

# The Constitutional Tribe:

---

*Re-thinking Governance in the Developing World*

*By Logan Trombley*

A thesis submitted in partial fulfillment of the requirements for the degree of Bachelor of Arts with Honors in Philosophy, Political Science, and Economics at the University of Michigan 2014

Advisor: Professor Kenneth Kollman

Second Reader: Professor Eric Lormand

## Table of Contents

<b>INTRODUCTION .....</b>	<b>4</b>
Why Native Americans? .....	6
Why Do Tribes Matter?.....	8
Paper Outline.....	10
Paper Findings.....	10
<b>DEPENDENT VARIABLES .....</b>	<b>11</b>
Composition and Selection of the Random Sample.....	11
Statistically Defining the Population.....	12
Building the State-Controlled Tribal Development Index .....	13
How is the Index Calculated?.....	18
Dependent Variable Findings.....	19
<b>INDEPENDENT VARIABLES .....</b>	<b>22</b>
Legitimacy.....	22
Property Rights.....	26
Accountability .....	33
Rule of Law .....	37
<b>RESULTS AND ANALYSIS .....</b>	<b>42</b>
Legitimacy.....	42
Property Rights.....	44
Accountability .....	47
Rule of Law .....	50
Holistic Study.....	52
<b>CONCLUSION .....</b>	<b>54</b>

**BIBLIOGRAPHY ..... 56**

**APPENDIX A: TRIBE GENERAL INFORMATION..... 59**

*Acknowledgements*

*Thank you to Professor Kenneth Kollman, my thesis adviser, for both advice and guidance, which without this thesis would not be what it I now. Thank you to Professors LaVaque-Manty, Hardin, Anderson, and Koremonos for the inspiration and encouragement during the process of writing the thesis. Finally thank you to my family and the love of my life Mackenzie Barry for the constant support*

# Introduction

There is an intense debate in the development community over the causes of inequality in the international society. One side, espoused by Jared Diamond's *Guns, Germs, and Steel*, argues that geography is the prime factor that explains international inequality<sup>1</sup>. Such arguments focus on the barriers to political and economic development posed by inherent geographic features of a land like the amount of arable land, access to water sources, climate, and disease vulnerability. The other side, embodied by Daren Acemoglu's and James Robinson's *Why Nations Fail* argues that political institutions are the prime factors that explain international inequality<sup>2</sup>. Such arguments focus on the effects of political institutions on economic outcomes like lack of public good procurement, extractive regimes, market manipulation, and corruption. This paper theorizes that the cause of international inequality is not one or the other, but rather a combination of both, where the main causal factor is whether or whether not the political institutions of a society are adapted to the geography the society inhabits. Geography determines the original social structure of society, which effects the political institutions of that society.

Societies with access to arable land whether through access to rivers for irrigation or sufficient rainfall utilized intensive agriculture in order to adapt to the environment. Intensive agriculture has little risk due to either a steady climate or a stable water source, and high rewards, so personalizing the risk and rewards results in optimal production<sup>3</sup>. The state of nature in these societies resembles the prisoner's dilemma described by Hobbes and Locke, where individuals always have the incentive to defect in order to steal other's produce, rather than cooperating by respecting each other's property. Therefore a social contract is needed to create a centralized state that will enforce these private property rights, and provide the necessary collective public goods to make private property economically viable. Modern Western political thought is based off Hobbes and Locke's original conception of the state of nature, and their proscriptions on the type of institutions that best solve this state of nature. Hobbes introduced the conception of the modern centralized state composed of individuals and a sovereign, where only the power of the state to protect individuals from the state of nature determined its borders and

---

<sup>1</sup> Diamond, Jared M. *Guns, Germs, and Steel: The Fate of Human Societies*. New York: Norton, 1997.

<sup>2</sup> Acemoglu, Daron, and Robinson, James A. *Why Nations Fail: The Origins of Power, Prosperity and Poverty*. 1st ed. New York: Crown, 2012

<sup>3</sup> Bates, Daniel G. *Human Adaptive Strategies: Ecology, Culture, and Politics*. Needham Heights: Allyn & Bacon, 1997. pg 112-

limits, rather than tradition or collective identity. Locke extended this protection to all individual's property, and developed a government composed of elected representatives charged with protecting these rights by making laws. These institutions are created to allow individuals to compete for resources for optimal collective gain, rather than cooperate.

In geographic areas with less arable land the indigenous people will develop a tribal social structure focused on a collective identity, rather than individual identity in order to adapt to the environment. Terrain like deserts, mountains, steppes, and rain forests are agriculturally inhospitable due to climate, soil content, or difficulty of clearing sufficient land. Populations are concentrated into either small valley or oasis villages in practicing sedentary horticulture, or spread out along the desert or mountainside as mobile pastoralists. Both procurement systems tend towards tribal social organizations<sup>4</sup>. These communities are subject to greater fluctuations in the environment and climate, so they develop collective identities in order to pool risks, rather than personalize risk like in individualistic societies. Their state of nature resembles the stag hunt game described by Rousseau, where the overriding incentive is to cooperate, but due to lack of trust or communication an individual may defect. Therefore they create tribal collectivist institutions that are designed for cooperation among individuals for collective gain.

Effective political institutions, where effective is defined as providing for general well-being, are seen as legitimate, provide for property rights, are accountable to the people, and follow the rule of law. Western individualist societies base legitimacy on artificial boundaries that collect individuals within a geographic area, while tribal collectivist base legitimacy on a collective identity from a common lineage. Western individualist societies prefer private property when risk is low to maximize individual incentives, while tribal collectivist societies prefer collective property rights in order to minimize risk. Western individualist societies prefer factional representative government based on competing interests, while tribal collectivist societies prefer consensus based on collective interest. Western individualist societies prefer retributive justice in order to deter, while tribal collectivist societies prefer restorative justice in order to repair trust. When a society imposes its political institutions on another with a different underlying geography and social structure, it imposes political institutions ill adapted to that society and by result ineffective. This paper will focus on how Western individualistic political

---

<sup>4</sup> See 3

institutions are ineffective at providing development for tribal collectivist societies, and seek to identify effective political institutions for tribal collectivist societies through an empirical study of Native American tribal governments. .

The empirical study takes a random geographically stratified sample of 70 out of the 337 federally recognized Native American tribes in the contiguous 48 states of the United States of America. From this random sample it codes a series of institutional designs and characteristics as independent variables, and collects series of well-being indicators as dependent variables from each tribe. These well-being indicators are combined into a Tribal Development Index modeled of the United Nations Human Development Index and the Multi-Dimensional Poverty Index. The study seeks to isolate the institutional designs that are effective and ineffective at providing development to tribes through a series of linear regressions and t-tests. The paper predicts that the most effective institutions relate closer to tribal traditions and collective identities, rather than Western notions of legalism and individualism.

### **Why Native Americans?**

Native Americans pertain to this question of effective political institutions for tribal collectivism in four key areas: geography, history, politics, and development. Geographically Native American Tribes are spread throughout the continental United States, but are primarily concentrated in the West with over 75% of Native Americans living in states west of the Mississippi River<sup>5</sup>. This is an important geographic distinction because all lands west of the 100<sup>th</sup> meridian of the Continental United States require extensive irrigation for agriculture. Those tribes who remain in the East live in geographically isolated locations like the Seminole in the Florida Everglades, and the Red Lake Band of Chippewa Indians in Northern Minnesota. This is the product of history as Native American tribes were driven off their land due to endemics, wars, and white settler intrusion starting in the 17<sup>th</sup> century and not ending until the close of the 19<sup>th</sup>. The Dawes Act, which will be further described in the paper, also served to take millions of the best acres of arable land away from Native American tribes<sup>6</sup>. Thus Native American tribes are similar to tribal people all across the world in being located in geographically inhospitable and isolated areas.

---

<sup>5</sup> Norris, Tina, Paula L. Vines, and Elizabeth M. Hoeffel . "American Indian and Alaska Native Population." United States. Census Bureau.: 2012. Web.

<sup>6</sup> O'Brien, Sharon. *American Indian Tribal Governments*. Vol. 192. University of Oklahoma Press, 1999

Historically Native American tribes have all gone through repeated attempts by the United States Federal Government to raise Native American prosperity through imposing Western individualistic institutions on them. First came the Dawes Act of 1887, which sought to impose private property rights on the tribes and break down tribal social structures into individualistic household structures. Next came the Indian Reorganization Act (IRA) of 1934, which overturned the Dawes Act, but sought to impose Western political institutions on the tribe. The 1950s saw a termination policy, which sought to end tribes' special ties to the federal government and encourage Native Americans to move to cities. The Great Society policies of the 1960s extended social welfare to the tribes and paternalistic economic development schemes by the Bureau of Indian Affairs (BIA). Finally after a series of violent Native American protests in the 1970s, Supreme Court decisions in the 1980s, and a new federal policy of self-determination, tribes were given control over their own destinies both politically and economically<sup>7</sup>. Thus Native Americans experienced problems of exploitation, political imposition, urbanization, and paternalism, which are shared commonly by tribal populations today in the developing world.

The politics of Native American tribes is an interesting and fruitful area of study. The IRA imposed western institutions on existing tribes and established new tribal entities where they did not exist before. Some tribes resisted the IRA and established their own constitutions or maintained their traditional institutions. Therefore there is a variety of political institutions to analyze. Also their relationship and status as sovereign elements within westernized states is interesting. Tribal societies coexist with settler societies in developing countries. In fact they depend on each other economically and socially. Pastoralists need agriculturalists and urbanites to sell their products to and to buy foodstuffs and manufactured goods from. Nomadic traders depend on settled communities to ply their trade. Native Americans interact both economically and socially with the surrounding American population, whether it be Americans going to tribal casinos, or tribesmen going to universities in urban centers. This economic relationship will be further explored in the property rights section of the paper. The paper seeks to identify institutions that not only effectively govern tribal collectivist societies, but are able to coexist with settlers as well.

---

<sup>7</sup> Cornell, Stephen, and Joseph P. Kalt. "Pathways from poverty: Economic Development and Institution-Building on American Indian Reservations." *American Indian Culture and Research Journal* 14, no. 1 (1990): 89-125

Finally the wide disparity in development outcomes among tribes points to a causal factor. Historical Native Americans have been the poorest minority in American society. In 1928, the Native American population suffered from disease, malnutrition, poverty and discontent. Life expectancy was only 44 years and average annual per capita income was only one hundred dollars.<sup>8</sup> Years of failed federal policies did not drastically improve the situation. By 1980 the census 45 percent of reservation Native Americans lived under the poverty line (\$4,190 individual income). Housing quality was poor with “21 percent of reservation Indian households had no indoor toilet facilities; 16 percent lacked electricity; 54 percent had no central heating.”<sup>9</sup> After the switch to self-determination policies Native American prosperity increased. By 2010 the reservation Native American poverty rate decreased to 29.4 percent<sup>10</sup>. Among all Native Americans only 2.6 percent are without plumbing facilities and 10 percent are without have central heating<sup>11</sup>. Yet this increase was not uniform across the tribes with some becoming more wealthy than the surrounding American population and others being mired in the same destitution. For example the Pala Band of Luiseño Mission Indians of the Pala Reservation in California have a median income of \$102,292 and poverty rate of 15%, while the White Mountain Apache Tribe of the Fort Apache Reservation has a median income of \$26,582 and a poverty rate of 44%<sup>12</sup>. This paper will seek to explain this disparity in outcomes based on the political institutions of each tribe.

### **Why Do Tribes Matter?**

Improving governance and development outcomes in countries with predominantly tribal collectivist societies is important from both a development and national security perspective. Countries with high levels of tribalism are the least developed countries in the world. The Tribalism Index composed by The University of South Florida affiliated nonprofit think-tank *The Citizenship Initiative* measures tribalism through compiling multiple indicators and indexes on corruption, ethnic fractionalization, gender inequality, group grievance, and indigenous population

---

<sup>8</sup> See 6

<sup>9</sup> See 7

<sup>10</sup> Champagne, Dwayne. “Breaking the Cycle of Poverty and Crime in Indian Country”. Indian Country Today Media Network, October 19, 2013. Read more at <http://indiancountrytodaymedianetwork.com/2013/10/06/breaking-cycle-poverty-and-crime-indian-country-151430>

<sup>11</sup> U.S. Census Bureau; *American Indian Alone Housing Characteristics: 2006-2010 American Community Survey 5-Year Estimates*

<sup>12</sup> U.S. Census Bureau; *American Indian Alone Economic Characteristics: 2006-2010 American Community Survey 5-Year Estimates*



from 2011<sup>13</sup>. Figure 1 shows a scatterplot with the Tribalism Index as the independent variable on the x-axis and GDP per capita as the dependent variable on a logged y-axis shows a strong negative relationship between tribalism and GDP per capita<sup>14</sup>.

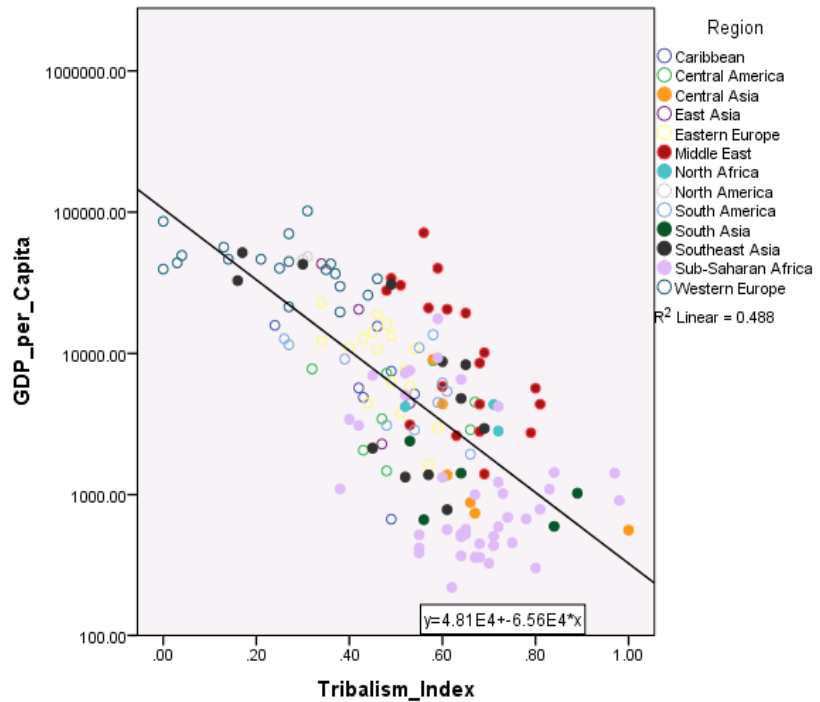
Therefore from a development perspective finding a governance solution for countries with high levels of tribalism will have a large effect on alleviating poverty in

the developing world. In addition to poverty, tribal societies are magnets for terrorists, criminal networks, and rebel groups. Such groups are naturally drawn to areas of geographic isolation, weak governance, history of corruption and violence, and poverty in order to escape central authorities and engrain themselves inside of a local tribe through marriages and kin relationships<sup>15</sup>. Multiple fronts in the War on Terror in Pakistan, Yemen, Somalia, Mali, Afghanistan, and Iraq are in areas of tribal societies. Solving tribal governance issues would prevent national security threats from obtaining safe havens.

