

Income Inequality and Local Government

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Basic Question

- **Have increases in income inequality contributed to the changing taxing and spending patterns of U.S. state and local governments?**
- Substantial increase in income inequality over the last 30 years
- At the same time, doubling of government expenditures at state and local levels.
- Furthermore, substantial changes in the composition of state and local tax revenues, fees, and intergovernmental transfers – in part, prompted by tax and expenditure limitations and school financing requirements.
- To rephrase the question: What would taxing and spending patterns look like in the United States without the increase in income inequality?

Why We Care

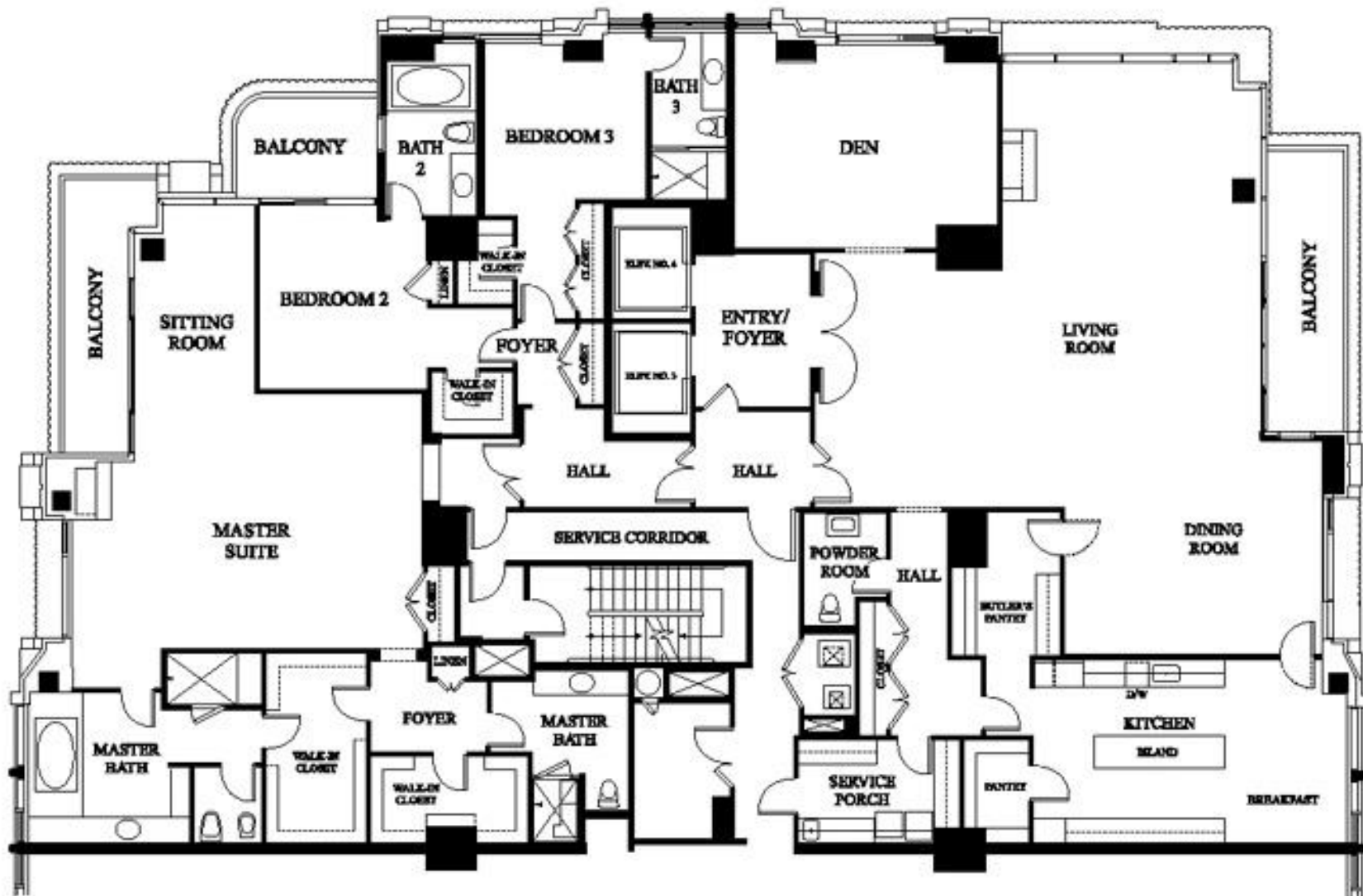
- Competing models in the economic, political science and sociology literature lead to different predictions on the relationship of inequality and fiscal policy.
- Traditional tax scholarship has focused on how taxes influence the level of inequality (either through government takings and transfers or through their influence on individual behavior regarding work, savings and investments)..... We examine how inequality may contribute to differences in taxing and spending patterns.
- Empirical studies in many disciplines find a negative correlation between inequality and economic outcomes (educational, health, and community participation). Do changes in the taxing and spending patterns help explain why inequality is correlated to these outcomes?

