

# South Dakota and The Gini Coefficient



## Purpose Statement

To inform listeners about a common inequality measurement technique, the Gini Index, and describe how it can be used to gain insight into South Dakota's economic landscape.



# Why Do We Care?



Occupy Wall Street 2011  
Top 5% control about 1/3 of all U.S.  
income



New York County Gini: **0.601**  
United States Gini: **0.469**

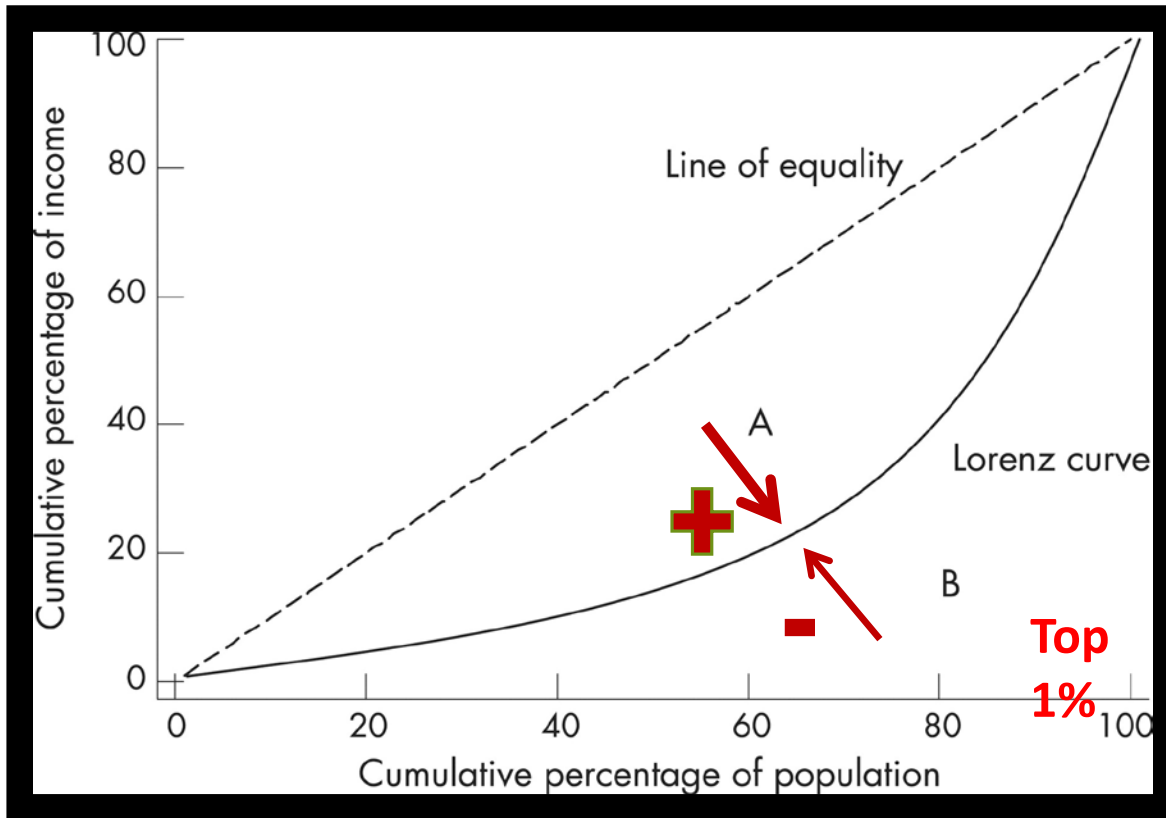
# The Terminology

**Economic Inequality:** the unequal distribution of **household**, family or individual income across the various participants in an economy.

**Gini Index:** A measurement of the income distribution of a country's residents. This number, which ranges between 0 and 1, is based on residents' net income. It helps to define the gap between the rich and the poor, with 0 representing perfect equality and 1 representing perfect inequality.

\*Brookings County Gini is 0.425

# Gini Basics



- From Lorenz Curve, visual representation of the distribution of wealth, to the Gini
- Now there is a quantifiable number.



# What is Income?

**Income ~ The census defines income in 42 customizable components :**

- <http://www.census.gov/cps/data/incdef.html>
- **Earnings, annuities, pensions, various government assistance programs.**



# Why Group Income by Households?

- **Census** defines a **household** to include all of the persons who occupy a housing unit. Roommates, Family, Friends, etc.
- The government collects income data at the individual level, but its not particular useful for inequality discussions. Therefore, the census prefers to use household income.
- For example, Mary Barra , CEO of GM, is # 7 on Forbes' list for most powerful women and receives \$5,233,140 in compensation from GM. Even if Anthony Barra, her husband, made no money as a househusband, we would not consider Anthony poor by any means because his wife earns so much.



