 1938. In fact, the mean for the P.L. 280 reservations is actually smaller in 1938, the closest year to 1953 for which we have comprehensive data. By 1969, after P.L. 280 had been implemented, there were large, statistically significant differences in mean incomes that remained for every decade thereafter.

[10] We measured acculturation by the percentage of reservation populations that were non-Indian and by the percentage of reservation residents speaking a native language.

Something clearly happened between 1938 and 1969 that improved relative incomes on P.L. 280 reservations; the most likely cause is the law itself.

[Table 4 here]

We use the panel regression models, given by equations (1) and (2), to measure the impacts of state jurisdiction on per capita incomes.

$$(1) \qquad y_{it} = \alpha + \delta y_{it-1} + \beta(st.jurisdiction)_{it} + \delta(slots.percap) + \eta_t + \lambda_i + \varepsilon_{it}$$

$$(2) \qquad y_{it} = \alpha + \delta y_{it-1} + \beta(st.jurisdiction)_{it} + \delta(slots.percap) + \eta_t + \lambda_i + \phi_i Time + \varepsilon_{it}$$

Here y = per capita income (or the natural log of per capita income), i=reservation and t=time period. Each model controls for time shocks affecting all reservations (η_t), and allows each reservation to have its own income intercept (λ_i). Model (2) controls for reservation-specific linear trends ($\phi_i Time$), while model (1) does not. Each model also controls for the number of slot machines on reservation casinos divided by the American Indian population, as we did in our previous study (Anderson and Parker 2008). It is equal to zero prior to 1999 because the reservations in this sample did not have casinos until after 1989. We put the slot machine variable on the right-hand side because casino presence and size, although positively correlated

with P.L. 280 status, is probably not caused by P.L. 280.[11] In any case, the coefficient estimates on state jurisdiction (see table 4) are not very sensitive to the inclusion or exclusion of the casino variable.

Table 4 presents the panel regression results. Columns 1 – 4 employ the smaller sample of 324 observations, and columns 5-8 employ the larger sample of 444 observations. All standard errors are clustered at the reservation level to allow for unobserved correlation in the estimated errors of each reservation over time. The coefficients on state jurisdiction are statistically significant by conventional standards in five of eight specifications, and the t-ratio is never less than 1.42 (column 6). In general, allowing for reservation-specific time trends increases the size of the state jurisdiction coefficients but reduces the precision of the estimates.

In columns 1 and 5 the coefficients on state jurisdiction imply that it is associated with an increase of $1,431 and $1,579 increase in per capita incomes, in 2012 dollars. Using the natural log of per capita income provides a better picture of the magnitude of the effect of state jurisdiction. The average effects of state jurisdiction are calculated by $e^{\beta} - 1$. In column 8, for example, the $\beta = 0.281$ point estimate implies a 32.4 percent increase in per capita income under state jurisdiction. These panel regression results, which control for incomes prior to P.L. 280, reinforce the evidence in Anderson and Parker (2008) that state jurisdiction has led to faster growth.

[Table 4 here]

[11] Using the same measure of casino activity, Cookson (2010) finds a strong and robust correlation between P.L. 280 status and casino presence and size. It is unlikely that P.L. 280 directly caused more casino activity, however, because P.L. 280 did not give states jurisdiction over contracts between casino investors and tribes.

Parker's (2012) study of credit markets under state and tribal jurisdiction identifies a plausible channel from state jurisdiction to faster growth. Using Bureau of Indian Affairs annual credit report data from the 1950s and 1960s, Parker finds evidence that P.L. 280 caused a sharp increase in per capita credit shortly after P.L. 280 was implemented. Using modern Home Mortgage Disclosure Act data, he finds evidence that state jurisdiction increases the probability that a lender will accept a Native American's home loan application by more than 50 percent.

The focus on credit as a causal channel is appropriate for two reasons. First, P.L. 280 clearly gives states jurisdiction over individual debt contracts so this is a type of contract where the impacts of state jurisdiction should be most direct. Second, there are claims that more affordable credit would promote development on Indian reservations. For example, credit reports published by the Bureau of Indian Affairs (BIA) up to the 1970s consistently argue that "Indian economic development is stymied for lack of adequate financing" (BIA 1965, 2). More recent Native American lending studies claim that "Indian Country is capable of much higher growth" if more affordable credit were available (NACTA 2001, 6). The same publications usually list tribal sovereignty among the obstacles to greater financing, as it is easy to find claims such as: "Lending institutions are reluctant to make loans to Indian operators because foreclosure procedures may lie with tribal jurisdictions" (BIA 1987).