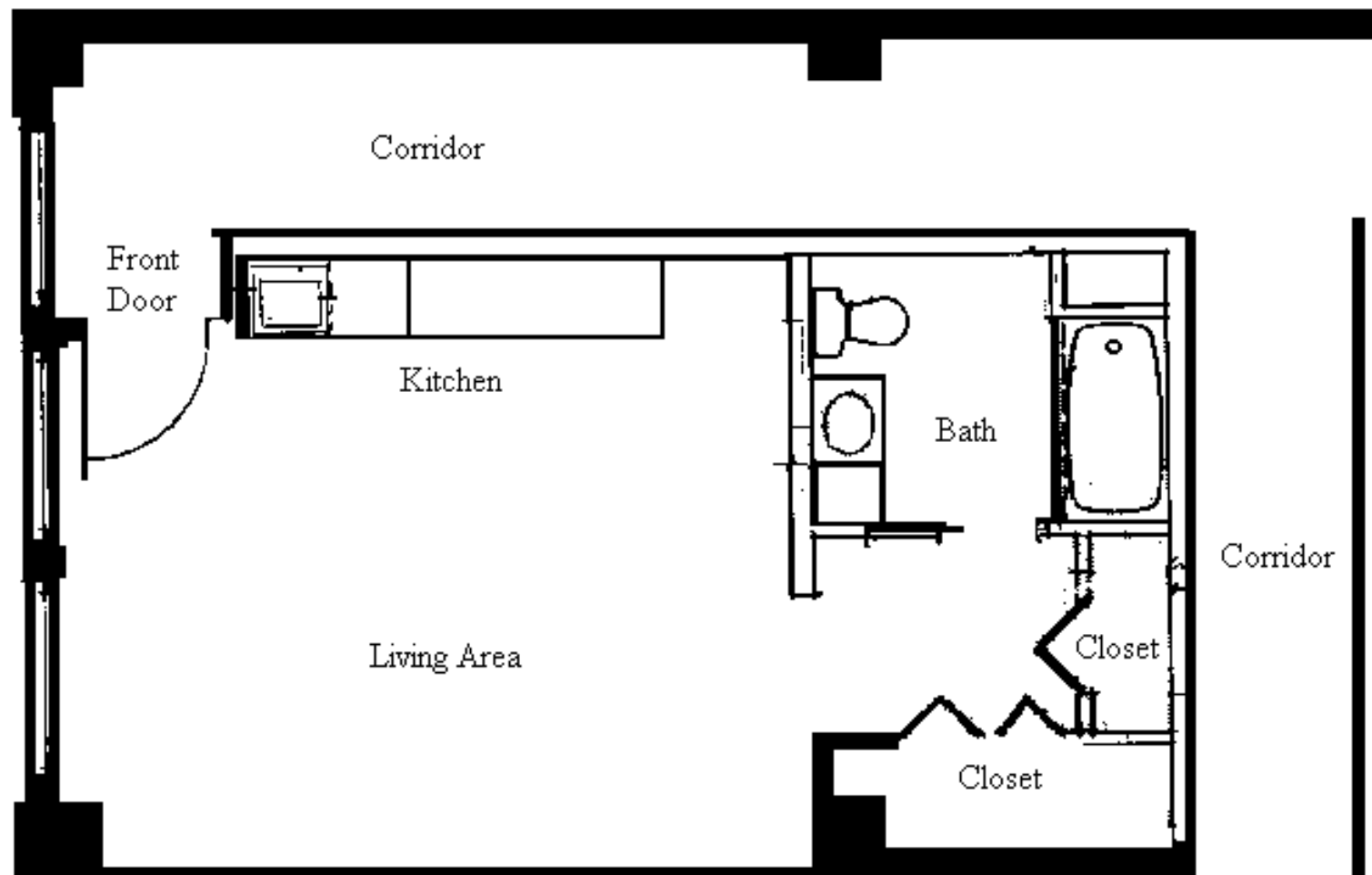


Jr. Penthouse

Approx. 5,666 Sq. Ft.

3 Bedrooms, 3 1/2 Baths





Brady Tower 2nd Floor
Studio - 350 Sq. Ft.

