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JEL Cassification: D78, E62, H10

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1 Introduction

Does income inequality necessarily lead to a rise in the size of government? One seminal paper is a political economy model designed by Meltzer and Richard (1981), who argue that in a median voter framework increased income inequality indicates larger distance between mean and median income and therefore, leads to greater demand for redistribution.

Empirical evidence generally has not supported the Meltzer and Richard (1981) hypothesis. For example, figure 1 depicts the raw correlation between state government tax revenue as a share of state GDP over 1976-1997 in the US and the ratio of mean to median household labor income, indicating no positive association between state government size and income inequality.[1]

Rising inequality in many developed countries has received renewed interest among policy-makers, academics, and the general public over the last decade, as shown by the attention generated by an academic book by Piketty (2014). Following up on Kuznets (1953) pioneering study, a number of authors (Alvaredo et al., 2011-2021) have constructed long-run series of top income shares to measure income inequality. For example, estimates from the World Inequality Database find that income concentration is high and growing in the United States: the richest 1 percent of households earned 20 percent of total income in 2015, up from 11 percent in 1978, while the bottom 50 percent experienced a complete collapse, from 20 percent to 12 percent of total income (Piketty et al., 2018). In contrast, and in spite of a similar trend, the top 1 percent share remains smaller than the bottom 50 percent in China but approaching the US level in 2015 (Piketty et al., 2019), and even less so in France as a typical representative of the West European pattern (Garbinti et al., 2017).

[1] Perotti (1996), Persson and Tabellini (2005), Shelton (2007), and Luo et al. (2017) all find an insignificant or even negative relationship between the size of government and the degree of inequality at country-level.

Despite the global resurgence of income inequality, there is still much doubt and debate as to whether such inequality is desirable. This debate is not a new phenomenon, often highly contested, and in recent years has fallen under the category of redistribution and growth debate. However, the seminal paper by Meltzer and Richard (1981), building on earlier research by Romer (1975) and Roberts (1977), offers a sanguine prediction: greater before-tax income inequality implies divergence between mean and median income and so, under universal suffrage, leads to increased redistribution. Democracy thus provides a corrective to increased inequality. However, evidence supporting the Meltzer and Richard (1981) hypothesis is generally weak. Perotti (1996), Benabou (1996), Persson and Tabellini (2005), and Shelton (2007) all find an insignificant or even negative relationship between the size of government and the degree of inequality.

Much of the following literature has focused on the impact of income inequality on economic growth, typically based on Meltzer and Richard (1981). One important benchmark is an endogenous growth model by Persson and Tabellini (1994), who argue that if in a society the political decisions regarding redistribution generate economic policies that tax investment, then inequality should harm growth as it increases redistributive tax pressures. Empirical support for this hypothesis is generally weak. For example, Forbes (2000) finds that an increase in the level of income inequality in a country has a positive and significant relationship with subsequent growth rates in the short and medium term, by controlling for country-specific effects and period effects.

However, in the original mechanism (Meltzer and Richard, 1981; Persson and Tabellini, 1994), labor is the sole channel of income and the rich have higher income by means of higher productivity (individual-specific skills, in other words). Nevertheless, in reality, labor is not the sole channel of income for the rich, as widely observed (see Piketty et al., 2018), and moreover, the labor share of income has consistently declined in recent years

(see Azmat et al., 2012; Karabarbounis and Neiman, 2013). Indeed, Piketty (2014) links increasing inequality to the declining labor share. Furthermore, capital income has recently become more unequal as well as more important. Kaymak and Poschke (2016), and Saez and Zucman (2016) document considerable rises in the concentration of wealth in the US over the past 50 years. Hence the current inequality-redistribution literature has one crucial omission: through focusing on the impacts of inequality and using the often assumed (aggregate) inequality solely induced by differences in labor productivity, the analysis is lacking a comprehensive consideration of capital income inequality.