# SD Economic Inequality

1) College Cities

2) Reservation Counties



# College Cities

**Income ~ College Students:** The Census includes scholarships, Pell Grants, and financial support from family and friends. However, loans are excluded as sources of income.

**Point:** Lots of cash, little income

**Household ~ College Students:** aren't part of their parents households unless they're still living at home. If they live off-campus with roommates, then the roommates would be considered the household. If they are on campus in dorms they fall into another category all together, "group quarters" which means they don't count towards household income calculations.

**Point:** Off-campus students form households in the community

# Why Does it Matter

			MEDIAN HOUSEHOLD INCOME		
PLACE	UNIVERSITY	STUDENTS AS SHARE OF POPULATION	STUDENTS INCLUDED	STUDENTS EXCLUDED	CHANGE
1 Gainesville, Fla.	Florida	26.6%	\$28,000	\$35,000	25.0%
2 Boston (Allston)	Boston U.	37.4	36,800	45,900	24.7
3 College Station, Texas	Texas A&M	20.8	37,000	44,100	19.2
4 Tallahassee, Fla.	Florida State	27.8	30,000	35,000	16.7
5 Boulder, Colo.	Colorado	21.6	60,500	68,600	13.4
6 Athens, Ga.	Georgia	25.0	33,000	37,000	12.1
7 Auburn, Ala.	Auburn	13.6	44,200	49,000	10.9
8 Boone, N.C.	Appalachian State	11.0	34,300	38,000	10.8
9 Waco, Texas	Baylor	13.7	28,000	31,000	10.7
10 Columbia, Mo.	Missouri	13.3	43,600	48,070	10.3
11 DeKalb County, Ill.	Northern Illinois	12.1	45,000	49,600	10.2
12 Columbus, Ohio	Ohio State	22.9	42,000	46,000	9.5
13 State College, Penn.	Penn State	20.1	54,800	60,000	9.5
14 Philadelphia (Central)	Pennsylvania	11.8	21,300	23,320	9.5
15 New York (Manhattanville)	Columbia	10.9	36,000	39,400	9.4
16 Iowa City, Iowa	Iowa	13.1	54,000	58,700	8.7
17 San Marcos, Texas	Texas State	10.1	52,000	56,500	8.7
18 Lexington, Ky.	Kentucky	17.6	35,000	38,000	8.6
19 Eugene, Ore.	Oregon	12.4	38,700	42,000	8.5
20 Ames, Iowa	Iowa State	17.4	47,000	50,900	8.3

For Example, Boone County, home to University of Missouri, ranks as the 309th most economically unequal County. When student households are excluded, however, and it falls to 500th.

# What about Brookings, SD

Population: 22,591

Student Population in Community: 8,005

Percentage of Population: 35.4%

Average Income per Student: \$14,400

Average Household Size: 2.2

Student Household Income: \$31,968

Brookings Median Household Income: \$41,468

SD Median Household Income: \$49,091

**Point:** Brookings' student population decreases the cities' median income and increases economic inequality.





# How Can This Be Useful

For Brookings:



For South Dakota:



- Increase household median income and decrease economic inequality statistics by increasing **upperclassmen housing on campus** or allowing students to live in **larger groups**.