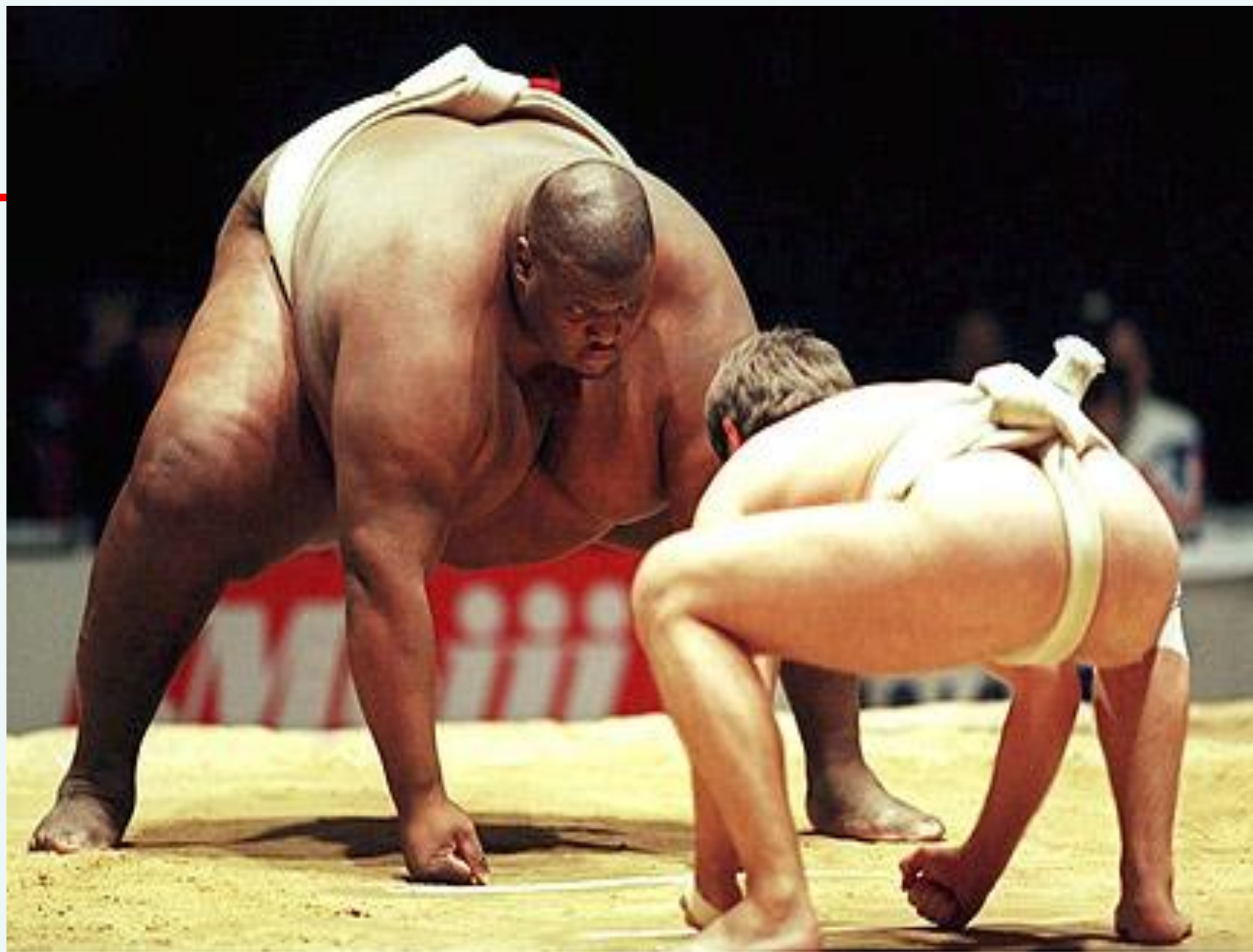
Unit A

Competing theories on relationship between inequality and fiscal policy

- Inequality leads to **higher levels** of government taxing and spending
 - **Altruistic model:** Greater inequality increases the need for government services.
 - **Median voter model:** Greater inequality increases demand for government services funded by upper income individuals.
- Theory: Meltzer and Richard (1981)
- Evidence: Schwabish (2008)

Competing theories, cont.

- Inequality leads to **lower levels** of government taxing and spending
 - **Political power model:** Inequality increases the control of the wealthy over the political process. The wealthy care less about providing goods and services that mainly benefit the poor.
 - **Declining social capital model:** Greater inequality weakens trust and willingness to engage in collective action.
 - **Declining demand for common goods model:** Greater inequality reduces common tastes and preferences for government goods and services. Therefore, individuals prefer private consumption.
- Theory: Putnam (2000); Alesina and co-authors
- Evidence: Alesina & LaFerrara (1999); Alesina, Baqir, & Easterly (1999); Goldin & Katz (1997)



Key questions in understanding relationship between inequality and fiscal policy

- Competing theories — Is it either/or..... or is it both?
- Do different levels of government behave differently to changes in inequality?
- Does where you start (based on level of income and level of inequality) influence where you end up?
- Do different regions in the US behave differently?
- Why might the relationship between inequality and taxing and spending patterns be different now than earlier times?