## Paper Outline

Moving forward, this paper will first describe the main dependent variable for all empirical statistical tests: the State Controlled Tribal Development Index Score. This chapter will show how the score is computed and give descriptive details on the distribution of the scores across the tribes under study. Next the paper will describe the independent variables that seek to explain the differences in state controlled Tribal Development Scores. Each independent variable

**Figure 1 Relationship between Tribalism Index and GDP per Capita**



<sup>13</sup> Jacobson, David & Deckard, Natalie. "The Tribalism Index: Unlocking the Relationship Between Tribal Patriarchy and Islamist Militants". *New Global Studies*. (2012) Volume 6, Issue 1

<sup>14</sup> The World Bank; *World Development Indicators: GDP per Capita 2011*

corresponds to the previously mentioned keys to effective governance: legitimacy, property rights, accountability, and rule of law. Descriptions of each variable will be followed by descriptive statistics illustrating the distribution of independent variables among the tribes under study. Then the paper will examine and analyze the results of the statistical tests for each group of independent variables. Finally a conclusion will summarize the paper's findings and propose a new model for thinking about governance in the developing world based on the constitutional tribe.

### **Summary of Findings**

This paper finds that institutional designs adapted to collectivist tribal societies outperform institutional designs adapted for individualistic settler societies in producing overall tribal development. Such collectivist tribal institutional designs are hybrid traditional and legal constitutions (legitimacy), common pool resource institutions (property rights), legislative elections by the entire tribe (accountability), executive elections by popular vote (accountability), tribal police provision (rule of law), and traditional court systems (rule of law). The individualistic settler institutional designs are IRA imposed constitutions (legitimacy), private or centralized property rights (property rights), legislative elections by district (accountability), executive elections by tribal council (accountability), outside police provision (rule of law), and formal tribal court structures (rule of law) respectively.

# Dependent Variables

## Composition and Selection of the Random Sample

The random sample is composed of 70 federally recognized tribes from 27 different states within the continental US<sup>16</sup>. The sample is geographically stratified to get a representative sample of the entire Native American population of the US excluding Alaska and Hawaii. Since the size of tribes vary greatly from just 100 members to over 100,000 a random sample of just tribal entities could cause a bias towards states with many small tribes over states with a few big tribes. For example California has 114 tribal entities, 34% of tribal entities, but only represents 15% of the population of Native Americans in the United States, while Arizona has only 20 tribal entities, 5% of tribal entities, but represents 13% of the Native American population. Therefore the stratified random selection allots each state a portion of the random sample based on its portion of the total Native American population in the United States as determined by the 2010 census. That portion is then randomly selected from the tribal entities within that state. For example 5% of Native Americans live Washington State, so Washington State gets an allotment of 4 tribal entities to the random sample. From the 28 tribes in Washington State, 4 are selected by a random number generator<sup>17</sup>.

Tribes randomly chosen were disqualified from the data set if they did not meet a minimum population threshold of 350 members, which excluded them from census surveys. The Navajo Nation was excluded from the data set due to its large size of over 150,000 members, which made its political institutions fundamentally different from the rest of the tribal entities of the random sample who averaged 5,500 members. If they were chosen, but disqualified, than another random selection would be made from the state's tribal entities with the disqualified tribe being excluded from the list. If a state did not have enough qualified federally recognized tribes to fill its allotment then a state with less than 1% of the Native American population would be given the allotment. Tribes whose boundaries occupied multiple states would be classified by the state which it had the greatest portion of its territory in.

---

<sup>16</sup> See Appendix A for list of tribes

<sup>17</sup> Random number generator used from [www.random.org](http://www.random.org)

### **Statistically Defining the Population**

The study primarily utilizes US Census data from the 2010 ACS 5-year American Indian and Alaska Native Tables Economic Characteristics, Housing Characteristics, and Social Characteristics data sets. The American Community Survey (ACS) is a nationwide survey that “produces demographic, social, housing and economic statistics in the form of 1-year, 3-year and 5-year estimates based on population thresholds<sup>18</sup>”. Its strengths lie in “percents, means, medians, and rates rather than estimates of population totals.<sup>19</sup>” In order to isolate a tribe’s data the study utilizes the US Census’s racial and ethnic group categorizations for each tribe. The US census utilizes self-identification to determine race. Race designations can appear as either “racial group” alone or “racial group” alone or in combination. The former means that the survey respondent referred to themselves as only of this racial category, while the latter means they referred to themselves as a combination of one or more racial groups. The study will utilize the data for “racial group” alone when the tribal membership blood quantum membership is above  $\frac{1}{2}$  and will utilize data for “racial group” alone or combination if it is below  $\frac{1}{2}$ . Blood quantum refers to the racial grouping of one’s parents, i.e if one parent is fully Native American and the other parent is  $\frac{1}{2}$  Native American, than the child would be  $\frac{3}{4}$  Native American.

Why use racial grouping of tribes instead of geographic grouping within reservations? The purpose of the study is not to identify the tribe that has the strongest reservation economy, but rather to find the tribes with the greatest overall welfare inside and outside of the reservation. If the tribal model is to be adapted overseas, than it cannot be assumed that the tribal government should only serve those who remain in the homeland or reservation, rather the tribe should benefit the diaspora urban population as well. This could be done through providing scholarships to universities, social networks, or periodic cultural ceremonies for the diaspora to return and attend to. The best tribal governments serve all of those who self-identify with the tribe, rather than just those who live within its reservation boundaries.

---

<sup>18</sup>US Census Bureau. *American Community Survey*. About the Data.. Web. 30 Mar 2014.

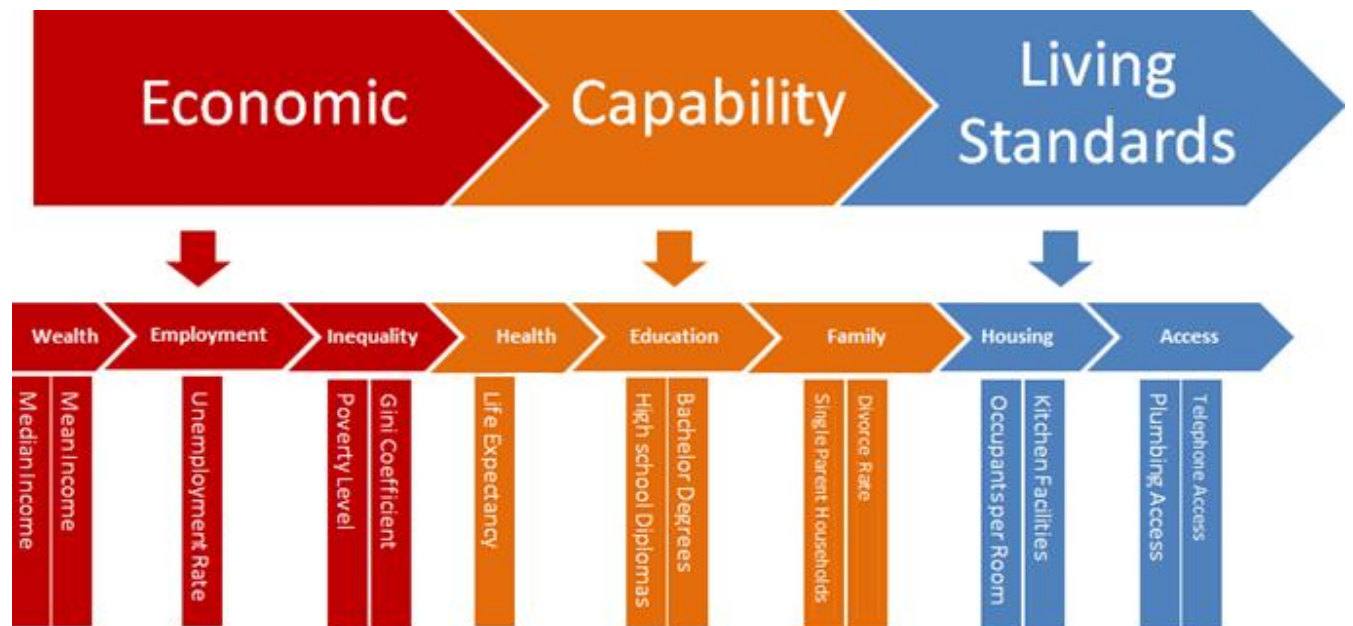
<<http://factfinder2.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=program&id=program.en.ACS>

<sup>19</sup>See 18

## Building the State-Controlled Tribal Development Index

The Tribal Development Index is designed to be a holistic index that seeks to capture the general welfare of the tribe on a multi-dimensional level. The model is composed of indicators similar to the UN Human Development Index (economic and capability) and the Multi-Dimensional Poverty Index (Living Standards) with the addition of measurements for family welfare and classic economic indicators like the unemployment rate, poverty rate, and a Gini coefficient estimate. The score it creates is a number between 0 and 1 that captures both the ranking of tribes and the magnitude of differences between them. The final score is controlled by the surrounding state score in order to eliminate the bias of surrounding wealth. Figure 2 visually depicts the model:

Figure 2 Tribal Development Index Model



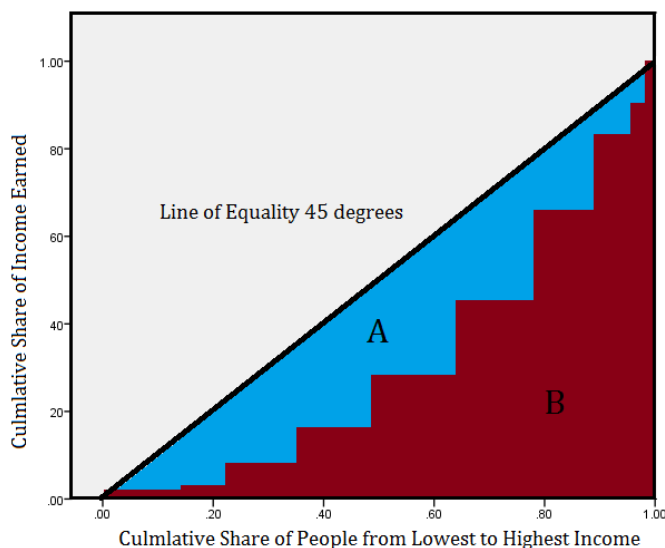
### Economic Indicators

The economic category is divided into three sub-categories: wealth, employment, and inequality. These measurements are intended to give an overall picture of the individual and tribal command of resources, the economic vibrancy of the tribe, and the distribution of wealth within the tribe.

The wealth sub-category is composed of median income and mean income. Both measurements are from the US Census 2010 ACS 5-year American Indian and Alaska Native Tables on Economic Characteristics. The study utilizes the household median income to determine what the average tribal member's purchasing power is. The higher the purchasing power, the greater the quantity and quality of a basket of goods and services a household may command. The household mean income serves as a proxy for the common use of GDP per capita used in developmental economics. The measure takes the entirety of tribal income and divides it by the number of tribe members. This number indicates the total resources the tribe controls, which differs from the median measurement that measures an individual household's command over resources.

The employment sub-category utilizes the unemployment rate to determine the vibrancy of the tribal economy. The unemployment rate is determined by dividing the number unemployed people by the civilian workforce, where the latter is defined as all of people looking for work. A vibrant economy utilizes all necessary resources including labor, so a high unemployment rate means an economy is not running at its full potential. In the case of Native American tribes an economy dependent on federal benefits will show a high unemployment rate, but a decent poverty rate and income. The purpose of this study is to identify tribes with an independent and sustainable economy that reduces poverty rather than one dependent on the

**Figure 3 Gini Coefficient Estimate  
Comanche Nation Example**



federal government. The unemployment rate data is taken directly from the US Census 2010 ACS 5-year American Indian and Alaska Native Tables on Economic Characteristics.

The inequality sub-category utilizes a Gini coefficient estimate and poverty rate to determine the distribution of income within the tribe. Inequality is a big issue in developing countries, where elites control political and economic institutions, while the rest remain impoverished. This is especially important when considering the resource curse. Tribal casinos are

similar to natural resource endowments: large sources of concentrated income that requires a low percentage of the labor force. Therefore it is critical to the study to insure the resources of the tribe are used to increase the plight of the lowest social strata. The Gini coefficient estimate is calculated by first taking the income distribution data from the US Census 2010 ACS 5-year American Indian and Alaska Native Tables on Economic Characteristics. This data consists of the number of households within a given income bracket<sup>20</sup>, which is then used to calculate the household income bracket % of population and the household income bracket % of income earned. The former is calculated by dividing the income bracket's number of households by the total number of households in the tribe. The latter is calculated by dividing the total income earned for each bracket divided by the total income earned by the tribe<sup>21</sup>The formula for the Gini coefficient estimate is:  $Gini = \frac{A}{A+B}$ . The greater the size of area A means the greater inequality. The poverty rate is taken directly from the US Census 2010 ACS 5-year American Indian and Alaska Native Tables on Economic Characteristics. This poverty rate covers all people, rather than just households.

### Capability Indicators

In his Noble prize winning work "Development as Freedom" Amartya Sen proposed a new set of indicators to measure human welfare. The capabilities approach entails two normative claims:

First, the claim that the freedom to achieve well-being is of primary moral importance, and second, that freedom to achieve well-being is to be understood in terms of people's capabilities, that is, their real opportunities to do and be what they have reason to value.<sup>22</sup>

Therefore an individual's health, education, and family well-being are important indicators of their well-being, because they provide opportunities to the individual to do or be what they value. Access to good healthcare provides longevity and sustained production throughout life. Education access offers means for advancement and gain in human capital. Familial support

<sup>20</sup> The income brackets used are 10,000 or less, 10,000-14,999, 15,000-24,999, 25,000-34,999, 35,000-49,999, 50,000-74,999, 75,000-99,999, 100,000-149,000, 150,000-199,999, and 200,000 or more.

<sup>21</sup> Total earned income for each bracket is calculated by taking the average of the min and max numbers of the range multiplied by the number of households in the income bracket. The 200,000 or more bracket uses 250,000\$ as its average.

<sup>22</sup>Martha C. Nussbaum, "Creating Capabilities: The Human Development Approach", Harvard University Press, 2011, 237pp.,

provides both a financial and emotional pool of support for future endeavors. This study seeks to measure health and education like Amartya Sen's Human Development Index with the additional indicator of family.

Health is measured by life expectancy, which is the expected number of years of life remaining at a given age. The human development index utilizes life expectancy as its measurement for health indicators. The data comes from the "Measure of America: of the Social Science Research Council" data set, which tracks statewide human develop index measurements by state and race across the United States. The measurement is taken from the last reported life expectancy of Native Americans within a state. 14 out of the 26 states found in the random sample reported a figure within the last 10 years. The latest figure was used for each state. Each tribe within the given state received that life expectancy figure. For those tribes in states without a reported life expectancy, they were reported as having a measurement of 73, which is the average life expectancy of all Native Americans, Thus they were not helped or hurt by not having a measurement.