The Choice of Jurisdictional Scale

P.L. 280 could have given tribes a way to accrue the benefits of state jurisdiction without incurring the costs had it allowed tribes to choose state jurisdiction over only certain legal disputes, such as enforcement over debt contracts with non-Indians. But, as noted above, tribes in the mandatory P.L. 280 states were subjected to blanket state jurisdiction over crimes and civil

disputes without their consent. Some optional P.L. 280 states did assume partial jurisdiction over certain subject matter but until the 1968 amendments to P.L. 280, these assumptions of jurisdiction did not require tribal consent.

The 1968 amendments of P.L. 280 gave tribes more choices, but fell short of giving tribes the authority to pick and choose the types of disputes over which states would have jurisdiction. The amendments required any state that had not yet assumed jurisdiction to first acquire tribal consent, which seems a marked improvement of the legislation for tribes. In practice, many of these states did not want to assume the burden of reservation jurisdiction or only offered to do so if tribes accepted blanket state jurisdiction over crimes and civil offenses. Since 1968 no tribe has consented to P.L. 280 jurisdiction.

The 1968 amendments also set up a process whereby a state (but not a tribe), could initiate the return or retrocession of state jurisdiction that was assumed prior to 1968. Had the tribes been given authority to initiate full or partial retrocession, their decisions to keep or dispose of state jurisdiction would provide valuable information about the relative costs and benefits of tribal control on different reservations. As it stands, we can only observe that a small number of tribes have undergone the process of retrocession, primarily over criminal jurisdiction.[12] According five case studies of retrocession provided by Goldberg et al. (2007, 439), the retrocessions seem to have been motivated by one of two factors; tribal dissatisfaction with state and county law enforcement, or a tribe's desire to make criminal justice more consistent with their overall assertions of sovereignty.

We can only speculate about the reasons for the lack of retrocession on the more than 150 other reservations still under P.L. 280 jurisdiction. It may mean that the majority of tribes view

[12] Goldberg et al (2007, 8-11) lists 29 tribes as undergoing partial or full retrocession. Sixteen of these are sparsely populated tribes in Nevada. Of the remaining thirteen cases, nine cases were partial retrocessions.

state jurisdiction as providing net benefits; alternatively states may be unwilling to withdraw their jurisdiction over these reservations.

At the individual level, it is difficult for tribal members to credibly contract around tribal jurisdiction even if that is what is demanded by one of the parties to the contract. Courts have held individual acceptance of state jurisdiction to be invalid, and this precludes non-P.L. 280 states from adjudicating the contracts of individual American Indians or firms even if the contracting parties were to agree to have future contract disputes resolved in state courts (see Anderson and Parker 2008). And, as Ramirez (2002) notes, efforts to try to make it appear as if the transaction did not arise on the reservation (e.g., having the contracts signed off the reservation, delivering the goods in question off the reservation) "are of questionable effectiveness." Moreover, even if individual tribal members could credibly contract out adjudication on a case-by-case basis, it would clearly be costly for each member to go through the process prior to engaging in each contract. And this approach would not work for implicit contracts such as torts.

When a tribe, rather than an individual tribal member, is a party to a contract, it also faces difficulties in credibly agreeing to allow disputes to be adjudicated by an outside court. 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 (1988, 179) 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.

To summarize, a better federalist arrangement for tribes would allow them to pick and choose when to yield their jurisdiction and when to retain it. Without the freedom to choose many tribes seem to be stuck with one of two second-best institutional arrangements. The first arrangement is a strong tribal law enforcement and court system that matches tribal norms and culture, but that is a liability for American Indians wanting to do business with non-Indians. The second arrangement is a state legal system that facilitates contracting with non-Indians, but that is a worse cultural match for tribes, particularly with respect to criminal law enforcement.