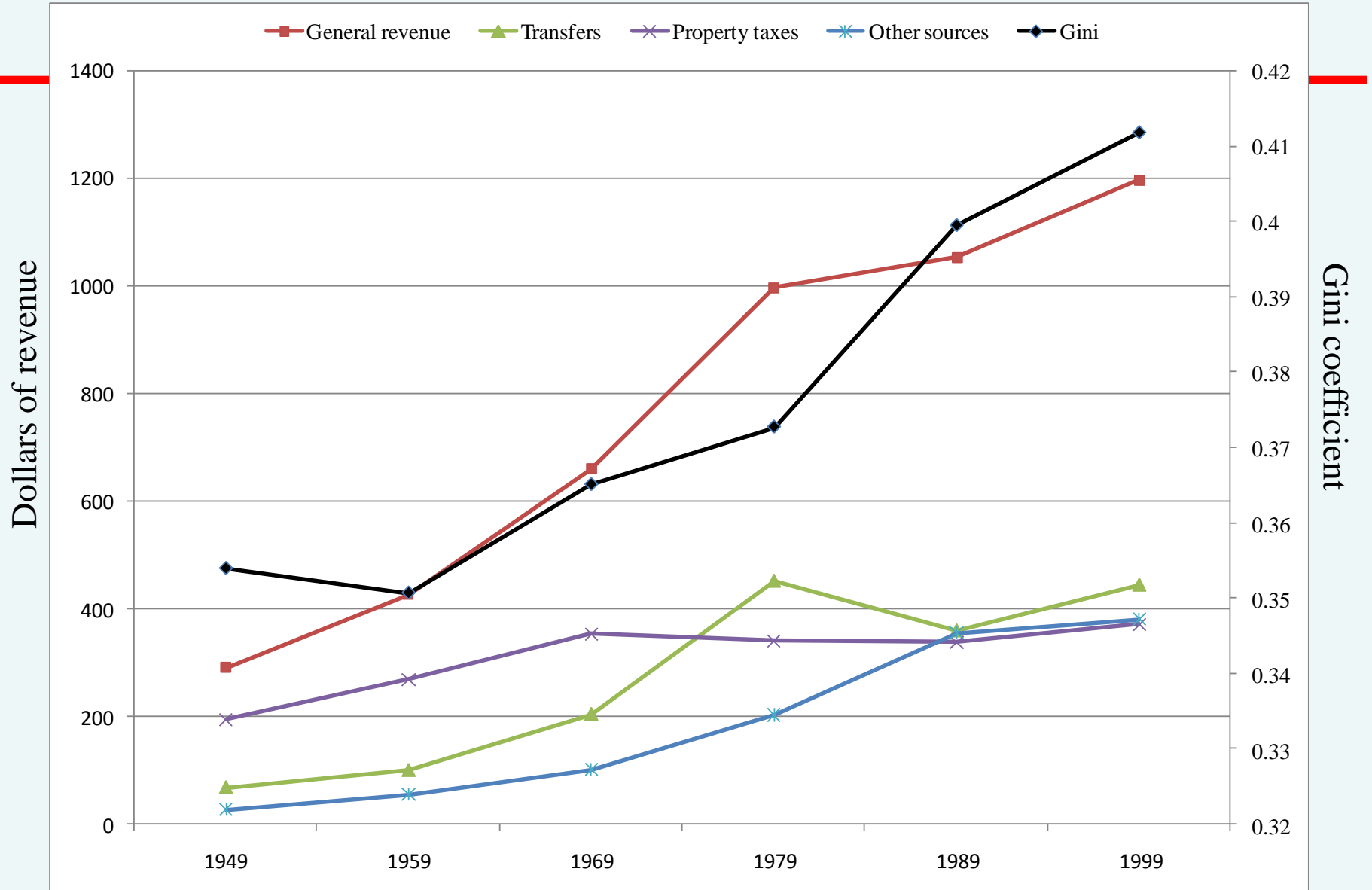
Building a data set

- Levels: Municipality, school district, county, state
- Census of Government: Revenue/expenditure, sources of revenue (property taxes, intergovernmental transfers, other)
 - At municipality level, “other” = 25% sales tax, 13% income tax, 40% charges, 14% interest income, etc.
- Census of Population: Income inequality measured with Gini coefficient. Calculated from 15-20 income bins.