Education is measured by both the percentage of 25 year olds with high school degrees and the percentage of 25 year olds with bachelor degrees. The Human Development index utilizes literacy and school enrollments as a measure, but in the case of the United States these measures are unavailable or not informative. In order to participate in the US economy it is critical to have at least a high school degree and to advance in income a bachelor's degree as well. This measurement seeks to capture the tribal government's ability to provide high school level education and opportunities for higher learning. Both measurements are taken directly from the US Census 2010 ACS 5-year American Indian and Alaska Native Tables on Social Characteristics.

Family is measured by the divorce rate, which is the percentage of the population divorced, and the percentage of single parent households among all households. The divorce rate seeks to capture the lost financial and emotional benefits from failed marriages, which adversely affects both the parents and children. The institution of marriage "provides a wealth-generation bonus" through proving economies of scale and specialization<sup>23</sup>. Also "research has

---

<sup>23</sup> Philips, Alma. "The State of our Unions". National Marriage Project. n. page. Web. 2012



consistently shown that divorce and unmarried childbearing increase child poverty.”<sup>24</sup> Therefore the single parent household measurement captures a loss of capability of the children from lack of familial resources. Both measurements are taken directly from the US Census 2010 ACS 5-year American Indian and Alaska Native Tables on Social Characteristics.

### **Living Standards**

The Multidimensional Poverty Index is utilized by the United Nations to measure poverty internationally. Like the human development index it measures health and education, but also introduces a new set of indicators under the umbrella of “Standard of Living” instead of income. It measures whether or whether not an individual has access to sanitation, clean water, and electricity. It also looks at the household’s assets like its type of flooring, or whether or not they owns a TV, radio or refrigerator<sup>25</sup>. This study seeks to capture both access and housing assets to determine living standards for each tribe.

Housing assets covered by two measurements: occupants per room and lack complete kitchen sets. The former divides the number of occupants living within a house by the number of rooms within a house. The study takes the percentage of houses with 1.01 occupants per room or more. This measurement seeks to measure overcrowding in houses, which has a large effect on children’s development due to lack of parental attention, strained relationships, and ultimately educational performance<sup>26</sup>. Lack of complete kitchen sets measures the percentage of the population that do not have a sink with piped water, a range, and a refrigerator. This measure provides information on a lack of water and assets within the household. Both of these measurements are taken from the US Census 2010 ACS 5-year American Indian and Alaska Native Tables on Housing Characteristics.

Access seeks to measure a tribe’s access to infrastructure such as plumbing and telephones. Both measures take the percentage of the tribe’s population that lack access to plumbing and telephone service. Lack of sanitation from a lack of plumbing is a health risk because it increases communicable diseases. Lack of telephone service is a safety hazard as well

---

<sup>24</sup> See 23

<sup>25</sup> Alkire, Sabina , Adriana Conconi, and José Manuel Roche.” Multidimensional Poverty Index 2013: Brief Methodological Note and Results”. Oxford Poverty & Human Development Initiative. n. page. Web. 2013

<sup>26</sup> Kopko, Kimberly. “The Effects of the Physical Environment on Children’s Development”. Departments of Human Development and Design and Environmental Analysis, Cornell University. n. page. Web.

as an economic inhibitor. Both of these measurements are taken from the US Census 2010 ACS 5-year American Indian and Alaska Native Tables on Housing Characteristics.

### **How is the Index Calculated?**

The Tribal Development Index's calculations utilize the same formulas of the Human Development Index to aggregate individual indicators into an index. Each measurement is first put through this formula:  $Index = \frac{Value - \min}{\max - \min}$ , where min is the lowest value exhibited by a tribe and max is the highest value exhibited by a tribe. If a lower measurement reflects higher wellbeing (i.e. unemployment rate) then the index formula is subtracted from 1. The result is an index with no units associated with it. Then if the measurement has a paired measurement within the sub category like the Gini coefficient is paired with poverty rate in the inequality sub-category, the geometric mean is taken, which follows this formula:  $geometric\ mean = \sqrt{(Index1 * Index2)}$ . This result is again put through the index formula ( $Index = \frac{Value - \min}{\max - \min}$ ), where min is the lowest to make a sub-category score. The sub-category scores are then combined to make a total category score by taking the geometric mean of the two or three sub-category scores: *If 3 then,  $\sqrt[3]{(sub1 * sub2 * sub3)}$  or If 2 then,  $\sqrt{(sub1 * sub2)}$* . The overall score is then calculated by taking the geometric mean of the three categories:  $\sqrt[3]{econ * cap * ls}$ . The overall score will be used as the main dependent variable for a statistical tests moving forward.

### **Controlling for the Surrounding State**

The state in which a tribe is located has a large effect on economic wellbeing of a tribe because it determines the markets through which the tribe interacts. A tribe in California- median income of \$57,708- with a casino can draw a higher income consumer than a tribe in Arizona- median income \$46,780. In order to account for this effect within the data analysis each state is given a development score using the same exact equations of the tribal development index. Instead of using the goal post numbers of the highest or lowest performing state in each measure, the state scores use the tribal goal posts. This way the state's scores are relative to the tribes, rather just relative to each other. The tribe's overall score is then divided by the state overall score in order to get a state-controlled overall score. The state-controlled score is the tribe's percentage of development of their host state. For example the Crow Tribe of Montana has a overall tribe score of .415, while the state of Montana has a score of .709, so in order to get the state controlled score .415 is divided by .709 to get the number .586, which means the Crow Tribe of Montana has 58.6% of the overall development

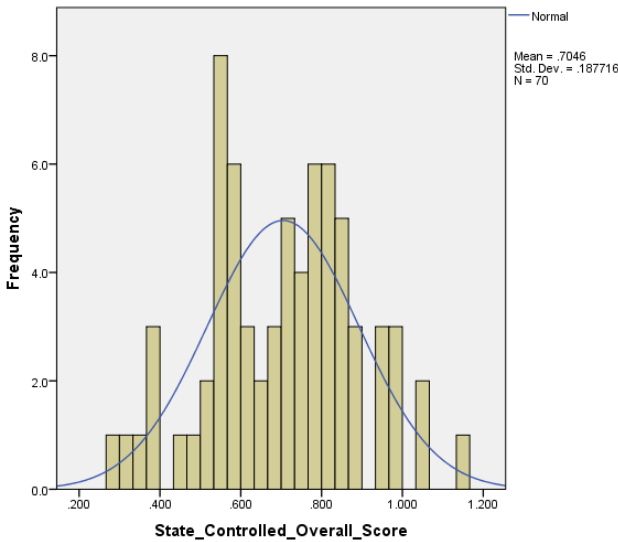
score of the state. The study uses the state controlled overall score in all of its statistical analysis and rankings of tribes.

### Dependent Variable Findings

This section will describe the findings of the index and analyze their relationship with the possible explanatory variables of factors of production endowment of land, labor and capital.

### Descriptive Statistics

Figure 5 Histogram of State Controlled Overall Score

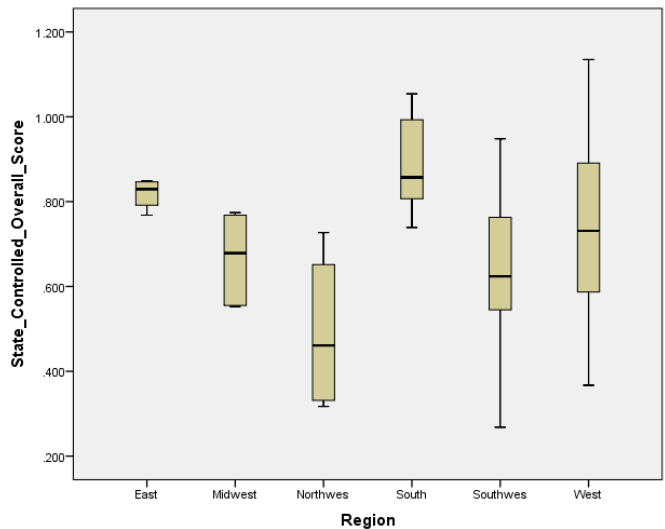


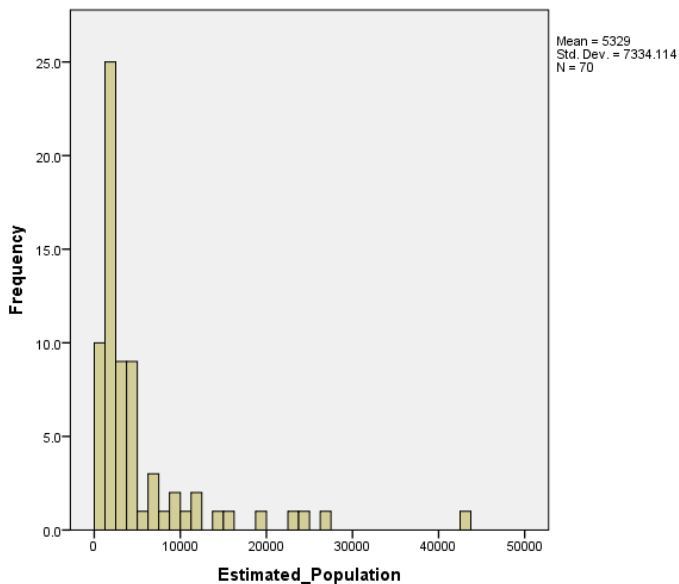
First it is necessary to get an overall idea of the random sample of 70 tribes under study. The state controlled overall score mean is .7046 with a standard deviation of .1877, which can be interpreted as saying that the average tribe is 70.46% as developed as their surrounding state with an 18.77% standard deviation. The maximum score was the Pala Band of Luiseño Mission Indians of the Pala Reservation with a score of 1.135 and the minimum score was the White Mountain

Apache Tribe of the Fort Apache Reservation with a score .286. A histogram of the data shows a bimodal distribution with peaks at .56 and .80. If one were to look at the data from a regional perspective it would show that the predominant majority of tribes in the sample are located west of the Mississippi. There is little difference between the mean scores of tribes west of the

Mississippi (.695) and those east of the Mississippi (.689). The tribes west of the Mississippi have a higher distribution in outcomes than the tribes east of the Mississippi, which can be seen in figure 5. This is important because it shows that the vast majority of tribes in the sample have a wide regional distribution, which means that region has little effect on the state controlled overall scores.

Figure 4 Regional Box and Whisker Plot



**Figure 6 Histogram of Estimated Population**

tribes in the sample have a small enough population size where it is possible for each member to know each other, which is an important aspect of a tight knit and cohesive community.

### **Possible Explanatory Variables- Factors of Production Endowment**

The classic models of economic development focus on an economy's lack of endowments of the factors of productions as a causal factor determining development. These factors of production are land, labor, and capital. The theory poses that economies with higher levels of factor endowments will have higher economic development. The analysis uses tribal population over 16 as a proxy for labor, tribal land in square miles as a proxy for land, and total tribal income (mean income multiplied by total population) as a proxy for capital.<sup>27</sup> A linear regression test shows that none of these endowments have a statistically significant positive correlation with the state controlled overall tribal development score:

---

<sup>27</sup> Tribal Land is determined by total square miles of tribal land and tribal trust land from US Census 2010 American Indian/Alaska Native/Native Hawaiian Areas Gazetteer Files. Labor is determined by population over 16 in 2010 ACS 5-year American Indian and Alaska Native Tables of Economic Characteristics. Capital is determined by mean income from the 2010 ACS 5-year American Indian and Alaska Native Tables of Economic Characteristics multiplied by the estimated population.

If one were to look at the sample from a population size standpoint one would see a left skewed histogram with most tribes having less than 500 members. The average tribe has a population of 5,329 members, while the median tribe only has 2,528 members. The Muscogee (Creek) Nation of Oklahoma has the largest population of the sample with 43,193 members and the Winnebago Tribe of Nebraska has the smallest population with 429 members. The population distribution shows that most

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.703	.027		26.268	.000
Land	-1.429E-005	.000	-.095	-.754	.454
Labor	1.672E-006	.000	.126	.793	.430
Capital	6.671E-012	.000	.007	.046	.963

a. Dependent Variable: State Controlled Overall Score

The lack of significant relationships from land, labor and capital shows that presence of factor endowments are not enough to guarantee development, but rather there is different explanatory variable: institutions. Institutions are the vehicles through which the factors of production are converted into economic activity and economic activity into development. The next chapter will discuss how institutions contribute to economic activity and provide public goods that raise the overall development of people.

## Independent Variables

This chapter will examine the political-economy theory behind legitimacy, property rights, accountability, and the rule of law and how these concepts interact with tribal collectivist societies. Each concept will have a series of independent variables used to measure different types of institutional designs and characteristics.

### Legitimacy

Max Weber described legitimacy as “the basis of every system of authority, and correspondingly of every kind of willingness to obey, is a belief, a belief by virtue of which persons exercising authority are lent prestige.”<sup>28</sup> According to Weber there are three main sources of legitimacy: legality, tradition, and charisma. Legality refers to faith in the rational reason of the law; tradition, faith in the customs and social order of the past; charisma, faith in the ruler<sup>29</sup>. Whether or whether not a system of authority has legitimacy determines whether or whether not the citizens or subjects of that system of authority have a political or moral obligation to obey the law. Tribal governments are unique in that they are based on both traditional and legal authority. The traditional authority is rooted in the sovereignty of the tribe and the traditional institutional designs of the tribal government. Such traditional institutional designs may include the utilization of clan or band structures in voting, or the use of traditional courts for dispute resolution, or the integration of hereditary positions into the government. Legal authority is derived from a rationally designed constitution and a set of formal institutional designs that dictate how an individual comes into a position and the specific authority of that position. Most tribes have constitutions that have formal rules for voting, and clear boundaries for each position in the tribal government. These rules can both codify tradition and establish new ways of governance.

The first and most important aspect of creating legitimate governance is establishing a sovereign tribe composed of members from a traditional collective entity. Tribal sovereignty is critical because it establishes the collective entity of the tribe. If other people, who are not traditionally part of the tribe are included, it divides the collective will of the tribe. The collective

---

<sup>28</sup> Weber, Max. *Economy and Society: An Outline of Interpretive Sociology*. Univ of California Press, 1978.

<sup>29</sup> See 28

will is best understood through the work of Rousseau. In Rousseau's conception of the state of nature in *A Discourse on the Inequality of Man*, man is not in a prisoner's dilemma, where the overriding incentive is to cheat others, but rather in a stag hunt situation. In the stag hunt situation both sides will benefit the most from cooperation, but may not out of distrust or lack of communication of intentions. This state of affairs resembles the actual incentives inherent in tribal societies. Hunter-gatherer, pastoralist, and horticulturalist societies all rely on collective cooperation rather than individual accomplishment to procure resources. The stag hunt problem is solved through a social contract among a community, where the general will of the community forces people to be free, which means it forces people to act towards collective will in order to gain the most collective good. Yet Rousseau limits the size and composition of a community to be small enough for everyone to know each other, one with a unity of origin, interest or convention, and lastly, "one in which unites the consistency of an ancient people with the docility of a new one."<sup>30</sup> In order for the general or collective will of the tribe to be effective it must have institutions through which it can be translated into law and policy.