Land and Natural Resources

The loss of land is one of the major themes of American Indian history, but the pattern of land ownership across Indian Nations is rarely linked to issues of fiscal federalism. To understand the link, it is useful to return to Chief Justice Marshall's *Cherokee Nation v. Georgia* opinion. Although the decision implied that tribes had retained their internal powers to govern themselves, Marshall described the relationship between tribes and the United States as "that of a ward to his guardian." Under this interpretation, the federal government monopolized treaty negotiations with tribes in order to reduce conflicts over land and forced tribes into a subservient position by declaring them "wards." It is through this guardian role that the federal government has asserted trusteeship over reservation land and resources.

Federal Trusteeship

With the passage of the Allotment Act of 1887, the U.S. federal government made its first major attempt at bureaucratic control over how reservation land would be allocated. Prior to the act, informal property rights to reservation land varied tremendously across the different reservations. There is evidence that land tenure systems that spontaneously evolved fit well with the culture of the tribe and with the geographic and resource constraints of the reservations. Carlson (1992, 73) provides a concise summary.

> Once a tribe was confined to a reservation, it needed to find a land tenure system suitable to the new environment. On the closed reservations, the system that evolved was one of use rights. Typically, the [U.S. Bureau of Indian Affairs] agent and members of a tribe recognized an individual's title to animals and, where farming was practiced, a family's claim to the land it worked. . . . What is remarkable is how similar this system of land tenure was to that which existed among agricultural tribes before being confined to reservations.

Under the Allotment Act, however, congress intervened and began to shape property rights from Washington, D.C. The act authorized the president to allot reservation land to individual Indians with the intention of granting private ownership including the right to alienate after 25 years or once the allottee was declared "competent" (the word in the act) by the secretary of the interior. For arable agricultural land the Indian head of a household was to receive 160 acres and for grazing land 320 acres. Indians would become U.S. citizens upon

receiving their allotments. In practice, Bureau of Indian Affairs agents would help Indians select their allotments and determine whether the Indian was "competent."

On reservations for which total acreage exceeded that necessary to make the allotments, excess land could be ceded to the federal government for sale with the proceeds deposited in a trust fund managed by the Department of Interior through the Bureau of Indian affairs.[13] A 1903 U.S. Supreme Court ruling, however, allowed surplus land to be opened to non-Indian settlement without tribal consent.

Through a combination of land sales once allotments owners were declared competent and title was alienable, and the declaration of surplus land, millions of reservation acres were transferred from Indians to non-Indians.[14] The Indian Reorganization Act (IRA) of 1934 halted such transfers, declaring those acres not already alienated to be held in trust by the BIA, either as individual trust land or as tribal lands. Table 5 reports that the number of reservation acres was cut from 136,394,895 in 1887 to 69,588,411 in 1934. This implies that 66,806,454 acres of surplus lands were ceded from Indian Country and sold to white settlers or retained by the federal government. Of the land that was retained within Indian reservations, another 22,277,342 acres was out of trust status by 1934, and most of these non-trust acres were owned by non-Indians in 1934.

[Table 5 here]

[13] Trust fund management was ultimately the focus of a major class action law suit, *Cobell v Salazar*, filed against the federal government. For a brief discussion see Anderson (2012).

[14] Some of the land cleared for fee simple ownership remains Indian owned, but there are no systematic sources on how much this is.

Under IRA Act of 1934, lands that had not been privatized by trust removal were locked into trust status. Some of these lands were held by individual Indians who received allotments that were never released from trust. Other trust lands were never allotted and remained held communally by tribes. Trust status means that the legal title to the land is held by the United States government, but the beneficial title—the right to use or benefit from the land—is held by either individuals or tribes.

Studies of how trusteeship affects land use suggest that this extra layer of bureaucracy may help keep land in Indian ownership, but that it reduces productivity. For example, Carlson (1981, 174) concludes that "no student of property-rights literature or, indeed, economic theory will be surprised that the complicated and heavily supervised property rights that emerged from allotment led to inefficiencies, corruption, and losses for both Indians and society."

The combination of the Allotment Act, the IRA, and related land policies created a mosaic of land tenure on many reservations. The most familiar is outright ownership, or fee-simple. Under this tenure the legal and beneficial title are held by the same entity. Fee-simple lands can be alienated and sold to Indians and non-Indians, and liens can be placed against the land title to collateralize loans. Tribally owned trust land generally cannot be acquired by non-tribal members, and there are legal restrictions against the use of liens and other encumbrances. In order to offer lenders collateral, the tribe can sometimes enter into a long-term leasehold interest with approval from the BIA. The same restrictions on alienation and encumbrances apply to individually owned trust land, although there is a program that allows mortgages on this type of land to be foreclosed and converted to fee simple with the consent of the secretary of the U.S. Department of Interior.