 - 1950, 1960: Collect data by hand for 450 cities/towns

Trends in the data

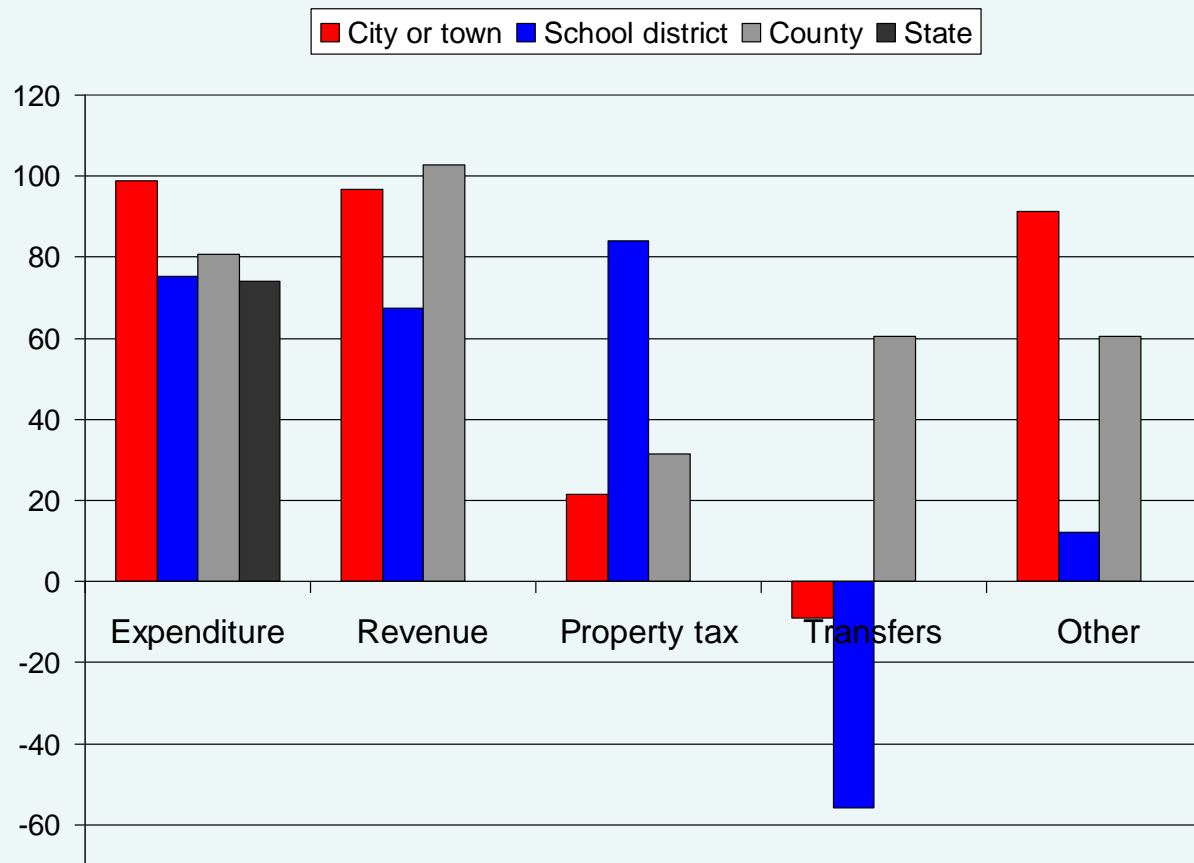
- Gini coefficient increases by around 6 points (from 0.35 to 0.41) from 1970-2000.
- Expenditures per capita double at city and school district levels. Increase at slower pace at state level.
- Localities no longer able to fund operations through own-source revenue alone. Property taxes fund a smaller percentage of local expenditures over time: 70% of budget in 1950 to 33% in 2000.