Traditional institutional designs have the advantage of being uniquely adapted to the tribe, because they are the products of hundreds of years of small decisions by tribal members to solve small collective action problems that came up over time. They are well known and respected by the community because they have been ingrained through communal norms and values. Legal institutional designs have the advantage of creating big and synthesized formal mechanisms through which people can solve big collective action problems in real time. They allow people to organize and express their will in predictable and clear ways that spur change. Yet if these institutions are imposed from the outside without any connection to past traditions upon an entity without a traditional collective identity, than the government will fail to be legitimate. This is best illustrated through the example of the San Carlos Apache Tribe of the San Carlos Reservation<sup>31</sup>:

---

<sup>30</sup> Rousseau, Jean Jacques. *Social Contract & Discourses*. New York: E. P. Dutton & Co., 1913; Bartleby.com, 2010.

<sup>31</sup> Source of case study Record, Ian W. "Broken Government." (1999).  
[http://nnidatabase.org/db/attachments/text/1999\\_RECORD\\_broken\\_government.pdf](http://nnidatabase.org/db/attachments/text/1999_RECORD_broken_government.pdf)

**Case Study 1: San Carlos Apache Tribe of the San Carlos Reservation**

The San Carlos Apache Tribe of the San Carlos reservation is located in Arizona with an estimated population of 10,900 members. . It is ranked 61<sup>st</sup> out of 70 tribes in the tribal development index with a state controlled overall score of .523. The San Carlos Apache Reservation was not established in 1873 for a cohesive pre-white contact tribal nation, but rather it was a place to “consolidate the remaining non-reservation Apaches in a remote location.” In fact some of the original bands were enemies of each other with some bands fighting under the famed Geronimo and other bands serving as scouts for the US Army. The BIA directly ruled the tribe until 1934 IRA gave power to a newly formed tribal government. In the process of its rule it sought to destroy the traditional authority structures of the tribe in favor of a business committee composed of “English speaking Apaches and Yavapais amenable to their plans,” which later formed the core of the new IRA government. The IRA constitution gave complete power to the tribal council with little separation of powers between legislative and executive power. From 1934 to today the San Carlos reservation has seen a “pronounced degree of institutional instability” due to the failures of the constitution in addition to “clan divisiveness and familial factionalism” that contributes to a high turnover in tribal officials. Worst of all the tribe has been beset by corruption and in some cases violence, where the tribal law enforcement officers suppressed dissent from protests. A constitutional structure imposed without underlying traditional legitimacy only serves to benefit the individuals who use it for their own ends, rather than a united tribe with a collective identity and goal of advancement.

The San Carlos Tribe is not a lone example, but rather a common story among a myriad of tribes with imposed IRA constitutions that do not reflect the underlying traditions of the tribe or the collective make-up of the tribe. Yet a tribal constitution based solely on codified traditions has its problems as well. It lacks the predictability and logic of rationally designed system makes it vulnerable to abuse by unaccountable political elite. The Oneida Nation of New York provides an example of the failures of purely traditional government:<sup>32</sup>



### **Case Study 2: Traditional Constitution- The Oneida Nation of New York**

The Oneida Nation of New York utilizes the same governing structure today as it did before white contact. It is composed of three clans: turtle, wolf, and bear. Each of these clans chooses two male representatives, who by tradition are responsible for daily decisions, while clan mothers are in charge of long-term decisions. The advantages and disadvantages of a completely traditional government are best seen through the career of Ray Halbritter, who still leads the Oneida Nation as the Oneida Indian Nation representative since 1975 and Chief Executive since 1990. Supporters of “hail him as a great leader who has pulled his people out of poverty,” while his opponents “condemn him as an opportunist who has amassed a fortune at the expense of others.” A former ironworker, and graduate of Harvard Law School, Halbritter spearheaded the building of tribal casinos on Oneida land, which today bring in revenue from 200 to 400 million dollars a year. Halbritter himself has become a wealthy man in the process with some claiming he is a billionaire, which he denies. Critics say not all Oneidas have benefitted from the newfound casino wealth. Tribe members tell of receiving stipends of \$16,000 a year, “but only if Halbritter approves them.” Doug George-Kanentiio, the co-founder of the Native American Journalists Association, claims he “systematically strips” dissenting Oneida tribesmen of their membership and that “he answers to no one.” The traditional form of government has the advantage of strong legitimacy, but lacks the advantages of accountability and rule of law found in constitutional forms of government.

In order to test which types of constitutions better serve collectivist tribal societies, the study will code each constitution as either IRA imposed, traditional, or hybrid. IRA imposed constitutions are constitutions ratified under the IRA act during its original push from 1936 to 1947<sup>33</sup>. Traditional constitutions will include tribes without written constitutions or constitutions that are codifications of traditional institutions<sup>34</sup>. Hybrid constitutions are constitutions ratified after 1947, which contain both traditional and legal institutional designs.

<sup>32</sup> Source of case study Vargas , Theresa , and Annys Shin. “Oneida Indian Nation is the tiny tribe taking on the NFL and Dan Snyder over Redskins name”. Washington Post, November 16, 2014.

<sup>33</sup>List of tribes come from this 1947 BIA report on the IRA: Hass, Theodore. “Ten Years of Tribal Government Under I. R. A”. United States Indian Service. (1947)

## Property Rights

Property rights are a bundle of rights that determine access, withdrawal, exclusion, alienation, transfer, and/or control of a tangible or intangible resource. Such resources could be natural resources like copper, plots of land, artificial property like stocks, consumer items like clothes, or intangible resources like ideas and art. Property rights can be assigned to individuals, or collective entities like firms, organizations, or the state. Private property refers to a “regime in which no more than a small number of persons have access to a resource,” while public property is “when more than a small number” have access to a resource<sup>35</sup>. Private Property can be split into individual and household ownership. There are three types of public property: group, horde, and open-access. Group property “refers to ownership by a collectivity whose membership is larger than a household's but small enough to permit intermittent face-to-face interaction.” Land in which those given access are larger than a group, but not universal is horde property. Open-access refers to land regimes where privileges of entry are universal.

Property rights are established in order to avoid the Tragedy of the Commons. The underlying logic behind these problems are that individual's incentives when confronting common pool resources in an open access regime result in collectively inferior outcomes than if they established property rights. In the tragedy of the commons a group of people each have incentives to consume as much as possible of a common pool resource until it is exhausted, because they do not trust their counterparts to restrain. Property rights are designed to set rules of access that allow for a sustainable expropriation of a common pool resource, which over the long run will benefit each individual more than consuming as much as possible in the first place. There are three property rights strategies used to avoid the Tragedy of the Commons and achieve the greatest collective good: privatization, centralization, and common pool resource institutions<sup>36</sup>.

---

<sup>34</sup> This includes all Pueblo tribes in the sample, Tuscarora Nation, Oneida Nation, and Penescobat Nation

<sup>35</sup> Ellickson, Robert C. “Property in Land”. Yale Law Journal (1993): 1315-1400

<sup>36</sup> Ostrom, Elinor. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge university press, 1990. 8-11

### **Privatization**

Tribal social organizations are the results of geographic conditions that are inimical to private property rights. Such geographic rights include mountainous areas, deserts, vast plains, and dense forests. These types of regions can only support pastoralist or horticulturalist resource procurement systems without large-scale irrigation or forest clearing projects. Pastoralists require large tracts of land to shepherd their livestock, which makes marking individual boundaries prohibitive. Horticulturalists do not produce enough surplus from individual plots to support land investments or a substantial non-agrarian economy. Increase in parcel size would improve returns, but it would entail extensive irrigation or forest clearing, which individuals cannot procure on their own. Geography requires group organizations for pastoralists in order to mark boundaries and enforce rules on access to prevent over grazing, and for horticulturalists in order to provide capital for irrigation and forest clearance.

Another important area of property rights is to consider mineral rights, which are rights to natural resource extraction from a piece of land. In a private property system individual owners would hold ownership of the mineral rights underneath their land. Natural resource deposits tend to cover large amounts of area and are extremely capital intensive to extract. Thus they involve large amounts of landowners and require large amounts of capital, which could only be provided by a collective organization or outside firm/investor. In the latter case only the land owners of the natural resource would gain from selling their mineral rights, while the surrounding community would suffer from the associated externalities of resource extraction like pollution and environmental degradation.

Native American history provides an illustrative example of the inadequacies of private property systems providing development for tribal societies. The General Allotment Act, known as the Dawes Act of 1887 sought to 'assimilate' Native Americans into American society by making them into independent farmers, and breaking the social structure of the tribe. The act unilaterally dismembered each tribe's land into individual plots of 160 acres to each family or 60 acres to each individual. If the tribe did not have enough land for 160 acres each, then it was dispersed evenly with some families receiving as little as 10 acres. The 'surplus' land was then sold off or leased to white farmers and ranchers and such sales and rents would be held by the BIA in trust. The title to each allotment was held in 'trust', which prevented its sale and taxation in order to 'protect' the Native American land from White encroachment. Yet even this restriction was mostly rescinded by amendments in 1906 that gave the Secretary of the Interior

power to determine an allottee owner ‘competent’, and thus able to sell their land or be taxed. The result of the law was a humanitarian disaster that saw further impoverishment of Native Americans and a loss of over 90 million acres of land<sup>37</sup>. It was repealed in 1934 and generally “historians have concluded that the Dawes Act was a failure.”<sup>38</sup>

The Dawes Act failed primarily due to two reasons: Native American inability to farm the area due to social and geographic constraints, and the exploitation of white settlers. The law primarily applied to tribes in the West, who for centuries followed a pastoralist, subsistence farming and hunter gather resource procurement strategy due the environment of the West. The Southwest desert is unable to sustain agriculture without heavy irrigation. The Western plains originally had plenty of wild game in the form of buffalo herds until their near extinction late in the 19<sup>th</sup> century by white traders. The Indian Wars of the late 19<sup>th</sup> century also pushed tribes off more fertile land and forced them into the mountains and deserts. Before the allotment act the tribal land was held in common with men primarily focused on nomadic hunting and pastoralism, while women pursued subsistence farming. Thus when the Dawes Act allotted land to individual families and expected male head of households to till the land they lacked all the factors of production to make a successful economic enterprise. The land was inhospitable; labor had little to no experience or knowledge of farming; the dissolution of the tribe and lack of capital markets made capital non-existent. Thus whenever an allottee lost trust status to their land they soon were forced into bankruptcy from property taxes or they leased or sold the land to white settlers who had the expertise and capital to develop the land. Studies show that a tribe’s land allotment date was correlated with the demand from surrounding white settlers for the land in question<sup>39</sup>. White settlers quickly bought and leased the most fertile and natural resource rich tribal trust land from individual impoverished Native Americans or the federal government’s ‘surplus’ land, which created a checkerboard pattern of land ownership among Native American Reservations. Since the Dawes Act is a century old its effects would not be easily discernible in the data set based 2010 data, therefore this study will not develop an independent variable to measure it, but rather will judge it on its historical outcomes in the results and analysis section.

---

<sup>37</sup> Malmgren, Rachel, and Garrick Small, eds. *Indigenous Peoples and Real Estate Valuation*. Springer, 2008.

<sup>38</sup> Carlson, Leonard A. "The Dawes Act and the Decline of Indian farming." *The Journal of Economic History* 38, no. 01 (1978): 274-276.

<sup>39</sup> See 38

### **Centralization**

The centralization property rights strategy uses the power of coercion in order to alter individual incentives towards cooperation and more collective gain. The logic behind this strategy says that individuals have overriding incentives to defect or cheat, so there needs to be a centralized entity that will punish those who will defect. For example, a nation's oil deposits could be considered a common pool resource. Individuals/ individual firms all have incentives to buy a portion of land on top of the deposit and drill as much as quickly as possible before the deposit collapses in on itself. Yet, every individual will have the same incentives and thus the excessive drilling will not only glut the market reducing profits for all, but also reducing the total quantity of oil that deposit could have produced. Thus the logic of a centralized system says that all oil deposits should be nationalized or centralized under central governments control. The government will then control or regulate the extraction of oil in order to extract enough oil to maintain high prices and prevent the collapse of the deposit. The theory also posits that the central government will internalize the externalities of oil extraction to maximize the collective gain from the resource extraction. The central government also has the capital resources to make the necessary investments to extract a resource.

Elinor Ostrom identified problems with the central government approach in regulating or controlling common pool resource extraction. The central government lacks enough local knowledge to make efficient decisions. Instead of making rulings or laws on the ground with knowledge of the surrounding environment, and local populace conditions centralized entities make technocratic decisions based on theory and impersonal data from far away. Centralized institutions also require expensive administration and monitoring in order to enforce these rules. This monitoring has a high propensity of error due to a lack of local knowledge and legitimacy among the enforcers, who would be outsiders. Yet the worse and most destructive aspect of centralized control over resources is a lack of accountability to the people most affected by the resource extraction. Even in a democracy a surrounding population only makes up a small percentage of the overall electorate, which means the central government has no incentive to control externalities or distribute the gains from extraction fairly<sup>40</sup>.

In Native American history the BIA is the centralized institution that has controlled Native American resources in two ways: tribal trust land and paternalistic economic development schemes. Tribal trust land is the land that remained after a Tribe's land was allotted according to

the Dawes Act. This land remained under tribal ownership, but was in federal trust status, which meant that the BIA managed it for the ‘benefit’ of the tribe. This management takes the form of needing the approval of the Secretary of the Interior for all land use decisions and in some cases the leasing of trust land by the BIA without the consent of the tribe. The other form of centralized control is paternalistic economic development programs and schemes that from the 60s to the 80s the “United States has poured hundreds of millions of dollars into reservation economic problems” with “substantive progress on the economic front [proving] frustratingly elusive.”<sup>41</sup> Many tribes have become dependent on federal transfer programs and federally funded government services rather than enterprise led growth. Therefore in order to test how large the BIA’s presence is in a tribe’s economy, this study uses the percentage of the population who work for the federal, state, or local government. Higher percentage of public workers translates to higher numbers of tribal members who work for the BIA or the tribal government’s social programs<sup>42</sup>.

### **Common Pool Resource (CPR) Institutions**

Political-economist Elinor Ostrom in her Noble prize winning book “Governing the Commons” proposed a ‘third way’ that was neither privatization nor centralization, which have been the dominant paradigms for the last century of political-economic thought. She stated that property rights could be vested in local institutions, rather than free markets or central states. Through an empirical analysis of these type of institutions throughout history she isolated 6 features of successful CPR Institutions: 1) Clearly defined boundaries, 2) Appropriate rules take advantage of local knowledge, 3) community participation, 4) Monitors are accountable to appropriators, 5) Graduated sanctions, 6) Low enforcement and transaction costs<sup>43</sup>. Since the 1980s tribal governments have relied on CPR institutions called Tribal Business Enterprises to lead economic development. These institutions are similar to private corporate firms in organization and legality with the key difference that instead of paying dividends and reporting to shareholders they pay dividends and report to the tribal government. They use capital from the tribal government to develop tribal common pool resources and employ tribal members. Tribal Business Enterprises match Ostrom’s conception of successful CPR institutions.