Hence, following Luo (2020) and Luo (2021), with the twist that income inequality is engendered from differences in capital income as well as differences in labor productivity, the purpose of this paper is to analyze how the sources of income inequality affect the size of US state government. The relationship between inequality and government size is investigated empirically using a panel of US states, including new measures of both capital and labor income inequality as additional explanatory variables. This paper constructs the measures of inequality making use of household-level income data from the Panel Study of Income Dynamics (PSID). Both mean-level income and median-level income for these two types (labor income and capital income) can be constructed, which allows more direct measurement of these two kinds of inequality. As in Meltzer and Richard (1981), labor income inequality is equal to the ratio of mean to median labor income. This paper thus constructs this, and also a comparable measure for capital income inequality following Luo (2021).

Our analysis makes use of the US state data and adopts the panel regression with fixed effects to document three main findings. First, an increase in capital income inequality is found to be negatively associated with government size. A one standard deviation rise in capital income inequality is statistically associated with a decline in state tax revenue of 0.14% of state GDP. Second, the results hold across various econometric specifications

employed, such as utilizing five-year average data, instrumental variables estimation, and alternative measures of ideology. Third, controlling for capital income inequality yields a positive relationship between state government size and labor income inequality in states with lower income levels. Moreover, our results also show that capital income inequality plays a key role in poor states, whilst labor income inequality does in rich places regarding the explanation of the change in state government.

We believe that this paper makes two crucial contributions to the current literature. First, this paper seeks to contribute to the empirical literature on the sources of income inequality. Our analysis examines the sources of income inequality theory within a developed country, under the premise that the existing literature mainly focuses on the analysis of cross-country. Second, we show capital income inequality as one new explanation of the slowdown in the size of government in US, which sheds light on further research direction. In addition, the analysis of this paper can be applied in the design of tax system, given that government did raise revenue through labor income taxes 30 years ago and it might have reached the peak of Laffer curve.

The rest of the paper is organized as follows. The next section introduces the existing literature. Section 3 describes the data and the methodology. Section 4 contains the estimation results, and section 5 concludes.

2 Literature Review

The debate of the relationship between inequality and the redistributive taxes appeared from 1980s. There are two main groups of this analysis could be identified: one group argues that greater inequality would generate greater redistribution and more distortionary taxation,

while the other group claims that more equal nation could lead to higher redistribution or taxes.

2.1 Taxation Encouraging Effects of Inequality

The most significant and oldest notion of taxation promoting effects of inequality could trace back to the study of Meltzer and Richard mentioned previously. On the theoretical side, the positive relationship between inequality and taxation has received attention of literatures. An interesting idea of this is what Persson and Tabellini (1994) have clarified in the democratic regimes. If some countries are initially high inequality, the median voter would be relatively poor in those economies and thus, this relatively less-income median voter would like to vote the higher redistributive taxes to be the optimal fiscal policy. This favor policy of relatively higher taxes could be ordinarily wasteful if they are not constructed in a suitable way, which would finally hurt growth in the future. Another key research of this argument is the work of Perotti (1996). In Perotti's theoretical part, the component of political mechanism shows that higher income inequality would generate rising pressures for redistributive taxes. This will in turn discourage the motivations in the physical and human capital accumulation due to higher distortionary taxation. This is consistent with the implication pointed out by Bertola (1993). Based on the majority rule, the level of taxes and redistribution is the consequence of process of democratic voting. The pre-tax individual income mainly decides the preference of voter. Thus, a highly unequal democratic economy would clam more redistribution that is financed by the unattractive distortionary taxes.

In terms of empirical side, it is meaningful to point out there are also plenty of studies trying to evaluate the positive relationship between income inequality and redistribution analyzed in the theoretical way mentioned previously. As Milanovic (2000) has demonstrated, one proper

test of the hypothesis of median voter taking redistribution into account would be proposed. Having included the required data of 24 democracies, the results of this research support the relation that economies with higher factor income inequality would have more redistribution, which is in line with implication of theoretical models discussed above. Additionally, Alesina and Rodrik (1994) have tried to endogenize public policy in an endogenous growth model in order to study the link between economic growth and political conflict. Both the theoretical and empirical part of their study presents that in a democratic economy the higher inequality the wealth distribution becomes, the higher the taxation rate is.