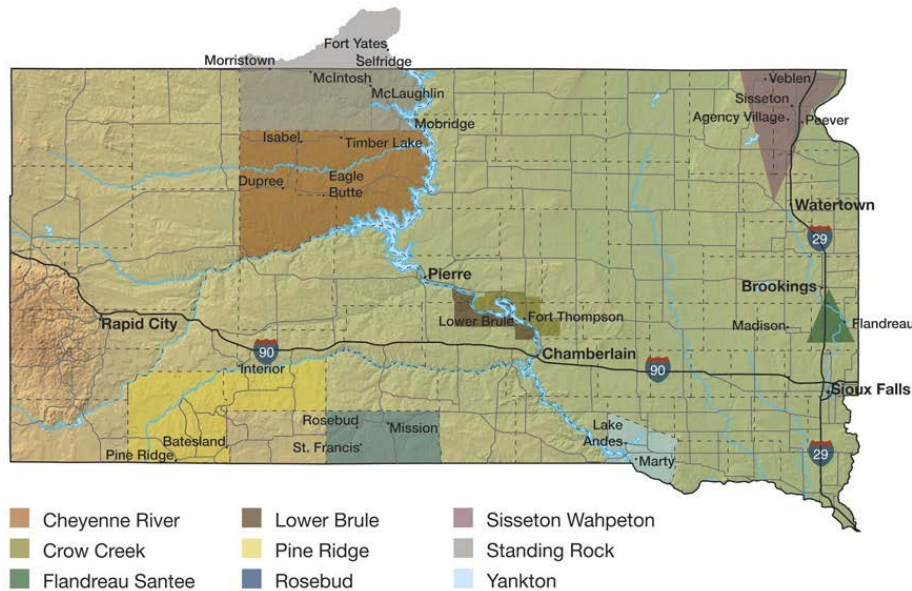
# SD Economic Inequality

1)  College Cities

2) Reservation Counties

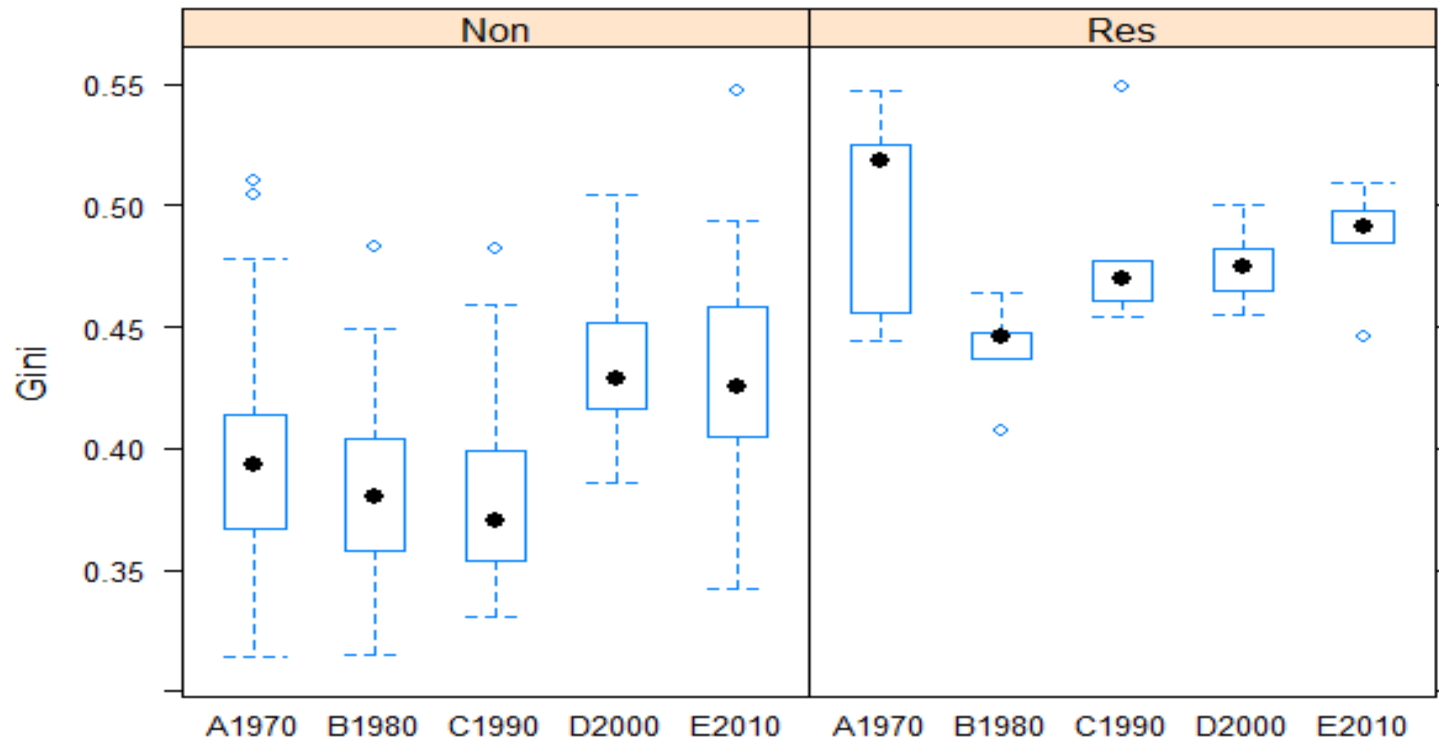
# Reservation Counties

Note: Corson, Dewey, Shannon, Todd, and Ziebach counties are classified as reservation counties.