---

<sup>40</sup> See 36

<sup>41</sup> See 7

<sup>42</sup> Percentage of private and public class of worker found in ACS 5-year American Indian and Alaska Native Tables of Economic Characteristics

<sup>43</sup> See!36

A tribe's boundaries can be both geographic and/or demographic. Geographically a tribe can lay claim to an area of land that has been traditional homelands of the tribe and are populated by mostly tribal members. This type of territory would encompass only rural or natural areas outside of major cities and large-scale agricultural development. As noted earlier, tribes typically occupy geographically isolated and inhospitable land, so through negotiation and surveys there can be a jurisdictional separation between major cities and intensive agricultural areas, which require different forms of political institutions more akin to Western precepts. Deserts, mountains, and dense forests do not support intensive economic activity, but tend to be rich in natural resources like mineral deposits, oil, lumber, and wild game. For example, the Ute Indian Tribe of the Uintah and Ouray Reservation and the Ute Mountain Tribe have significant oil deposits, while the Three Affiliated Tribes in North Dakota and Coeur d'Alene Tribe have deposits of rare earth metals.<sup>44</sup>

Tribes also have demographic boundaries as well because tribal membership is determined by lineage rather than geographic location. Giving membership rights to urban tribal members gives individuals both a cultural and financial tie back to their homeland. This benefit runs both ways with members investing money and returning home for cultural events as well as the tribe providing public goods like higher education and trade networks in urban areas. For example the Hopi Nation provides \$1500 per month stipend/scholarship to tribal members attending college with 3.5 GPA<sup>45</sup>. A fundamental problem in developing economies is a lack of trust, which results in ethnic specialization of trades. This is because tribal networks provide relationships and a community among geographically separated people, which gives individuals reputational incentives to be trustworthy. A possible business cheater would have to consider the social costs of cheating as well as the legal risks. For example the "Hausa in Ibadan, Nigeria, both own houses and broker long distance trade in cattle and koala nuts," so "if the brokers cheat their business partners...they leave behind valuable houses as hostages."<sup>46</sup> Tribal business enterprises can scale up larger than the typical family businesses in developing countries, while maintaining a sufficient level of trust to do business. Thus tribal entities are not dependent on a land base, but rather a vehicle through which people organize themselves to procure resources.

---

<sup>44</sup> Grogan, Maura . "Native American Lands and Natural Resource Development." Revenue Watch Institute. (2011).

<sup>45</sup> "Hopi Tribe Grants and Scholarships Program." Arizona Association of Student Financial Aid Administrators. Web. <<https://www.aasfaa.org/FNA/tribes/Hopi.html>>

Local knowledge not only includes knowledge of the environment, but also knowledge of the traditions and customs that have sustained that tribe for generations. Tribal enterprises can reflect traditional ways of life for economic benefit. For example the Pueblo of Taos maintains a traditional village, a UNESCO World Heritage Site, year-round to attract tourists. They sell local crafts, give tours, perform ceremonies, and educate the general public on their culture and way of life<sup>47</sup>. Tribal casinos reflect in their design and appearance the local tradition and customs of the tribe. Tribal cultural valuation of the environment and sustainability has led to investments in renewable energy. Tribal businesses both employ tribal members and their profits contribute to the general welfare of the tribe. Through the use of local knowledge, incorporation of traditions, employment of and benefit to the community, tribal businesses provide legitimate and fair economic activities.

Tribal Business Enterprises are also accountable to the people, whose resources they develop. Rather than far off shareholders or central government bureaucrats, the tribal enterprises are accountable to the tribal government, who are responsible for the externalities and the long-term sustainment of the resources being developed, which are incentivized to limit externalities and promote long-term sustainability of resources. For example, the Hopi tribe and Navajo Nation of New Mexico both prohibited the mining of uranium on tribal land out of concern for its environmental health effects. As legal entities similar to corporate entities they have the advantages of the firm to organize themselves in order to minimize transaction costs and enforcement costs according to market conditions and the specific resources they are developing.

In order to test the effectiveness of tribal business enterprises in contributing to tribal development this study will look at two variables: percentage of private workers, and the number of casinos the tribe owns.<sup>48</sup> Private workers are defined as those working for profit making enterprises, which includes tribal business enterprises. Therefore the higher percentage of private workers means the higher number of tribal members employed by tribal business enterprises and thus the higher percentage it has in the overall economy. The number of casinos in a tribe is an informative number because casinos can be considered a common pool resource and the tribal business enterprises that run them can be considered CPR institutions. At first glance casinos do not seem to be common pool

<sup>46</sup> Easterly, William, and William Russell Easterly. *The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good*. Penguin, 2006.

<sup>47</sup> "Taos Pueblo." World Heritage Centre List. UNESCO. Web.. <<http://whc.unesco.org/en/list/492>>.



resources, but in the case of tribal sovereignty in the federal system they are. In states where gambling is illegal tribal sovereignty grants each tribe within the state a possible monopoly power in their geographic area. This monopoly power is subject to the same tragedy of the commons as natural resources are. If individual tribal citizens were each able to open a casino within tribal territory, then the monopoly profits would quickly be decreased by competition, which would help the outlying outside consumer population at the expense of the tribe. Casinos are a common pool resource because exclusion of multiple sources tapping into this monopoly can be done through the tribe itself establishing its own casinos and outlawing the right of individual tribal members to build casinos. Casinos are established through tribal business enterprises and more casinos generally mean the tribe is making more profits from that enterprise. One would expect, that more profit from a common pool resource would naturally translate into more general benefits for the entire tribe, but this relationship is not necessary true all the time. If one were to look internationally at the areas of large oil deposits, one would find that the tribal people who either own or inhabit that land do not benefit from the common pool resource. One only needs to look at the indigenous tribes of Ecuador, the Shiite tribes of Saudi Arabia, and the Okonjo-iweala tribe of Nigeria to see the harmful effects of what is commonly called the ‘resource curse’ on the tribal owners of the land. Thus, if every member of the tribe benefits from casinos, then it would show that CPR institutions may defeat the resource curse.

### **Accountability**

Accountability refers to the institutional methods through which a person of authority gains or loses their position. Political actors rely on the support of others in order to gain or retain their offices. The necessary support to retain office may range from a few political elites to thousands of voters depending on the political institutions. Bruce Bueno de Mesquita, Alastair Smith, Randolph Siverson, and James Morrow in “The Logic of Political Survival” base their analysis on one core insight: a politician’s desire to stay in office motivates the selection of policies and the allocation of benefits<sup>49</sup>. Their *selectorate theory* focuses on a political leader’s necessary winning coalition, or their necessary support, needed to gain and maintain power. As noted in the section on legitimacy, a tribal government’s ability to reflect the collective will of the tribe is an important part of its legitimacy. As noted in the section on property rights CPR institutions also depend on accountability to the collective

---

<sup>48</sup> For percentage of private workers see 42; number of casinos comes from National Indian Gaming Commission list of Gaming Tribes Sorted by State

<sup>49</sup> Bueno de Mesquita, Bruce, James D. Morrow, and Randolph M. Siverson. *The Logic of Political Survival*. MIT press, 2005.

will in order for tribal business enterprises to have the incentives to limit externalities, promote sustainable resource development, and distribute the gains equally and fairly. Therefore in order to reflect the collective will of the people tribal institutions must require the largest possible winning coalition of tribal members. This section will first explore the general composition of tribal governments and the competing methods of electing legislative and executive tribal officials on the basis of collective accountability.

### **Tribal Government Composition**

The typical tribal government is composed of three branches: legislative, executive, and judicial. The legislative branch is composed of the tribal council, whose members are usually elected by the tribe, but in some traditional systems members are selected by their clans, or a special body of elders in the case of some Pueblo tribes. Tribal council members are usually elected by either a staggered vote by the entire tribe or a biannual vote by districts. The average number of council members in this random sample is 8.87, but the number varies depending on the population size of the tribe. The average term limit is 2.7 years with 2 years as the mode. In the model IRA constitution imposed on many tribes there is no separation of powers between the legislative and executive branch. The executive takes the form of the chairman of the tribal council and is elected by the council like a CEO is elected by a board of directors. In other tribal constitutions the tribal executive is elected by popular vote of the tribe and is in charge of the tribal government bureaucracy. The tribal executive chairs the tribal council, but can only vote on tie breakers. The average term is the same as tribal council members.

### **Legislative Elections**

The two competing methods for legislative elections are biannual voting by district or staggered voting by the entire tribe. The former entails arbitrarily dividing the population into equal parts and then electing a representative for that district every two or four years. This is an individualistic Western institution because it incentivizes representatives to focus on their part of the whole instead of the welfare of the collective whole. Representatives are beholden to the interests of a small geographically contiguous constituency, which forces them to only propose policies that will benefit their district, and fight policies that may harm it. In a individualistic settled society this is beneficial because it insures public good procurement, where all benefit like defense, and a fair share of particular public goods from political horse trading, but it slows down the collective will when one district needs to bear costs for the collective benefit. District

voting is also subject to gerrymandering, which matches candidates to voters, rather than voters to candidates. Staggered voting by the entire tribe entails an election of a fraction of council member every year. It allows for annual elections that don't completely turn out experienced councilmen based on a bad year, but communicate the same voter displeasure to politicians. The collective will is always exerted on tribal council members, whether through competing in elections or observing the results of other's elections.

In addition to continuously reflecting the collective will of the tribe, staggered elections also produce a larger winning coalition necessary for election. Suppose a tribal council consists of 7 members, 6 councilmen and 1 separately elected chairman. In an annual 1/3 staggered election 2 members of the council would be up for election for the entire tribe. Therefore there would be 4 candidates up for election, which means in order to be elected a candidate would realistically need at least 26% of the vote assuming the vote parcels out evenly. A district voting system would have all 6 members up for election in electorates consisting of 16.6% of the population. A 51% minimum margin of victory only requires 8.3% of the electorate. Factoring in voting turnout the staggered system requires winning coalition of 13% of the population, while a district voting system requires 4.15% of the population. In a tribe with only 1,000 members that means in order to be elected by district voting a candidate would only need the support of 42 people, which could easily be the size of an the candidate's extended family and friends. A candidate seeking election by staggered vote would require over 130 members of the tribe for support. Therefore this study analyzes and codes all of the constitutions of the tribes in the random sample in order to answer the following question: are tribal council members elected by district voting or the entire tribe<sup>50</sup>.

### **Executive Elections**

The two competing methods of election are between the tribal council electing the tribal chairman by majority vote or the entire tribe electing the tribal executive by popular vote. The former method of election is specifically a individualistic western approach to governance rather than collectivist, because it relies on majoritarian and elitists principles, rather than consensus principles. Locke favored a government composed of representatives of the people, who would vote in their interests. This elected body of political elites would then have discretion to pass

---

<sup>50</sup> Tribal Constitutions original documents came primarily from the National Indian Law Library (NILL), The University of Oklahoma Law Library, and the Tribal Court Clearinghouse

laws by majority vote. Therefore in this conception the tribal chairman is the leader of this representative body who controls the majority of the body like a prime minister or CEO. The collectivist tribal approach to governance favors consensus over majoritarian principles<sup>51</sup>. In this conception the tribal executive is a consensus builder directly accountable to the people, rather than a leader of the majority faction. Rather than majority voting power, the tribal executive has agenda power, which allows them to guide discussion in the council to a consensus, rather than pass laws at the expense of the loyal opposition.

In addition to promoting consensus principles, electing tribal executives by popular vote requires significantly larger winning coalitions to gain and retain office. As the tribal council chairman and administrator of the tribal government the tribal executive has agenda setting and administrative power, which could be used to both provide public goods in the form of government services and private goods in the form of patronage jobs. Thus it is important to make sure the tribal executive depends on a large winning coalition. If it is assumed the tribe uses runoff elections where the candidate or incumbent must have at least 50% of the eligible vote to gain or survive in office, then assuming only half the population votes in the election the winner would require a winning coalition of at least 25% of the total population of the tribe. Such a winning coalition would be too large to pay off with just private goods, so the tribal executive would have to focus on public good provision. In the second option the tribal executive is indirectly elected through the popularly elected tribal council. This method of election dramatically shrinks the winning coalition to just a handful of people. Although the councilmen are directly accountable to the people, the tribal executive has a better chance of concentrating private goods on a couple of individual council members in order to maintain power than 25% of the tribe, which usurps the collective will of the tribe for the particular will of the tribal chairman. For Rousseau, when the particular will usurps the general will, it results in the loss of sovereignty, and thus the loss of legitimacy for the government. Therefore this study analyzes and codes all of the constitutions of the tribes in the random sample in order to answer the following question: is the tribal executive elected by the tribal council by majority vote or by popular vote of the tribe<sup>52</sup>.

---

<sup>51</sup> Lemont, Eric D., ed. *American Indian Constitutional Reform and the Rebuilding of Native Nations*. University of Texas Press, 2009

<sup>52</sup> See 51 for tribe constitution sources

## Rule of Law

Rousseau and Kant define the rule of law as the replacement of the personal arbitrary rule of one person with the legitimate rules and laws dictated by the general or collective will. The first section on legitimacy spoke to the importance of a unified collective will as the basis for legitimacy. The second section on property rights spoke of the institutions that translate collective resources into collective economic activity and development. The previous section described institutional designs that are accountable to the collective will. The institutions under study in this section describe institutions that enforce and interpret the rulings and laws of the collective will in order to prevent the arbitrary personal rule of others. These institutions are commonly referred to as the justice system, which is composed of the police who enforce the collective will and the courts, who interpret the collective will on a case by case basis. Justice refers to the fair rulings or interpretation of law according to a society's traditions, norms, and values. Collectivist tribal societies and individualistic settler societies have different paradigms for determining justice. The former paradigm is collectivist, which is based on a "holistic philosophy" that focuses on "a circle of justice that connects everyone involved with a problem or conflict on a continuum, with everyone focused on the same center."<sup>53</sup> The center refers to the underlying issues that need to be resolved for the individuals and community to have peace and harmony. The latter paradigm is personal, which is based on a "retributive philosophy that is hierarchical, adversarial, punitive, and guided by codified laws and written rules, procedures, and guidelines."<sup>54</sup> It is premised on the notion that criminals are bad people, who are personally responsible for their actions. The justice system serves to first determine guilt, and then punish the criminal to deter others, and for societal revenge purposes. These alternate paradigms of justice require different types of institutions to enforce and interpret the laws justly and not arbitrarily.

---

<sup>53</sup> "Indigenous Justice Systems and Tribal Society." National Institute of Justice. Office of Justice Programs, n.d. Web. <<http://www.nij.gov/topics/courts/restorative-justice/perspectives/Pages/indigenous-tribal.asp&xgt;>.

<sup>54</sup>See 54

### **Police Provision**

Just enforcement of laws in collectivist tribal societies requires the adherence to two principles in determining provision of police: collective accountability and local knowledge. Collective accountability reduces the chances of corruption, which is a pervasive problem in developing countries. Police will set up road blocks or seize property in order to demand bribes. In some places the “police themselves rob the poor or are in cahoots with the criminals.”<sup>55</sup> The problem of corruption increases as the distance of chain of command increases between the policeman and the public officials in charge of them. This is because the public official must delegate tasks, which means they “lose control and now suffer from asymmetric information with respect to these ‘intermediaries.’”<sup>56</sup> The police now have discretion as to whether to report misbehaviors of the population or their own misbehaviors. The greater number of intermediaries, the greater the problem. Local institutions not only drastically decrease the numbers of intermediaries, but also increase the number of people the police are accountable to. In a centralized system each individual police officer is only legally accountable to their immediate superior, but in the case of local institutions each police officer is socially accountable to each member of the community. If they were to engage in corruption, then the community could socially punish the police officer by ostracism. Corrupt police officers impose their own arbitrary personal rule on the population, rather than the collective will of the laws.