The burden of trusteeship is further complicated by the fact that individual trust lands have often been inherited several times leaving multiple landowners who must unanimously agree on land-use decisions. The website for the Indian Land Tenure Foundation explains how extreme fractionalization can arise:

> … imagine that an Indian allottee dies and passes on the ownership of the allotment to her spouse and three children. Divided interest in the land is now split between four people. Now imagine those children becoming adults and raising families of their own, each consisting of three children. When the second generation dies, and if all the grandchildren survive, then ownership is divided between all of the grandchildren. The ownership of the original allotment is now split between nine different people or possibly more depending on whether the spouses of the second generation are still alive. As each generation passes on, the number of owners of a piece of land grows exponentially. Today, it is not uncommon to have more than 100 owners involved with an allotment parcel.

With so many owners, each individual owner has weak economic incentives to coordinate investments in the land that could increase the value of the property. Moreover, the cost of getting unanimous agreement from all owners rises exponentially.

Table 6 summarizes the mosaic of land tenure types. In terms of relative importance, tribal trust was the most common tenure on the 82 reservations with American Indian populations exceeding 1,000 in 1999. The mean percentage of reservation land held in tribal trust

for these reservations is 58.3 percent; the mean percentage held in fee-simple is 29.3 percent; and the mean percentage in individual trust is 13.9 percent.[15]

[Table 6 here]

Economic Consequences of Federal Control

Because the Bureau of Indian Affairs must approve or disapprove contracts for land use held in tribal trust, the added cost of negotiating contracts can suppress development and investment. Trosper (1978) was one of the first economists to formally identify the importance of reservation land tenure to agricultural productivity after the allotment era. He observed that ranches operated by Indians on the Northern Cheyenne Reservation in Montana generated less output per acre than ranches operated by non-Indians adjacent to the reservation.

There are three possible explanations for the productivity difference: (1) Indians lacked technical and managerial knowledge of ranching; (2) Indians had ranching goals other than profit maximization; and (3) land tenure on reservations constrained Indians from operating their ranches at an efficient scale and from using the optimal mix of land, labor, and capital.

Trosper argues that the lower output chosen by Indian ranchers on the Northern Cheyenne is actually profit-maximizing. According to his estimates, Indian ranchers are as productive as non-Indians operating nearby ranches when accounting for the different input ratios. Given that Indian ranch managers are at least as technically competent as non-Indians, Trosper concludes that the effects of land tenure should be examined further.[16]

[15] The source is Anderson and Parker (2008) and the authors' data.
[16] Trosper also dismisses the claim that Indians on the Northern Cheyenne do not seek to maximize profits. His data suggest that Indian ranchers used inputs efficiently.

Anderson and Lueck (1992) take up this challenge by estimating the impact of land tenure on the productivity of agricultural land using a cross-section of large reservations. They benchmark the productivity of tribal and individual trust lands against those of fee-simple lands on reservations. When controlling for factors such as the percentage of trust lands managed by Indian operators and whether the tribe was indigenous to the reservation area, Anderson and Lueck estimate the per-acre value of agriculture to be 85–90 percent lower on tribal trust land and 30-40 percent lower on individual trust land. They attribute the larger negative effect of tribal trust land to collective action problems related to communally managed land. In addition to having to overcome BIA trust constraints, agricultural land held by the tribe is subject to common-pool resource management incentives that can lead to exploitation and neglect.

The U.S. Congress has authorized some noteworthy land reforms, but, for the most part, their impacts have not been rigorously studied by economists. An exception is the Indian Long-Term Leasing Act of 1955, which increased the length of allowable leases of trust land for some tribes. Akee (2009) finds evidence that the increase in allowable lease tenure caused a significant increase in land values and in commercial and residential development on tribally owned trust land on California's Aqua Caliente reservation. This result suggests that the inability of tribes to commit to long-term leases elsewhere has hindered their ability to gain from commercial interest in their land.