# Gini ~ County and Decade



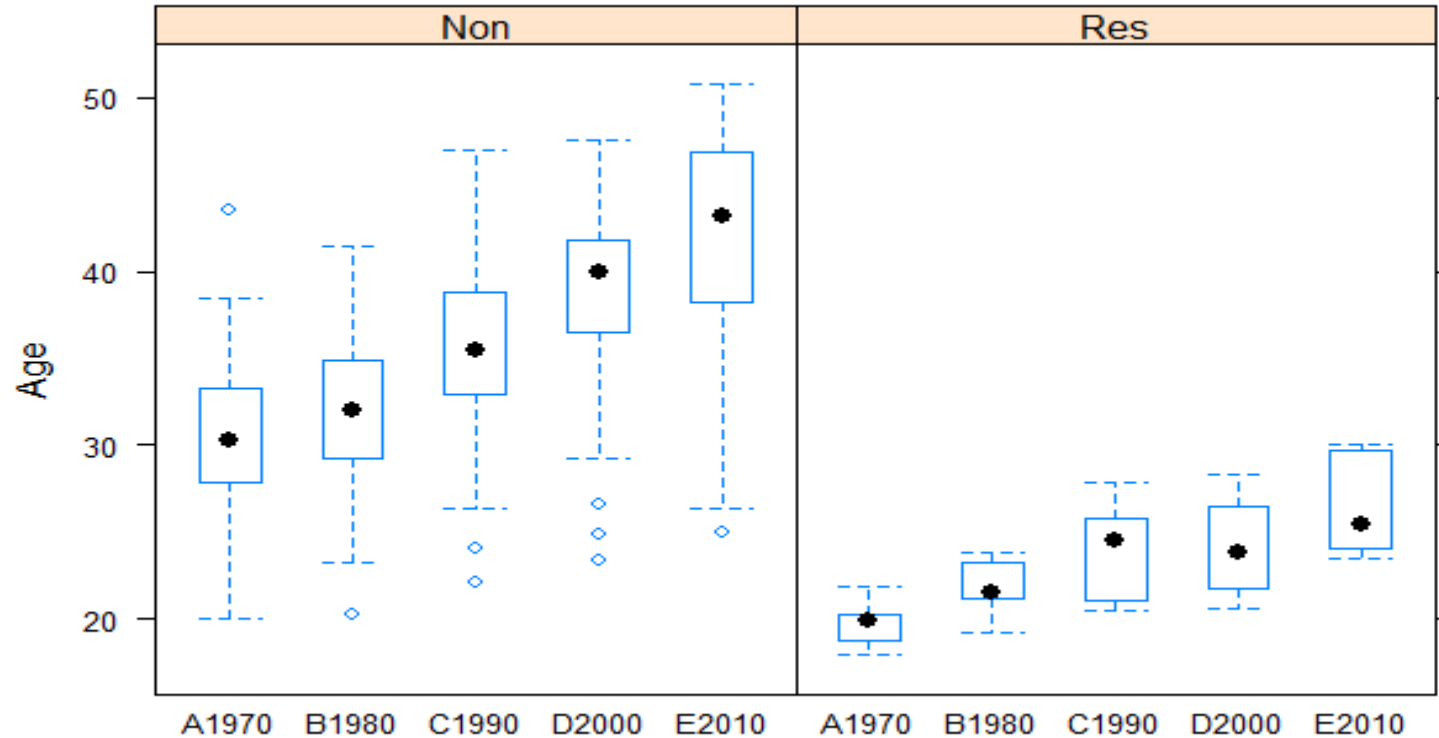
## Gini vs. County

Non Res Mean: 0.405

Res Mean: 0.476

**Point:** High economic inequality in reservation counties

# Median Age ~ County and Decade



## Age vs. County

Non Res Mean: 35.68

Res Mean: 23.23

**Point:** Reservation counties are young

# Reservation Counties

County	Population	Labor Force	Government Employees	%
Brookings	32,968	18,725	4,260	23
Corson	4,215	1,405	650	46
Dewey	5,586	2,675	1,569	59
Shannon	14,118	3,915	3,142	80
Todd	9,982	3,460	2,274	66
Ziebach	2,834	1,060	160	15

**Point:** Well paid Government workers in a county of impoverished youth.



# Why Does it Matter

“In nearly every contemporary society, the poor have more children than the rich.” ~ McFalls