Local knowledge is needed in order to engender trust within the community, and to be more accurate in catching law violators. Police work requires extensive communication with and knowledge of the local population. The former is needed to get tips on possible violations or to collect witness testimony to find the perpetrator. Trust is a critical need for if the people do not trust the police they will not help the police, and may even actively oppose them. Lack of trust will especially be a problem if the policeman is of another ethnicity. Local knowledge of the community is also critical in picking out regular violators from the crowd. An outsider will have a hard time differentiating between the civilian population, while a member of the community personally knows the character and past behaviors of all its members. Having better knowledge not only increases the odds of successfully catching violators, but decreases the chances of mistakenly punishing an innocent person, which engenders distrust and enmity

---

<sup>55</sup> See 46

<sup>56</sup> Abhijit Vinayak Banerjee, Roland Benabou, and Dilip Mookherjee, Editors. *Understanding Poverty*. New York: Oxford University Press. 2006.

among the local population. Collective tribal societies rely on everyone to enforce the collective will, rather than an impersonal police force divorced from the community.

These two principles together holds that the police must be answerable to the tribal government rather than an outside agency controlled by centralized authorities like the BIA or FBI, or unaccountable neighboring settler institutions like state or local government police forces and be composed of tribal members to take advantage of local knowledge. Therefore this study utilizes a 2002 Bureau of Justice Statistics Survey on tribal justice systems to answer the following question: does the tribe utilize primarily tribal police or outside sources for police provision? Outside sources include the BIA, FBI, State police, and local police. If a tribe uses only tribal police and one other outside source, than it is determined to primarily use tribal police. If a tribe utilizes two or more outside sources for police provision than it is coded as primarily using outside sources.

### **Court Systems**

Different paradigms of justice result in different types of institutional designs or court systems. Western individualistic court systems are based on impersonal procedures and guidelines designed to assess guilt and assign appropriate punishment based on previous precedents or law. Such institutions are necessary in settler and urban societies due to the lack of personal contact and communal cohesion in everyday life. The impersonal market system requires an impersonal and predictable system that enforces contracts between people without any personal relations. Retributive justice provides predictable deterrence, which alters individual's incentives to cheat on their agreements. For human security matters the state serves as Hobbes' Leviathan, who punishes those who transgress the laws that protect the collective security of the polity. The primary purpose of individualistic western court systems is to solve the prisoner's dilemma problem by deterring transgressions of contracts and laws through retributive justice that imposes costs on deleterious behavior.

Individualistic Western formal court systems are ineffective when applied to collectivist tribal societies. Traditional justice systems are based on reparative or restorative justice, which seeks to repair or mend personal and communal relationships. It is based on the stag hunt game, where a defector only defects out of a lack of trust or communication with their counterpart. Therefore in order to reestablish trust and justice "it is essential for the offender to make amend through apology, asking forgiveness, making restitution, and engaging in acts that demonstrate a

sincerity to make things right.<sup>57</sup> Tribal justice systems today based on traditional tribal justice utilize varying combinations of family and community forums, traditional courts, quasi-modern and modern tribal courts. Peacemaker courts are an illustrative example of traditional courts<sup>58</sup>:

### **Case Study 3: Peace Making Courts- Stockbridge Munsee Community**

The Peacemaking Court is intended to “provide formal support, structure and enforcement to traditional Mohican methods of resolving disputes through mediation and the use of traditional ways.” The courts rules are to be interpreted liberally and informally with the goal of “providing a fair, informal, inexpensive and traditional means of resolving disputes.” The guiding principles for the court are harmony, non-coercion, community health, and sacred justice. The peacemaking system works through first both parties of the dispute agreeing to use a peacemaker instead of the tribal court system. Then a tribal judge appoints a peace maker, who can be any member of the tribe over 35 years old with a reputation of honesty and integrity among the community. The peacemaker will then have the power to: 1) mediate disputes, 2) use tribal religious or other traditional ways of mediation, 3) instruct or counsel individuals on traditional tribal teachings or values relating to the dispute, 4) encourage participation of people affected by the dispute, and 5) use any means consistent with the principles in order to resolve the dispute. The peacemaker does not have the authority to decide a disputed matter unless both parties agree to such authority.

The modern tribal court system originated with the BIA, which had BIA local agents or favored Indians provide law and order. In 1883 the Secretary of the Interior established the Courts of Indian Offenses, which provided local BIA agents “with guidelines for court organization and a limited criminal and civil code.<sup>59</sup>” The centrally controlled courts not only did not reflect the norms and traditions of the local Native American populations, but actively sought to undermine and eradicate them. When the BIA commissioner proposed the court system to the Secretary of the Interior in 1882, he wrote that its purpose was to repress religious practices deemed as “heathenish rites” and to “destroy the tribal

<sup>57</sup> See 54

<sup>58</sup> Source of Case Study is Chapter 4 of the Stockbridge-Munsee Tribe’s code, titled “Stockbridge-Munsee Tribal Law Peacemaker Ordinance” from the Native American Rights Fund (NARF)

<sup>59</sup> Brandfon, Fredric. "Tradition and Judicial Review in the American Indian Tribal Court System." *UCLA L. Rev.* 38 (1990): 991.



relations as fast as possible.”<sup>60</sup> Following the passage of the IRA, tribal governments began to establish their own tribal courts or take over the local Courts of Indian Offenses. Modern tribal courts “mirror American courts” with law trained judges that handle “criminal, civil, traffic, domestic relations, and juvenile matters and are guided by written codes, rules, procedures, and guidelines.”<sup>61</sup> Yet some tribes incorporate indigenous justice methods as an alternative resolutions process “for matters that are highly interpersonal, either as a diversion alternative, as part of sentencing, or for victim-offender mediation.”<sup>62</sup> Therefore this study utilizes a 2002 Bureau of Justice Statistics Survey on tribal justice systems to answer the following question: does the tribe only use modern tribal courts or does it incorporate traditional justice methods as an alternative resolution process? Traditional justice methods include traditional forums, and peacemaking courts<sup>63</sup>.

---

<sup>60</sup> NiiSaka, Clara. " "Indian courts" a Brief History." Native American Press/ Ojibwe News. Maquah, n.d. Web. <<http://www.maquah.net/clara/Press-ON/01-06-15-courts.html>>.

<sup>61</sup> See 54

<sup>62</sup> See!54!

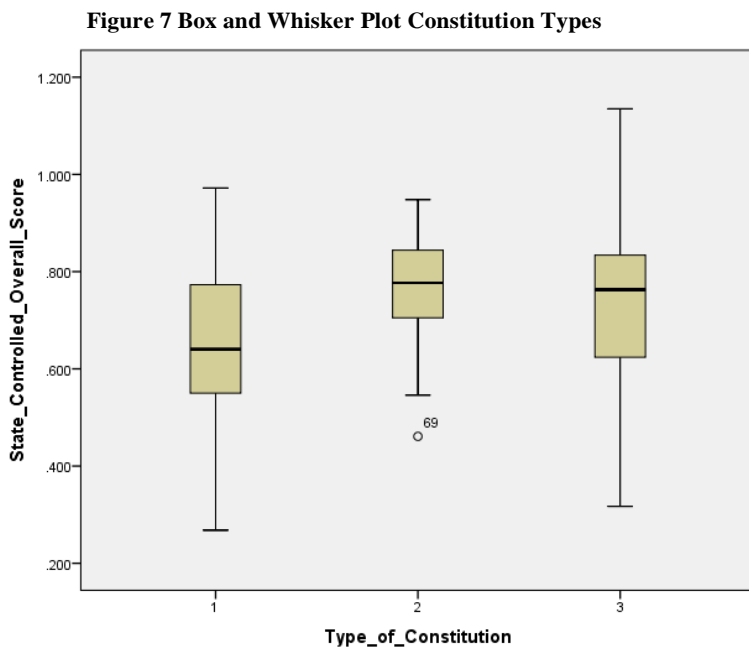
<sup>63</sup> If tribe did not answer survey, than presence of traditional or peacemaking court determined by accessing the tribe's government website

## Results and Analysis

This chapter will first present the results of a series of statistical tests designed to show statistically significant differences in state controlled overall tribal development scores between competing institutional designs (Independent Sample T-Tests), and to show relationships between institutional design quantitative proxies and state controlled overall tribal development scores (Linear Regression Tests). It will present such findings in the same sections and order as the independent variables were presented in the previous chapter. After presenting and analyzing the findings for each section, the chapter will conclude with a holistic statistical test of the findings all taken together.

### Legitimacy

The distribution of constitutional designs shows that Hybrid constitutions outperform both IRA and traditional constitutions. One can see from figure 7 that IRA constitutions have a lower



distribution (#1) and mean (.646) than traditional constitutions (#2) (.745) and hybrid constitutions (#3) (.756) respectively. Traditional constitutions have a similar mean to hybrid constitutions, but an independent T-Test that compares the means of hybrid constitutions with the combined means of IRA and traditional constitutions shows hybrid constitutions have a statistically significant higher mean than both:

**Group Statistics**

	Hybrid Constitutions	N	Mean	Std. Deviation	Std. Error Mean
State Controlled Overall Score	Yes	29	.75603	.190103	.035301
	No	41	.66822	.179478	.028030

		t-test for Equality of Means						
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
State Controlled Overall Score	Equal variances assumed	1.968	68	.053	.087815	.044628	-.001238	.176868
	Equal variances not assumed	1.948	58.233	.056	.087815	.045076	-.002407	.178037

If the test were done in reverse, where the mean of traditional constitutions are compared with the combined means of hybrid and IRA constitutions the statistically significant finding does not hold:

**Group Statistics**

		Traditional Constitutions	N	Mean	Std. Deviation	Std. Error Mean
State Controlled Overall Score	Yes		9	.74567	.154052	.051351
	No		61	.69854	.192532	.024651

		t-test for Equality of Means						
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
State Controlled Overall Score	Equal variances assumed	.700	68	.486	.047126	.067278	-.087126	.181377
	Equal variances not assumed	.827	12.027	.424	.047126	.056961	-.076951	.171202

Therefore it is at least safe to conclude that hybrid constitutions outperform IRA constitutions, while it is inconclusive whether or not hybrid constitutions outperform traditional constitutions. This result supports the theory that imposed institutions that do not reflect underlying tradition lack legitimacy, and therefore result in lower tribal development.

## Property Rights

### Centralization

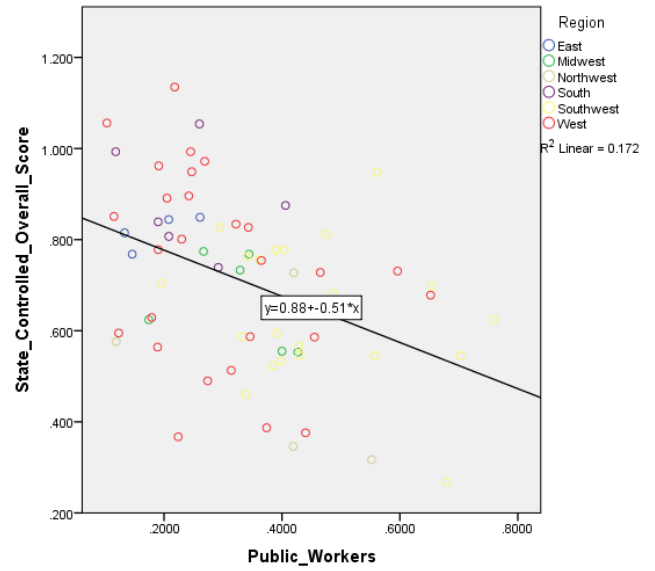
The first test for this section seeks to identify a relationship between the proxy for centralized control or influence within a tribal economy, percentage of public workers in the tribal economy, and the state controlled overall tribal development score of the tribe. The linear regression test shows a statistically significant moderate negative relationship between the percentage of public workers in a tribe’s economy and its state controlled overall tribal development score:

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.415 <sup>a</sup>	.172	.160	.172074

a. Predictors: (Constant), % of Public Workers

**Figure 8 Relationship between %'Public Workers and Development**



**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.878	.051		17.358	.000
	Public Workers	-.507	.135	-.415	-3.757	.000

a. Dependent Variable: State Controlled Overall Score

This result supports the theory that centralized paternalistic economic control does not only not result in tribal development, but actually is a hindrance to development. This finding could be interpreted in reverse as well, for it could be argued that lack of development draws in federal transfer funds and BIA economic development schemes. Yet the fact that the federal government has been investing in these schemes since the 1960s without major self-sustaining effect shows that the tribes who break federal dependence perform better.

### CPR Institutions

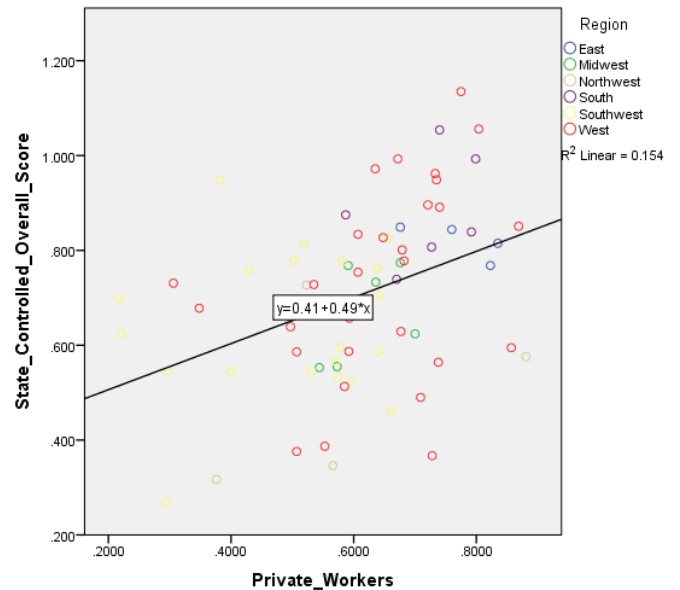
In order to identify the presence of Tribal Business Enterprises in a tribe’s economy the study uses two proxy numbers: percentage of private workers and the number of casino’s the tribe operates. A linear regression test that uses both proxies as independent variables, and the state controlled overall tribal development score as the dependent variable results in a statistically significant moderately positive relationship:

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.481 <sup>a</sup>	.231	.208	.167056

a. Predictors: (Constant), Casinos, Private Workers

**Figure 9 'Relationship between % Private Workers and Development**



**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.399	.083	.281	4.794	.000
	Private Workers	.430	.134	.347	3.196	.002
	Casinos	.028	.011	.281	2.586	.012

a. Dependent Variable: State Controlled Overall Score

This result supports the theory that common pool resource institutions are the best performing property right regimes for producing overall tribal development. The casino result especially shows that CPR institutions are effective at converting a common pool resource into general welfare, rather than just benefitting elites, which is critical for many developing countries rich in natural resources, but mired in the resource curse. A case study of how the Seminole Tribe of

Florida converts their casino success into the general welfare of the tribe illustrates the institutional mechanisms that explain this result<sup>64</sup>:

#### **Case Study 4: CPR Collective Benefits- The Seminole Tribe of Florida**

The Seminole tribe has found tremendous economic success in tribal business enterprise in the entertainment, tourist, and agricultural industry. How does their politics translate that economic success into general welfare? Distribution of tribal enterprise profits are done in three ways: per capita payments, public good provision, and diversification. Per capita payments are distributed to each member of the tribe to insure a basic standard of living out of poverty for each tribal member. This type of distribution reflects past Seminole traditions of evenly splitting game caught by hunters among all families, rather than the hunter owning the prize solely. Next the tribe provides public goods to its members in the form of universal healthcare, educational scholarships, cultural events, and infrastructure. Finally the tribe provides diversification by investing in new lines of revenue besides casinos in order to employ tribal members, insure future revenue flow, and reduce risk of reliance on one industry. This ability to translate tribal wealth into collective well-being is derived from Seminole culture and politics. In Seminole culture people “despise the man who lives rich,” but rather measures how rich you are “by how much you share.” Thus politicians seek to get elected by promising more sharing of the wealth. Tribal officials are cultural expected to share not only the tribe’s wealth, but their individual wealth as well. For example at community meetings tribal officials always distribute prizes, and are expected to pick up the tab of a tribal member if they happen to be in the same restaurant. This culture translated into politics when the tribe impeached longtime tribal chairman James Billie (elected in 1979) in 2001 for “lining his own pockets and letting power get to his head.” A tribal culture of sharing in conjunction with accountable government translates economic success into collective development and increased welfare.