2.2 Taxation Damaging Effects of Inequality

In contrast, it is valuable to point out that there also exist evidences, both in theoretical model and empirical analysis, though rare, supporting the idea that income inequality in an economy would have a negative effect on redistributive fiscal policy, in particular taxes. In other words, if an economy is more equal in income distribution, the fiscal redistribution or distortionary taxation would be greater. This runs in an opposite way to those predicted by early political economic models which indicate that more unequal democratic economies tend to distribute more, as having discussed above. It is interesting to note that the theoretical part of the work provided by Perotti (1996) aims to illustrating the argument that initially greater inequality in democratic economies tends to distribute more in the political mechanism, while its empirical section does not seem fairly supportive of its theoretical explanation by using the cross-nation data. As Perotti's empirical contribution has shown, those distributive policies are normally correlated with inequality in such an opposite sign to its implication in theoretical part, which presents that if economies are initially more unequal, the fiscal redistribution would tend to be less, rather than greater.

Further, one crucial and rare theoretical model is the work of Benabou (2000), which discusses the imperfect insurance and capital markets and analyzes how different agents vote for the distributive policies. Based on the framework of Benabou, the first relationship between distributive policy and inequality is U-shaped. This means that if the income inequality is relatively less, there is nearly tending to the efficient distributive policy, and as income inequality rises it would reduce the level of distributive policy firstly due to an increase in the proportion of rich agents, and then raise it again because of a great number of poor. The second relationship implied by Benabou is the advance of human capital accumulation. Having invested greater in human capital, the poor individuals would increase their relative income. This shows that inequality is a diminishing function of distributive rate. Taking these two into account, it can easily find that the distribution is a decreasing function of inequality, and two stable equilibriums could be identified. The first one is the thought of Welfare State, showing that low level of inequality while high level of government transfers; another one is the idea of Laissez-Faire, clarifying that more unequal links with less level of distributive expenditure, which are the main ideas of the framework of Benabou.

Moreover, there also exists empirical contribution supporting the implications of Benabou. As Muinelo-Gallo and Roca-Sagalés (2013) have discussed the relationship between inequality and growth by the way of fiscal policy. By constructing a panel data of 21 upper income OECD countries during the year 1972-2006, their test demonstrates that the level of gross income inequality plays a crucial role in determining the outcomes of fiscal policy, and fiscal policy would also affect the growth and inequality in turn. It is meaningful to point out that there is a negative relationship between the initial gross income inequality and the fiscal policy, which means that higher inequality would connect with lower level of distribution, as the empirical results imply.

2.3 Recent Development in the Study of Inequality

Given that capital income has become more unequal and more important in recent years (see Piketty, 2014; Kaymak and Poschke, 2016; Saez and Zucman 2016), a series of recent articles (i.e., Luo et al., 2017; Luo, 2018; Luo, 2020; and Luo, 2021) question and discuss the sources of income inequality in particular in an era of declining share of labor income. Following the series of literature working on the sources of income inequality, the argument proposed in this paper invokes a median voter model with the twist that income inequality is engendered from differences in capital income as well as differences in labor productivity.[2] The key issue is that capital income is difficult to tax, whilst income from labor is taxable. When income differences are induced by capital income, the capacity of the median voter to redistribute through the tax system is restricted as the capital-rich supply less (taxable) labor. If capital income inequality rises such that the capital-rich supply less labor, then the demand for tax on labor declines as the capital-poor (median voter) cannot expropriate the rich. Thus, increased inequality in capital income leads to smaller government.

What is the recent development in the study of inequality? And how does capital contribute to the dynamic of inequality? A recent series of literature argues that inequality has rised less than previously thought, particularly owing to a more modest rist of wealth and capital income at the top. Smith et al. (2021) hold that the increase of the top 0.1 percent wealth share is half as large as previous estimates. Smith et al. (2019) classify three-quarters of pass-through profit as human capital income, and thus indicate that labor income is more prevalent at the top income compared with the estimates in Piketty et al. (2018). Auten and Splinter (2019) state that the top 1 percent share of income has not rised at all on a post-tax basis from the 1960s onwards.

[2]Please find a simple theoretical model in chapter 2 in Luo (2018).

3 Data and Methodology

The source of data for the dependent and control variables is Pickering and Rockey (2013), who provide comprehensive state-level policy and institutional data for the period over 1960-1997.[3] Following their analysis the dependent variable is measured by total state taxes (i.e., the sum of sales, income and corporate taxes) per capita divided by state income per capita. The argument invoked in this paper emphasizes the median voter framework hence states in the US are the appropriate sample. Table 1 contains descriptive statistics of all the variables.