BIA trusteeship goes beyond land management alone to include other natural resources such as coal, oil and gas, and timber. Just as it has thwarted more productive use of land, trusteeship has limited the ability of tribes to manage and profit from other resources. Though federal paternalism has been described as a responsibility "to protect Indians and their resources from Indians" (American Indian Policy Review Commission on Reservation and Resource

Development, quoted in Morishima 1997, 8), there is ample evidence that the BIA has failed to be a good "guardian," not the least of which was the 2009 settlement of the long running class-action lawsuit in *Cobell vs. Salazar*. The plaintiffs claimed the U.S. government mismanaged Indian trust assets, including money deposited in trust accounts, and therefore owed the beneficiaries billions of dollars. Eventually the government settled for $3.4 billion, likely a small fraction of what was actually lost.

To give tribal governments more control of their assets, Congress passed the Self Determination Act of 1976 (Public Law 93-638) and later the Self-Governance Demonstration Project Act in 1988. Under this legislation, the Confederated Salish and Kootenai Tribes (CSKT) on the Flathead Reservation became one of ten tribes to have more management autonomy. Finally in 1995, the confederated tribes' forestry department compacted with the BIA to take control of forest management decisions on the Flathead Reservation.

Berry (2009) documents the success of the experiment in fiscal federalism on the Flathead Reservation by comparing tribal forest management with U.S. Forest Service management on the neighboring Lolo National Forest. Not only did she find that the CSKT earned more that $2 for every $1 spent compared to the U.S. Forest Service just breaking even, Berry found that timber quality, wildlife habitat, and water quality were all better under tribal management. In her words, "Since the CSKT rely on timber revenues to support tribal operations, they have a vested interest in continuing vitality of their natural resources. . . . The tribes stand to benefit of responsible forest stewardship—or bear the burden of mismanagement" (2009, 18).

Berry's results mirror those of Krepps (1992) and Krepps and Caves (1994). According to Krepps (1992, 179), "as tribal control increases relative to BIA control, worker productivity

rises, costs decline, and income improves. Even the price received for reservation logs increases."

Tribal versus Federal Protection of Culture

Federal trusteeship of Indian land and resources does not comport with fiscally optimal federalism on almost all dimensions. It takes control of resource use decision out of local hands where information about the value of output and production techniques is greatest and removes the incentive for local leaders to seek gains from trade. Moreover, by putting control at the federal level, trusteeship raises the cost of holding the trustee accountable to the beneficiary as *Cobell vs. Salazar* clearly illustrates. All of these reasons—information, incentives, and accountability— call for relegating resource decisions to a lower level of governance, perhaps even to the individual resource owner in the form of complete privatization.

One dimension on which trusteeship may benefit tribes is through its restraint on alienability. Typically economists view restraints on alienation as a limit on the potential to gain from trade. Because trust lands cannot be alienated, parcels cannot be sold to producers who might value it more, consolidated to take advantage of scale economies except through leasing, or used as collateral in capital markets.

These restraints on alienation, however, do come with a benefit not captured in individual trades, because restraints on alienation may help preserve customs and culture. Consider, for example, zoning rules which in effect limit alienability for certain uses. Though zoning rules may disallow more valuable land uses, they may preserve the character of community. Without them, individual owners would be faced with the "prisoner's dilemma."

In the context of American Indians, McChesney (1992, 120) puts it this way: "*A priori*, the individual Indian owner of land may be in a prisoner's dilemma, the dominant strategy being to sell, even though all would be better off agreeing not to sell to preserve an Indian way of life." If an individual Indian sold his or her land to a non-Indian who did not share the same cultural norms, the costs of tribal collective action could rise. If cultural assets—preserving the "Indian way of life"— have value, that value is best assessed at the tribal level where local information can give a more accurate measure of the cultural asset's value and where collective agents can be better held accountable optimizing that value.

McChesney (1992) points out that preservation of the "Indian way of life" may explain restricting alienation to non-Indians, but that it does not explain why alienation should be restricted on all reservations by the federal government rather than leaving that decision to local tribal governments who better understand the costs and benefits of alienation. A proposal by Canadian First Nations to change the Indian Act would let individual bands decide if they want out of Canadian federal trusteeship so that bands can decide for themselves to what degree they want collective ownership or private ownership. Under such self-determination, bands could decide if they want to limit alienation to non-band members.