<sup>64</sup>Cattelino, Jessica R. *High Stakes: Florida Seminole Gaming and Sovereignty*. Duke University Press, 2008

## Accountability

### Legislative Elections

In order to compare the performances of the 43 tribal governments who elect their tribal council members via staggered elections by the entire tribe with the 22 tribal governments who elect their tribal council members via biannual elections by district, the study will compare the means of each group using an independent samples t-test<sup>65</sup>. The results of the test on all tribes in the sample show a higher mean for the former method, but not at a statistically significant level:

	District or Tribe	N	Mean	Std. Deviation	Std. Error Mean
State Controlled Overall Score	District	22	.66859	.200374	.042720
	Tribe	43	.71686	.171704	.026185

		t-test for Equality of Means						
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
State Controlled Overall Score	Equal variances assumed	-1.013	63	.315	-.048270	.047645	-.143481	.046942
	Equal variances not assumed	-.963	37.123	.342	-.048270	.050106	-.149783	.053244

Yet if one were to use the same test on tribes above the median population, than the result is statistically significant:

	District or Tribe	N	Mean	Std. Deviation	Std. Error Mean
State Controlled Overall Score	District	18	.65917	.184015	.043373
	Tribe	16	.76563	.135213	.033803

<sup>65</sup> 5 Traditional governments were excluded from test due to non-applicable election procedures

		t-test for Equality of Means						
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
State	Equal variances Controlled assumed	-1.901	32	.066	-.106458	.055995	-.220516	.007599
Overall Score	Equal variances not assumed	-1.936	30.973	.062	-.106458	.054990	-.218614	.005698

This result matches the logic expressed in the corresponding section on accountability in legislative elections in the chapter 2 on independent variables. The theory hypothesizes that the election system needs the greatest possible number of tribal members in the winning coalition to gain or retain office in order for the legislator to have the incentive to consider the collective will over their family's will or district's will. The abstract example shows that with a 1,000 member tribe with tribal council of 6 members the former method needs almost 100 more tribal members in the winning coalition than the latter. If one were to reference the population distribution of tribes in the sample at the end of chapter 1, one would see that the population size increases exponentially after the median tribe from 2,668 members to 43,193 members. So if the tribe's population is 44,000 instead of 1,000 members, that means the former method needs almost 4,000 more tribal members in the winning coalition than the latter. Thus the former method's advantage increases exponentially with the increase in population size of the tribe, assuming that the number of council members increase exponentially as well<sup>66</sup>.

### Executive Elections

In order to compare the performances of the 42 tribal governments who elect their tribal executive via popular tribal elections with the 22 tribal governments who elect their tribal executive via majority tribal council vote, the study will compare the means of each group using an independent samples t-test. The results of the test on all tribes in the sample show a higher mean for the former method at a nearly statistically significant level:

	Executive Election	N	Mean	Std. Deviation	Std. Error Mean
State Controlled Overall Score	Council	28	.66404	.167352	.031627
	Tribe	42	.73164	.197448	.030467

<sup>66</sup> A linear regression shows a strong ( $r=.511$ ) positive linear relationship between tribe population and council members, but not a cubic relationship.



**Group Statistics**

		t-test for Equality of Means						
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
State Controlled	Equal variances assumed	-1.489	68	.141	-.067607	.045399	-.158200	.022986
Overall Score	Equal variances not assumed	-1.540	64.044	.129	-.067607	.043914	-.155335	.020121

Yet if one were to use the same test on tribes below the median population, than the result is statistically significant:

**Group Statistics**

		Executive Election	N	Mean	Std. Deviation	Std. Error Mean
State Controlled	Council		17	.6351	.19174	.04650
Overall Score	Tribe		18	.7614	.21090	.04971

		t-test for Equality of Means						
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
State Controlled	Equal variances assumed	-1.851	33	.073	-.12639	.06826	-.26527	.01249
Overall Score	Equal variances not assumed	-1.857	32.957	.072	-.12639	.06807	-.26488	.01211

This result also matches the logic expressed in the corresponding section on accountability in legislative elections in the chapter 2 on independent variables, but in the reverse of the above section. In this case the winning coalition according to the assumptions of the abstract example in chapter 2 will always be 25% of the population. Therefore as the population increases exponentially, the winning coalition experiences increasing decreasing marginal returns on each added member of the winning coalition. For example the increase of the winning coalition in a 1,000 member tribe from 250 to 251 has a large effect than the increase in the winning coalition in a 10,000 member tribe from 2,500 to 2,501. Therefore one would expect a larger institutional effect of this institutional design in tribes below the median population size

## Rule of Law

### Police Provision

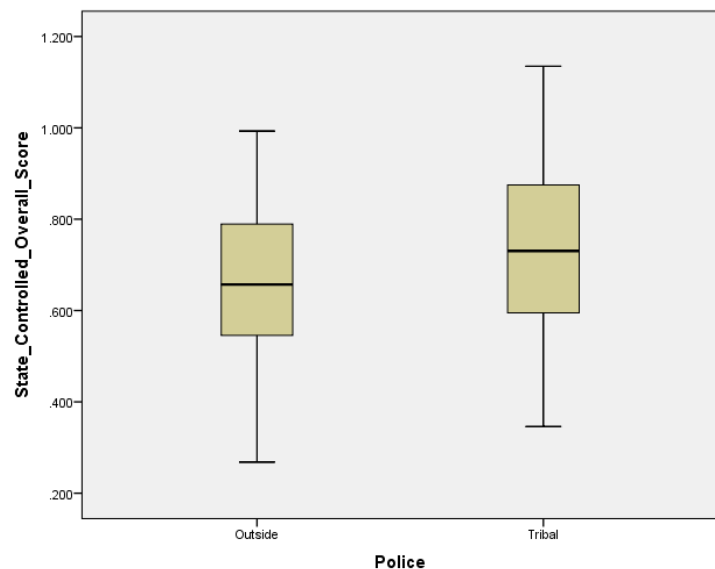
In order to compare the performances of the 30 tribes who primarily use tribal police with the 35 tribes who primarily use outside sources of police, the study will compare the means of each group using an independent samples t-test<sup>67</sup>. The results of the test show a higher mean for the former method at a statistically significant level:

Group Statistics					
	Police	N	Mean	Std. Deviation	Std. Error Mean
State Controlled Overall Score	Tribal	30	.74537	.202295	.036934
	Outside	35	.66089	.177093	.029934

		t-test for Equality of Means						
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper	
State Controlled Overall Score	Equal variances assumed	1.795	63	.077	.084481	.047052	-.009545	.178507
	Equal variances not assumed	1.777	58.195	.081	.084481	.047541	-.010676	.179638

This result supports the theory that tribes who primarily use their own tribal police, rather than outside sources will more effectively serve the community and assist in tribal development. This finding could be challenged with the reverse argument that only rich tribes can provide tribal police, therefore the question is biased. Yet if one were to look at the distribution of each category (Figure 10) one would see that the poorest

Figure 3 Police Provision Box and Whisker Graph



<sup>67</sup> 5 Tribes (Crow Tribe of Montana, Haliwa-Saponi Tribe, Onieda Nation of New York, Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation, and the Seneca Nation of New York) did not answer the tribal police survey questions in the data set

tribe in primarily tribal police distribution is within the bottom quartile of the primarily outside source distribution. Thus over 75% of the outside source tribes can afford primary tribe police provision.

### Court Systems

In order to compare the performances of the 19 tribes who use traditional courts solely or in conjunction with tribal courts, with the 42 tribes that solely use modern tribal courts, the study will compare the means of each group using an independent samples t-test<sup>68</sup>. The results of the test show a higher mean for the former method at statistically significant level:

**Group Statistics**

	Types of Courts	N	Mean	Std. Deviation	Std. Error Mean
State Controlled Overall Score	Traditional	19	.76058	.136053	.031213
	Tribal Court	42	.68088	.200083	.030874

		t-test for Equality of Means						
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
State Controlled Overall Score	Equal variances assumed	1.576	59	.120	.079698	.050579	-.021511	.180907
	Equal variances not assumed	1.815	49.606	.076	.079698	.043902	-.008500	.167896

This result supports the theory that institutions that utilize restorative and reparative justice perform better in tribal collectivist societies than institutions based on retributive systems.

<sup>68</sup> 7 tribes did not respond to the Justice System and upon further research did not have a tribal court system

## Holistic Study

The final statistical test seeks to test whether or not the presence of collectivist institutions identified by the study predicts tribal economic development. The independent variable for this test is an index of institutional designs. Collectivist institutional designs receive a score of 2; individualistic institutional designs receive a score of 1; and unknown institutional designs due to coding non applicability or missing data receive a score of 1.5. Collectivist institutional designs are hybrid traditional and legal constitutions (legitimacy), common pool resource institutions (property rights), legislative elections by the entire tribe (accountability), executive elections by popular vote (accountability), tribal police provision (rule of law), and traditional court systems (rule of law)<sup>69</sup>. Individualistic institutional designs are IRA imposed constitutions (legitimacy), private or centralized property rights (property rights), legislative elections by district (accountability), executive elections by tribal council (accountability), outside police provision (rule of law), and formal tribal court structures (rule of law) respectively. The institutional design scores are then added up into a total index score. A linear regression test with the institutional design index as the independent variable, the state controlled overall tribal development score as the dependent variable, and the tribe's factor of production endowments as control variables shows a statistically significant strong relationship between collectivist institutional designs and tribal development:

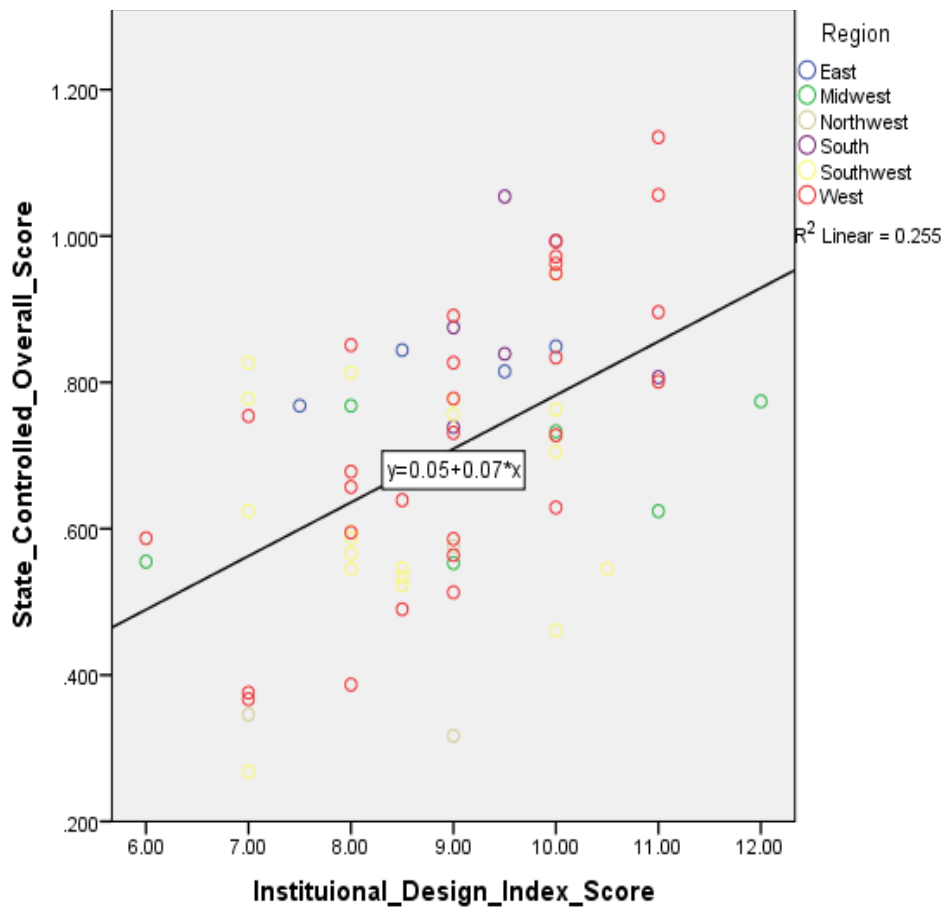
**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.531 <sup>a</sup>	.282	.238	.163878

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
	(Constant)	.058	.147		.395	.694
	Institutional Design Index Score	.073	.016	.503	4.545	.000
1	Land	7.535E-006	.000	.050	.460	.647
	Labor	1.129E-006	.000	.085	.596	.553
	Capital	-1.730E-010	.000	-.189	-1.409	.164

<sup>69</sup> CPR institutions are determined by having a private worker percentage over the median .607, while centralized institutions have a private worker percentage lower than the median

Figure 11 Graphical Relationship between Tribal Development and Institutional Design



This linear regression test shows that the number one predictor of tribal economic development is institutional design. It also shows that as the number of collectivist institutional designs increase for a tribe, so does tribal development. This holistic test in combination with the other tests in this chapter make a strong case for collectivist institutions for tribally organized societies, rather than individualistic institutions.