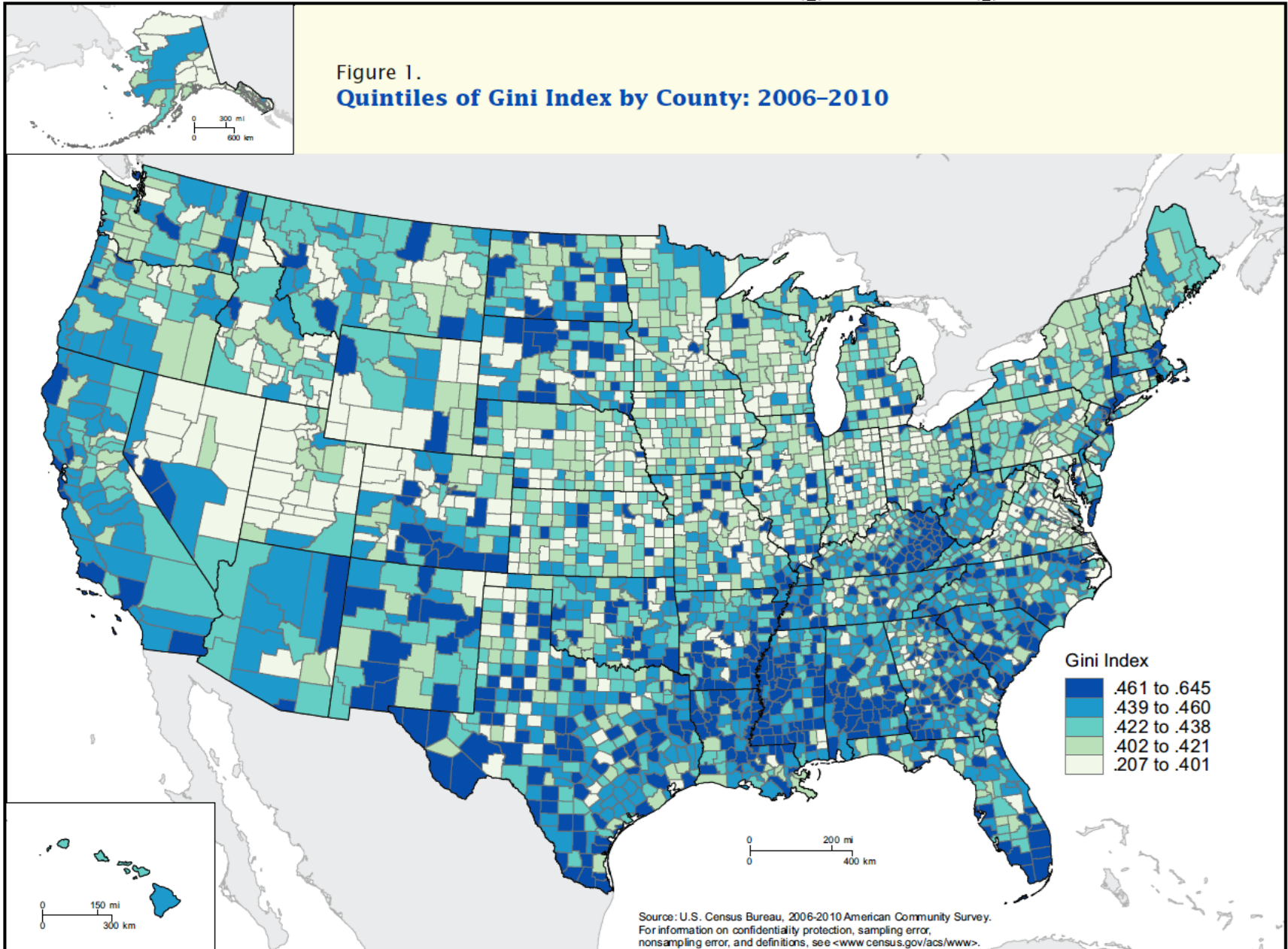
“In general, fertility declines as the income and educational attainment of women increase.” ~McFalls

Poverty most strongly effects the young, under 18 years of age ~ ucdavis

**Point:** The poor have more children and poverty most strongly effects the poor. It's a cycle.

# Gini Index County Map

Figure 1.  
**Quintiles of Gini Index by County: 2006–2010**



# Finding Current Gini Scores for Your Counties

1. Google American Fact Finder
2. Select advance search
3. Under “refine your search” type Gini or B19083
4. Under “Geographies” select a state or individual county





# Finding Older Gini Scores for Your Counties

## **Gini 1970-1990:**

- François Nielsen Department of Sociology University of North Carolina  
<http://www.unc.edu/~nielsen/data/data.htm>

## **Gini 2000:**

- Dr. Burkley Professor of Economics at NCAT (2000 Gini),  
<https://sites.google.com/a/burkeyacademy.com/main/home/gini-coefficients>

# Ending Notes

“The geographic distance and concentration of poverty will foster the evolution of incompatible cultures, and it will be increasingly hard for the poor and wealthy to interact on the job, in the classroom, or in social situations.”

~Dr. Joseph A. McFalls Jr.

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