Getting from Here to There

When the U.S. Supreme Court placed Indian relations in the hands of Congress in the 1830s, the prospects of fiscally optimal systems of federalism emerging for Indians greatly diminished. Rather than optimizing the locus of collective action by balancing the benefits of scale economies through collective action with information and agency costs, Indian policy has

mainly been determined by Congress and its agencies with too little input from the Indian people.

This top-down control comes despite a long history of *de facto* bottom-up federalism within most tribes. American Indian history is a history rich in property rights and governance institutions consistent with customs and culture and compatible with the resource constraints they faced. For example, in pedestrian times, bison hunting tribes were organized into larger groups necessary to achieve the scale economies necessary to drive bison into surrounds or over jumps. When the horse arrived on the scene, the efficient size of the group was reduced as a few proficient horsemen could supply bison to smaller family and clan units. Once confined to reservations but before allotment, American Indians were proving they could adapt their institutions and be productive with the resources at hand (Carlson 1981).

Even if the best of intentions are attributed to the reformers who championed the Allotment Act of 1887, namely to assimilate Indians into non-Indian culture and empower their productivity through the incentives inherent in private ownership, the passage of that act ended much hope for beneficial federalism on reservations. As Roback (1992, 23) concludes:

> The allotment policy did not institute private property among the Indians; instead it overturned a functioning property rights system that was already in place. . . . Allotment failed because it privatized the land among individuals without understanding the existing family and tribal structure or the property rights structure that accompanied it.

In other words, allotment failed to understand a key principle of of fiscal federalism; namely that local knowledge is a strong argument in favor of local control.

Allotment perpetuated the guardian-ward relationship between American Indians and the federal government, leaving tribes will little opportunity for finding an optimal balance between local governmental control and top-down bureaucratic management. To be sure, perpetual trusteeship has prevented the transfer of even more land from Indian Country to non-Indians and probably has helped to preserve local culture, but that benefit has come at a high cost. To whit, returns from land, minerals, energy, and wildlife are lower than they would have been.

American Indians have called for self-determination for decades, but a heavy hand from the top down has provided few opportunities. When such opportunities have arisen, as in the case of forest management and in some cases wildlife management, tribes have proven they can do it themselves. Moreover, tribes heavily involved in reservation gaming have learned that sovereign powers to tax and enforce contracts must be limited if they are to do business with non-tribal companies and customers, but there remain questions about what it really takes for a tribe to credibly limit its own sovereignty. In short, opportunistic local governance must be checked by a predictable rule of law. An uncertain legal environment in Indian Country is part of the reason why reservation incomes are the lowest of any ethnic group and why reservation income growth rates have lagged behind the rest of the nation for decades.

The principles of fiscal federalism offer a blueprint for how tribal governments should think about the importance of their sovereignty and limits upon it. Should Indian lands and other natural resources remain under the trusteeship of the federal government? Should tribes limit alienation of land to non-Indians? Should tribes seek to transfer ownership of individual trust land to the tribe? Should legal disputes on reservations remain the domain of tribal courts or be transferred to higher levels of government? Should the sovereign power to tax or regulate non-

Indians on reservations be limited? Answering these and other questions regarding the appropriate level of governmental control is what self-determination is all about.

The initiative by Canadian First Nations to allow local bands to answer such questions is a step in the direction of fiscal federalism. Getting from here to there will not be without failures, but experiments will also result in successes that can guide other native people. Crow tribal member Bill Yellowtail (2006) puts it well: "We must give Indians permission to pursue that age-old but newly-remembered paradigm of entrepreneurial self-sufficiency. Surely that is not the entire solution, but it is part of the puzzle." Balancing the benefits of local information and incentives to craft institutions and manage resources with benefits of a federal rule of law is a key part of bring prosperity without dependence to Indian Country.

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Table 1
States with Public Law 280 and Related Jurisdiction