Increases in government revenue and income inequality: 450 cities/towns



Income inequality is associated with higher government revenue in the cross-section...

Implied change in \$ per capita for a 5 point increase in the Gini coefficient



....But, should we *really* be comparing New York (highest) to Alaska (lowest)?

Estimation strategy

- We focus on *changes* in inequality and government activity within a place over time.
- Allowing for regional trends.
- Controlling for changes in population size, racial composition, age structure and median income.

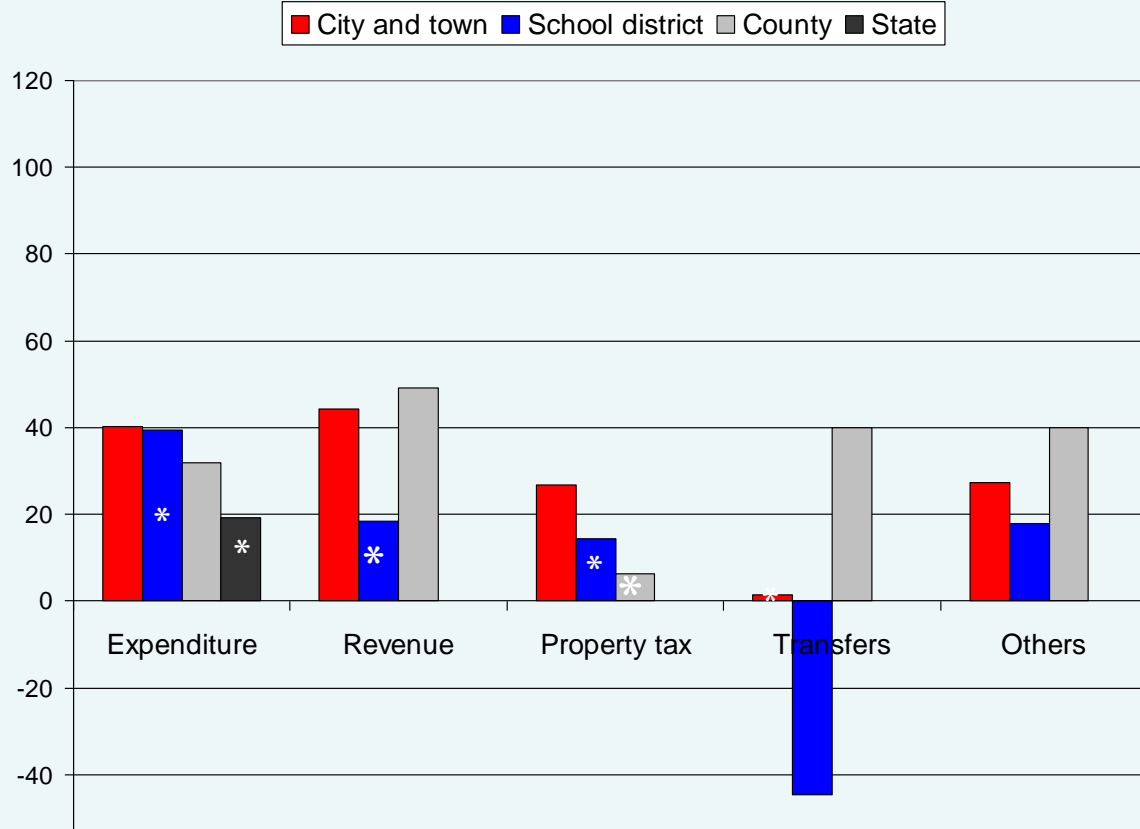
$$\% \Delta \$ \text{ gov't revenue} = \alpha + \beta(\Delta \text{ Gini}) + \Phi'(\Delta X) + (\mathbf{R} \cdot \mathbf{T}) + \varepsilon$$