The measure of income inequality used in traditional empirical analysis is an aggregate level of inequality. One common measure of inequality widely employed is the share of income received by the top 1 percent of the population, taken from the World Inequality Database. If the argument invoked in this paper is crucial, which implies that capital income inequality and labor income inequality may capture different influences on government size, especially at different levels of income, then arguably previous analysis has suffered from an omitted variable bias. The separate measures of inequality are preferable to the top income share and other frequently used aggregate measures of inequality, as they have incorporated all types of income within an index while capital income inequality has become more unequal as well as more important.

The ideal measure of inequality, based on the logic in Meltzer and Richard (1981), is the ratio of mean to median income. As this paper argues, in the case of capital income, the greater this ratio the lower demands for redistribution and therefore, smaller government size. For most of the US states, it is possible to access household level micro-data from the Panel Study of Income Dynamics (PSID) that would allow more direct measurement of these two kinds of inequality (the advantage of split between labor and capital income), whilst the number

[3]Note that Pickering and Rockey (2013) obtain the data from Besley and Case (2003).

of states and subsequent observations falls due to data availability.[4] Following Meltzer and Richard (1981), labor income inequality is equal to the ratio of mean to median labor income ($LabIneq$). Table 1 contains statistics for this measure showing a mean value of 1.26, hence (as expected) mean labor income is generally greater than the median in the PSID data.

The PSID data also give the opportunity to construct a measure of capital income inequality. Since the data of median capital income contains many relatively small values (mostly zero), I use the natural logarithm of the difference between mean and median capital income to measure capital income inequality ($CapIneq$). As a result, the construction of capital income inequality differs slightly from that of labor income inequality. Table 1 show that the mean value this measure takes is 6.89, which serves to highlight the fact that most households do not receive any capital income, and shows that inequality in capital income is severe. Thus, the empirical analysis uses the inequality measure as the key explanatory variable.

Following Pickering and Rockey (2013), the regression analysis also includes their control variables in the analysis of state government size. In particular I control for state income per capita in real terms, demographic composition, a set of political representation variables, percentage net value of transfers received, and alternative measures of ideology. The benchmark empirical specification is thus

$$(\frac{t}{y})_{i,t} = \beta_1 Inequality_{i,t} + \mathbf{x}'_{i,t}\Gamma + \alpha_i + \eta_t + u_{i,t} \tag{1}$$

where i represents each state and t represents each time period, and $u_{i,t}$ is the error term. The left-hand-side variable, $\frac{t}{y}$, is a measure of government size in state i in year t. The variable of interest is *Inequality*, including $CapIneq$ and $LabIneq$, as described above. The

[4]Note that, when I have less than 100 individuals matching the criteria for the construction of inequality measures in the PSID, I report the index as missing. Current data availability for labor and capital income precludes using the data before 1976.

coefficient, β, hence indicates the impact of inequality on the size of state government. A positive and significant β suggests that income inequality exerts a positive effect on the state government size, whilst a negative and significant β implies that the inequality pushes the level of state redistribution lower. Control variables analyzed above are included in the vector $\mathbf{x}_{i,t}$. We also include year-specific dummy variables, η_t, to control for shocks and trends that shape government size over time, and state-specific dummy variables, α_i, to control for time-invariant, unobserved state characteristics that shape redistribution across states.

4 Empirical Results

This section is to test whether and how total state government tax revenue as a share of state GDP changes with income inequality in the presence of fixed state and year effects. Column 1 of Table 2 is a simple specification with just the measure of labor income inequality ($LabIneq$) as the only regressor using annual data OLS regression, with robust standard errors clustered by state. As mentioned above, column 2 then extends the regression to include two types of inequality, $LabIneq$ and $CapIneq$, to separate out labor and capital income. In this specification the sign of the coefficient estimate relating to capital income inequality is negative, and statistically significant at the 1% level. This is consistent with the argument - an increase in capital income inequality leads to smaller size of state government.