State	Mandatory PL 280	Optional PL 280		Notes
		Criminal	Civil	
Alaska	Yes	No	No	Tribal jurisdiction over some criminal offenses committed on the Annette Island Reservation was retained by the Metlakatla Indian Community.
Arizona	No	No	Partial: the state assumed jurisdiction over water & air pollution (1967)	
California	Yes	No	No	
Florida	No	Full (1961)	Full (1961)	
Idaho	No	Partial: the state assumed jurisdiction over seven subject areas and full jurisdiction with tribal consent (1963).		The seven subject areas are: school attendance; juvenile delinquency; abused children; mental illness; public assistance; domestic relations; and operation of vehicles on state and county roads. The Nez Perce is the only tribe to consent, allowing state jurisdiction over additional criminal offenses.
Iowa	No	No	Full: over the Sac & Fox Reservation (1967)	A federal statute passed in 1948 conferred criminal jurisdiction to the state over the Sac & Fox Reservation.
Kansas	No	No	No	A federal statute passed in 1940 conferred criminal jurisdiction to the state over all reservations within the state.
Minnesota	Yes	No	No	Red Lake Reservation was exempted. PL 280 jurisdiction over Bois Forte Reservation (formerly Nett Lake) was retroceded in 1972.
Montana	No	Full: over Flathead Reservation	Full: with tribal and county consent, but no tribe has consented (1963).	Most of the criminal jurisdiction assumed by the state over Flathead Reservation was retroceded in 1993.
Nebraska	Yes	No	No	The state retroceded criminal jurisdiction over Omaha Reservation in 1970, and over the Winnebago Reservation in 1986.
Nevada	No	Full: with tribal consent	Full: with tribal consent (1955)	PL 280 jurisdiction was conferred over a number of small reservations. Retrocession has now occurred over most reservations in this group.

Table 1
States with Public Law 280 and Related Jurisdiction - Continued

State	Mandatory PL 280	Optional PL 280		Notes
		Criminal	Civil	
New York	No	No	No	Federal statutes passed in 1948 and 1950 conferred criminal and civil jurisdiction to the state over all reservations.
North Dakota	No	No	Full: with individual or tribal consent, but no tribe has consented (1963).	A federal statute passed in 1948 conferred criminal jurisdiction to the state over Devil's Lake Reservation. Individual acceptance has been held invalid under the Supremacy Clause of the U.S. Constitution.
Oregon	Yes	No	No	Warm Springs Reservation was exempted from the list of mandatory reservations. The state retroceded criminal jurisdiction over the Umatilla Reservation in the 1980s.
South Dakota	No	The state attempted to assume jurisdiction over criminal offenses and civil causes of action arising on highways, subject to federal government reimbursement of enforcement costs (1961).		The state supreme court held this assumption to be invalid.
Utah	No	Subject to tribal consent (1971).		No tribe has consented
Washington	No	In 1957, the state assumed full PL 280 jurisdiction over nine reservations that had consented. In 1963, the state assumed jurisdiction without tribal consent over non-Indians and limited jurisdiction over Indians on the remaining reservations.		Criminal jurisdiction over Quinalt and Port Madison Reservations assumed through the 1957 legislation was retroceded in 1969 and 1972 respectively. The jurisdiction assumed over these reservations through the 1963 legislation remained intact. In 1986 the state retroceded jurisdiction over Indians for crimes committed on the Colville Reservations.
Wisconsin	Yes	No	No	The Menominee Reservation was exempted from the list of mandatory reservations and the reservation was terminated by federal statute in 1961. The Menominee Reservation was reinstated in 1973, and retrocession of PL 280 jurisdiction was granted shortly thereafter.

Source: Anderson and Parker (2008).

Table 2
Judicial Jurisdiction on American Indian Reservations

	Criminal Jurisdiction	
	non-P.L. 280 Jurisdiction	P.L. 280 Jurisdiction
Tribal	Over American Indians; subject to a few limitations	Over American Indians; subject to a few limitations
Federal	Over major crimes committed by Indians; over interracial crimes	Same as off reservation
State	Only over crimes committed by non-Indians against other non-Indians	Over Indians and non-Indians; subject to a few limitations
	Civil Jurisdiction	
Tribal	Over American Indians and non-Indians	Over American Indians
Federal	Same as Off-Reservation	Same as Off-Reservation
State	None, except some suits between non-Indians on fee-simple lands	Over suits involving non-Indians generally; subject to a few limitations

Source: Melton and Gardner (2000).