Summary of our aggregate findings

- Increases in inequality are associated with increasing government revenue/expenditure.
- This relationship is stronger at the **local** level than the state level.
- In cities, counties and school districts, inequality increases reliance on “other” revenues (not property taxes or direct transfers).

Inequality and government revenue: Changes over time, 1970-2000

Implied change in \$ per capita for a 5 point increase in the Gini coefficient



* Note: Asterisk indicates that the effect is **not** statistically different from zero

From 1970-2000, revenue per capita increased by \$514 in our sample of cities. Increase in inequality can “explain” 9 percent of this growth.

Summary by initial level of income and inequality

- Rich school districts: Increasing inequality associated with lower intergovernmental transfers and higher property tax revenue. Property tax *base* may have expanded.
- Poor school districts and cities: Increasing inequality associated with higher intergovernmental transfers. But, partially offset by falling property tax revenue.
- In all cases, increasing inequality associated with reliance on “other” revenue sources (including direct charges).

By initial level of inequality and income: School districts, 1970-2000

Implied change in \$ per capita for a 5 point increase in the Gini coefficient

	Revenue	Property tax	Transfers	Other
Poor and equal	159.12	32.18	102.38	29.43
Poor and unequal	-37.33	-55.28	53.62	16.60
Rich and equal	10.43	157.90	-151.37	26.24
Rich and unequal	-55.05	102.38	-242.99	-4.67

Note: White = statistically significant. Grey = not statistically significant

By initial level of income and inequality: Cities and towns, 1950-2000

Implied change in \$ per capita for a 5 point increase in the Gini coefficient

	General revenue	Property tax	Intergov transfer	Other
All	45.16	22.30	2.77	25.44
Poor and equal	-24.08	-23.18	-0.77	42.51
Poor and unequal	115.94	10.36	51.43	52.44
Rich and equal	17.29	8.04	-25.54	59.09
Rich and unequal	21.13	-18.29	-26.97	42.73

Note: White = statistically significant. Grey = not statistically significant

Other findings

- We find no differences in the relationship between inequality and revenues in states with or w/o tax and expenditure limitations (Moule and Weller, 2008)
- Contrary to our expectations, strongest positive relationship between inequality and revenue in South and Midwest.
- Future work: Do school finance equalization plans effect the relationship between inequality and expenditures? By type of plan and date of adoption.

Conclusions

- Existing theories and models fail to address adequately the relationship between inequality and fiscal policy in a multi-level government environment.
- Increasing income inequality is associated with higher government expenditures at all levels. As a rough estimate, increases in inequality can explain about 9% of the increase in government expenditures.
- Initial levels of inequality and income do matter in determining how changes in inequality may influence taxing and spending patterns.
- Because of increased revenue demands and legal and other constraints, local governments have less control over their taxing and spending decisions.