## Conclusion

The findings of this paper can be summed up in two words: self-determination. History is replete with examples of settled agrarian societies trying to ‘pacify’ the tribal people of distant and harsh lands. The ancient Mesopotamians and Egyptians had to battle the Hittites of mountainous Anatolia; the ancient Chinese fought the Xiongnu of the steppes, the Romans clashed with the Germanic tribes of the dense forests, the Byzantines succumbed to the marauding Arabs of the desert. This trend extended into the colonial area when the great of the West competed to divide up the globe. The Spanish devastated the indigenous populations inhabiting the jungles of South America; the Dutch dominated the islanders of the Southeast Asian archipelagos; British took the African Savanah from the nomadic tribesmen, the Russians conquered the steppe tribes of Central-Asia; the French pacified the jungles of Southeast Asia; the Americans pushed the Native Americans off the Great Plains. Today the United States is fighting a war on terror. A war whose frontlines are in the remote tribal areas in the world: Afghanistan, the FATA areas of Pakistan, Western Iraq, Eastern Syria, Yemen, Somalia, and Mali. Instead of repeating the same mistakes of the Indian Wars, which focused on destroying the Native American’s traditional way of life, the United States needs to embrace this way of life. It needs to give the tribes the legal power to realize their own self-determination. The tribes of the world need collectivist institutions that match the underlying traditions, values, and beliefs of tribal societies. They do not need Western institutions imposed on them, but rather they need the Constitutional Tribe.

What is the Constitutional Tribe? The findings of this paper point to a set of underlying principles necessary for successful tribal self-government:

1. **Constitutional Tribal Sovereignty:** the tribe must be a legal entity based on its traditional membership and core traditional values. The rules and laws governing the actions of the tribal government should be a hybrid between traditional and legal authority. The tribe should be sovereign in that it is embedded within a larger settled society with special prerogatives in collective property rights, self-government, and the administration of law and justice.

2. **Common Pool Resource Institutions:** tribal economic activity should be primarily conducted on a collective basis through Tribal Business Enterprises. These institutions combine on the ancient trust, traditional comparative advantages, and collective mindset of the tribe with the legal strengths of private firms in terms of flexible organization, market accountability, and innovation to create hybrid organizations that employ tribal members and contribute to the collective well-being.
3. **Collectively Accountable Institutions:** tribal self-government must be based on the consensus collective will of the people in order to remain legitimate and be effective. Institutions that promote holistic and consensus incentives for leaders will best reflect the collective will of the people.
4. **Communal Justice:** those who enforce and interpret the collective will of the people must not only be members of the tribal community, but be deeply ingrained in its traditions and values. Trust is the basis of tribal justice, therefore the police must be held accountable to the tribe, while the courts must focus their rulings on rebuilding trust and repairing relationships.

### **Looking Forward**

Defeating poverty, ethno-sectarian violence, failed states, and international terrorism is the global challenge of our time. The sources of these international problems are inextricably linked to the nexus of geography and political institutions. The greatest weapon the international community has is the local people who suffer the most from this state of affairs. Tribes need the tools to realize their collective goals. Such tools include extensive legal help in establishing formal institutions and codifying traditional practices. They need help establishing formal business enterprise structures and the financial acumen to distribute their benefits. Therefore there is a strong need for an NGO composed of international lawyers, anthropologists, and business people who can provide this assistance to tribes on a worldwide scale. Let us give them the tools to shape and wield this weapon to combat poverty, violence and corruption. Let us give them their traditions back. Let us give them their property back. Let us give them their voice back. Let us give them their laws back. Let us give them the Constitutional Tribe.

## Bibliography

1. Abhijit Vinayak Banerjee, Roland Benabou, and Dilip Mookherjee, Editors. *Understanding Poverty*. New York: Oxford University Press. 2006
2. Acemoglu, Daron, and Robinson, James A. *Why Nations Fail: The Origins of Power, Prosperity and Poverty*. 1st ed. New York: Crown, 2012
3. Alkire, Sabina , Adriana Conconi, and José Manuel Roche.” Multidimensional Poverty Index 2013: Brief Methodological Note and Results”. Oxford Poverty & Human Development Initiative. n. page. Web. 2013
4. Bates, Daniel G. *Human Adaptive Strategies: Ecology, Culture, and Politics*. Needham Heights: Allyn & Bacon, 1997. pg 112-117
5. Brandfon, Fredric. "Tradition and Judicial Review in the American Indian Tribal Court System." *UCLA L. Rev.* 38 (1990): 991.
6. Bueno de Mesquita, Bruce, James D. Morrow, and Randolph M. Siverson. *The Logic of Political Survival*. MIT press, 2005.
7. Carlson, Leonard A. "The Dawes Act and the Decline of Indian farming." *The Journal of Economic History* 38, no. 01 (1978): 274-276.
8. Champagne, Dwayne. “Breaking the Cycle of Poverty and Crime in Indian Country”. Indian Country Today Media Network, October 19, 2013. Read more at <http://indiancountrytodaymedianetwork.com/2013/10/06/breaking-cycle-poverty-and-crime-indian-country-151430>
9. Cornell, Stephen, and Joseph P. Kalt. “Pathways from poverty: Economic Development and Institution-Building on American Indian Reservations.” *American Indian Culture and Research Journal* 14, no. 1 (1990): 89-125.
10. Diamond, Jared M. *Guns, Germs, and Steel: The Fate of Human Societies*. New York: Norton, 1997.
11. Easterly, William, and William Russell Easterly. *The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good*. Penguin, 2006.
12. Ellickson, Robert C. “Property in Land”. *Yale Law Journal* (1993): 1315-14



13. Hopi Tribe Grants and Scholarships Program." . Arizona Association of Student Financial Aid Administrators. Web. <<https://www.aasfaa.org/FNA/tribes/Hopi.html>>.
14. Indigenous Justice Systems and Tribal Society." National Institute of Justice. Office of Justice Programs, n.d. Web. <<http://www.nij.gov/topics/courts/restorative-justice/perspectives/Pages/indigenous-tribal.asp&xgt;>;
15. Kittner, Cristiana C. Brafman. "The Role of Safe Havens in Islamist Terrorism." *Terrorism and Political Violence* 19, no. 3 (2007): 307-329.
16. Kopko, Kimberly. "The Effects of the Physical Environment on Children's Development". Departments of Human Development and Design and Environmental Analysis, Cornell University. n. page. Web.
17. Malmgren, Rachel, and Garrick Small, eds. *Indigenous Peoples and Real Estate Valuation*. Springer, 2008.
18. NiiSaka, Clara. " 'Indian courts'" a Brief History." Native American Press/ Ojibwe News. Maquah, n.d. Web. <<http://www.maquah.net/clara/Press-ON/01-06-15-courts.html>>.
19. Norris, Tina, Paula L. Vines, and Elizabeth M. Hoeffel . "American Indian and Alaska Native Population." United States. Census Bureau.: 2012. Web.
20. O'Brien, Sharon. *American Indian Tribal Governments*. Vol. 192. University of Oklahoma Press, 1993.
21. Ostrom, Elinor. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge university press, 1990. 8-11
22. Philips, Alma. "The State of our Unions". National Marriage Project. n. page. Web. 2012
23. Rousseau, Jean Jacques. *Social Contract & Discourses*. New York: E. P. Dutton & Co., 1913; Bartleby.com, 2010.
24. Taos Pueblo." World Heritage Centre List. UNESCO. Web.. <<http://whc.unesco.org/en/list/492>>.
25. Cattelino, Jessica R. *High stakes: Florida Seminole Gaming and Sovereignty*. Duke University Press, 2008.
26. Grogan, Maura . "Native American Lands and Natural Resource Development." Revenue Watch Institute. (2011).

27. Lemont, Eric D., ed. *American Indian Constitutional Reform and the Rebuilding of Native Nations*. University of Texas Press, 2009.
28. Weber, Max. *Economy and Society: An Outline of Interpretive Sociology*. Univ of California Press, 1978.
29. Hass, Theadore. "Ten Years of Tribal Government Under I. R. A". United States Indian Service. (1947).
30. Jacobson, David & Deckard, Natalie." The Tribalism Index: Unlocking the Relationship Between Tribal Patriarchy and Islamist Militants". *New Global Studies*. (2012) Volume 6, Issue 1
31. Martha C. Nussbaum, "Creating Capabilities: The Human Development Approach", Harvard University Press, 2011, 237pp.,
32. Record, Ian W. "Broken Government." (1999).  
[http://nnidatabase.org/db/attachments/text/1999\\_RECORD\\_broken\\_government.pdf](http://nnidatabase.org/db/attachments/text/1999_RECORD_broken_government.pdf) .
33. Vargas , Theresa , and Annys Shin. "Oneida Indian Nation is the tiny tribe taking on the NFL and Dan Snyder over Redskins name". *Washington Post*, November 16, 2014.

## Appendix A: Tribe General Information

Tribe Name	State	Estimated Population	State Controlled Overall Score	Institutional Design Index Score
Alabama-Coushatta Tribes	Texas	1020	0.566	8.0
Bad River Band of the Lake Superior Tribe of Chippewa Indians	Wisconsin	4191	0.768	8.0
Blackfeet Tribe of the Blackfeet Indian Reservation of Montana	Montana	27,279	0.587	6.0
Catawba Indian Nation (Catawba Tribe of South Carolina)	South Carolina	2,025	0.839	9.5
Cherokee Nation	Oklahoma	24,380	0.993	10.0
Cheyenne River Sioux Tribe of the Cheyenne River Reservation	South Dakota	8,936	0.387	8.0
Chitimacha Tribe of Louisiana	Louisiana	1,552	0.993	10.0
Cocopah Tribe of Arizona	Arizona	1295	0.545	10.5
Coeur D'Alene Tribe of the Coeur D'Alene Reservation	Idaho	2101	0.827	9.0
Comanche Nation	Oklahoma	23,330	0.834	10.0
Confederated Tribes of the Chehalis Reservation	Washington	853	0.317	9.0
Confederated Tribes of the Grand Ronde Community of Oregon	Oregon	4,287	0.851	8.0
Confederated Tribes of the Siletz Reservation	Oregon	3,912	0.513	9.0
Crow Tribe of Montana	Montana	15,203	0.586	9.0
Eastern Band of Cherokee Indians of North Carolina	North Carolina	11,835	0.739	9.0
Fort Mojave Indian Tribe (Arizona, California and Nevada)	California, Arizona, Nevada	1,872	0.681	9.0
Grand Traverse Band of Ottawa and Chippewa Indians	Michigan	2,668	0.774	12.0
Haliwa-Saponi Tribe	North Carolina	3,795	0.807	11.0
Havasupai Tribe of the Havasupai Reservation	Arizona	662	0.624	7.0

Hoop Valley Tribe	California	3523	0.731	9.0
Hualapai Indian Tribe of the Hualapai Indian Tribe Reservation	Arizona	1300	0.698	9.0
Karuk Tribe of California	California	6115	0.801	11.0
Kaw Nation	Oklahoma	2,389	1.056	11.0
Lower Brule Sioux Tribe of the Lower Brule Reservation	South Dakota	2,274	0.376	7.0
Lummi Tribe of the Lummi Reservation	Washington	4427	0.727	10.0
Minnesota Chippewa Tribe (Six component reservations: Bois Forte Band (Nett Lake);	Minnesota	2,998	0.555	6.0
Mississippi Band of Choctaw Indians	Mississippi	8,979	0.875	9.0
Muscogee (Creek) Nation	Oklahoma	43,193	0.891	9.0
Oneida Nation of New York	New York	11,555	0.844	8.5
Pala Band of Luiseño Mission Indians of the Pala Reservation	California	1310	1.135	11.0
Pascua Yaqui Tribe of Arizona	Arizona	8053	0.763	10.0
Pawnee Nation of Oklahoma	Oklahoma	4,878	0.972	10.0
Penobscot Tribe of Maine	Maine	4,278	0.849	10.0
Picayune Rancheria of Chukchansi Indians of California	California	1965	0.564	9.0
Pit River Tribe (includes XL Ranch, Big Bend, Likely, Lookout, Montgomery Creek and Roaring Creek Rancherias)	California	2939	0.629	10.0
Pokagon Band of Potawatomi Indians (Michigan and Indiana)	Michigan	1,793	0.624	11.0
Pueblo of Laguna	New Mexico	6758	0.777	9.0
Pueblo of San Felipe	New Mexico	2375	0.813	8.0
Pueblo of Santa Clara	New Mexico	1,182	0.948	10.0
Pueblo of Santo Domingo	New Mexico	3519	0.705	10.0
Pueblo of Taos	New Mexico	1,986	0.546	8.5
Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation (Nevada)	Nevada	933	0.778	7.0
Quapaw Tribe of Indians	Oklahoma	3,327	0.778	9.0
Quechan Tribe of the Fort Yuma Indian Reservation (Arizona and California)	California	2733	0.657	8.0
Quileute Tribe of the Quileute Reservation	Washington	598	0.346	7.0
Red Lake Band of Chippewa Indians	Minnesota	7,459	0.553	9.0
Sac and Fox Tribe of the Mississippi in Iowa	Iowa	1,596	0.595	8.0

San Carlos Apache Tribe of the San Carlos Reservation	Arizona	10900	0.523	8.5
Seminole Tribe of Florida (Dania, Big Cypress, Brighton, Hollywood and Tampa Reservations)	Florida	1,005	1.054	9.5
Seneca Nation of New York	New York	1429	0.815	9.5
Seneca-Cayuga Tribe of Oklahoma	Oklahoma	2124	0.896	11.0
Skokomish Indian Tribe of the Skokomish Reservation	Washington	877	0.576	9.0
Southern Ute Indian Tribe of the Southern Ute Reservation	Colorado	1,572	0.728	10.0
Stockbridge Munsee Community	Wisconsin	4114	0.733	10.0
Te-Moak Tribes of Western Shoshone Indians of Nevada	Nevada	1,499	0.587	8.0
Three Affiliated Tribes of the Fort Berthold Reservation	North Dakota	3,379	0.754	7.0
Tohono O'odham Nation of Arizona	Arizona	19453	0.534	8.5
Tule River Indian Tribe of the Tule River Reservation	California	1393	0.490	8.5
Tuscarora Nation of New York	New York	2364	0.768	7.5
Ute Indian Tribe of the Uintah and Ouray Reservation	Utah	1630	0.367	7.0
Ute Mountain Tribe of the Ute Mountain Reservation (Colorado, New Mexico and Utah)	New Mexico, Colorado, New Mexico	1359	0.545	8.0
Washoe Tribe (Carson Colony, Dresslerville Colony, Woodfords Community, Stewart Community and Washoe Ranches)	California, Nevada	2058	0.827	7.0
White Mountain Apache Tribe of the Fort Apache Reservation	Arizona	14177	0.268	7.0
Wichita and Affiliated Tribes (Wichita, Keechi, Waco and Tawakonie)	Oklahoma	1,637	0.949	10.0
Winnebago Tribe of Nebraska	Nebraska	429	0.678	8.0
Wyandotte Nation	Oklahoma	4,366	0.962	10.0
Yavapai Apache Nation of the Camp Verde Indian Reservation	Arizona	1615	0.595	8.0
Yavapai-Prescott Tribe of the Yavapai Reservation	Arizona	544	0.756	9.0
Ysleta Del Sur Pueblo of Texas	Texas	2,908	0.461	10.0
Yurok Tribe of the Yurok Reservation	California	6567	0.639	8.5