Table 3
Mean Per Capita Income on American Indian Reservations

	Reservations with data for each of the six years, in 2012 $s			Reservations with data for at least five of the six years, in 2012 $s		
	P.L. 280 Reservations (N)	Non-P.L. 280 Reservations (N)	abs. value of t-stat for difference	P.L. 280 Reservations (N)	Non-P.L. 280 Reservations (N)	abs. value of t-stat for difference
1915	2,988 (16)	3,257 (38)	0.39	2,624 (24)	3,168 (45)	1.00
1938	2,831 (16)	2,935 (38)	0.34	2,775 (26)	2,929 (44)	0.61
1969	8,198 (16)	6,405 (38)	2.74	7,895 (24)	6,415 (47)	2.67
1979	10,088 (16)	9,162 (38)	2.51	10,934 (29)	8,994 (49)	3.78
1989	9,325 (16)	8,229 (38)	2.04	9,409 (29)	8,361 (49)	1.93
1999	12,726 (16)	10,752 (38)	2.54	14,452 (29)	11,082 (49)	3.67

Notes: The per capita incomes are for American Indians on reservations. The 1915 and 1938 data come from Bureau of Indian Affairs reports. The 1969, 1979, 1989, and 1999 data come from decadal U.S. census reports. The t-statistics assume equal variance. Allowing for unequal variance, the t-statistic for differences are as follows: 1918 are 0.37 and 0.99; 1938 are 0.35 and 0.61; 1969 are 2.12 and 2.19; 1979 are 2.20 and 3.57; 1989 are 1.71 and 2.05; and 1999 are 2.87 and 3.32.

Table 4
Panel Regressions of Per Capita Income on American Indian Reservations

	Reservations with data for all six time periods				Reservations with data for five of six time periods			
	(1) Y = PCI	(2) Y = PCI	(3) Y = log of PCI	(4) Y = log of PCI	(5) Y = PCI	(6) Y = PCI	(7) Y = log of PCI	(8) Y = log of PCI
Lagged PCI or Lagged logged PCI	0.144* (0.068)	0.0241 (0.124)	0.0374 (0.057)	-0.064 (0.078)	0.140 (0.091)	-0.1311 (0.178)	0.017 (0.054)	-0.114 (0.085)
State jurisdiction (=1 if yes, otherwise =0)	1,431** (519.9)	1,907 (1,316)	0.186* (0.100)	0.253 (0.157)	1,579** (595.6)	2,146 (1,514)	0.197* (0.099)	0.281* (0.164)
Slot machines per Am. Indian	3,402** (404.2)	2,407** (839.5)	0.270** (0.043)	0.147* (0.077)	2,686** (1,115)	2,998** (952.4)	0.178** (0.060)	0.268** (0.073)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reservation fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reservation time trends	No	Yes	No	Yes	No	Yes	No	Yes
Observations	271	271	324	271	352	352	352	444
Adjusted R^2	0.89	0.92	0.87	0.95	0.82	0.92	0.89	0.95

Notes: * $p < 0.05$ for a one-tailed t-test, ** $p < 0.01$ for a one-tailed test, based on standard errors that are clustered at the reservation level. In columns 1, 2, 5, and 6 the lag of per-capita income is included. In columns 3, 4, 7, and 8 the lag of the natural log of per capita income is included.

Table 5
Reservation Acres in 1887 and 1933

	Acres
1. Reservation Land, 1887	136,394,895
2. Reservation Land, 1933	69,588,411
a. Tribal trust , 1933	29,481,685
b. Individual trust, 1933	17,829,414
c. Allotments no longer in trust	22,277,342
3. Surplus land surrendered, 1933	66,806,454

Source: Flanagan et al. (2010).

Table 6
Land Tenure Categories on U.S. Reservations

	Land Tenure Status		
	Fee-simple Land	Trust Land	
Characteristics		Tribally Owned	Individually Owned
Legal title	Individual owner or Tribal govt. owner	U.S. government	U.S. government
Beneficial title	Same as legal	Tribe	Individual
Alienation	Can be sold to non-tribal members	Cannot be sold to non-tribal members except under unusual circumstances	Cannot be sold to non-tribal members except under unusual circumstances
Collateral options	Can be used as lien and mortgaged in standard way	Loans secured by a leasehold interest are permissible	Can be used as a lien and mortgaged with approval of U.S. govt. Foreclosed land is converted to fee-simple if it cannot be transferred within the tribe
Other issues	Land use may be subject to tribal law	Tribes may develop programs through which it executes a land lease as a lessor. The lessee can then offer up a leasehold interest as collateral, subject to U.S. govt. approval.	Beneficial title is conveyed to all descendants, often resulting in a large number of fractional owners

Source: Listokin (2006, 98–99).