Following Besley and Case (2003) the rest columns further augment state income per capita, demographic composition, and a set of political representation variables (i.e. the fraction of Democrats in the lower and upper houses, indicator if the governor is a Democrat, indicator if the Democrats control both houses, and a measure of political competition) as further

controls. Moreover, in their analysis, one potential bias source may come from the fiscal transfers between states through the Federal government. Therefore, the total net value of transfers received is included as a further control. Following Pickering and Rockey (2013) $Ideo_i$ is defined as the moving average of different ideology measures over the past ten years of data (where $i = c, gADA/COPE, gNOM$). As mentioned in Pickering and Rockey (2011), the effect of ideology on government size is conditional on income. Thus, column 3 further includes an ideology measure ($Ideo_c$) and the interaction term ($Income * Ideo_c$) as well as the controls mentioned above. The results similarly demonstrate an increased tendency to reduce states' taxes as capital income inequality rises, as predicted in this paper. The results for the specifications using $Ideo_{g,ADA/COPE}$ or $Ideo_{g,NOM}$ as alternative measures of ideology are similar, with the estimated statistical significance of capital income inequality unaffected - remaining at the 1% level. Using the estimate from column 3 of Table 2, the estimated coefficient for capital income inequality is negative and the estimated relationship is sizable: a one standard deviation increase in capital income inequality is statistically associated with a fall in state tax revenue of 0.14% of state GDP. Results are also presented using five-year averages of the data, and the results essentially duplicate those found, establishing that the observed correlation is not driven by the cyclical features in the data.

The empirical analysis shown above establishes a robust negative statistical association between state government size and capital income inequality in the presence of a substantial set of controls. However, the results presented do not establish causality, insofar that the movements in capital income inequality may be endogenous to the policy variable, or alternatively both variables co-move in response to an unseen third variable. To address this, in Table 3 I instrument for capital income inequality by employing the lag of capital income inequality. Analogous to columns 3-5 of Table 2, columns 1-3 of Table 3 respectively correspond to ideology measured by $Ideo_c$, $Ideo_{g,ADA/COPE}$ and $Ideo_{g,NOM}$ and subsequent

interaction effects. The hypothesis that these instruments are weak can be rejected given that the F-statistic of the first stage regression in all cases exceeds 65. Importantly the estimated coefficient for $CapIneq$ is still found to be negative and statistically significant.

Table 4 investigates the robustness and contains estimation results from fixed state and year effects. Since the size of government is moving slowly and the lack of dynamics may result in biased estimates of standard errors and autocorrelated residuals, column 1 in panel A uses the same specification as column 3 of Table 2 but including the lagged dependent variable, confirming that state government size is highly persistent. Column 2 contains ArellanoBond dynamic panel estimation results especially in the presence of possible endogeneity problems. Statistical significance in columns 1 and 2 implies that the estimates are stable across these specifications, which in turn supports the argument proposed.

It is natural to see whether the results vary with the level of development. Columns 3 and 4 split the sample by economic development according to the median value of state income per capita. In column 3 the (relatively) high income sample again returns a negative coefficient for capital income inequality but with reduced statistical significance, whilst labor income inequality plays a significant role in this case. In column 4 the (relatively) low income sample also returns the same sign of the coefficient for $CapIneq$. It is also noteworthy that the coefficient estimate for labor income inequality is now positive, though is not statistically significant. This is in line with the findings in Luo et al. (2017) who focus on the sample of OECD countries, which implies that the US is in general richer than the average level of OECD and as a consequent, the group of poor states may be comparable to them. The results reported so far are if anything strengthened when state government expenditure is employed instead as the measure of state government size. The last column presents the relevant results and shows that using the expenditure data the estimated coefficient for capital income inequality keeps negative, although the significance level falls. Panels B and

C further use alternative measures of ideology and mirror the results found in panel A.

In summary, it is worth enriching our results with a discussion on the research results in the context of the added value made by this paper in two aspects. First, in contrast to Meltzer and Richard (1981), Inequality induced by differences in capital income is found to be negatively associated with government size, when the US state data is utilized. Second, as for the sources of income inequality theory, the existing literature mainly focuses on the analysis of cross-country (i.e., Luo et al., 2017), while this paper conducts the analysis within a developed country and obtains different results. Luo et al. (2017) use OECD data and argue that government size and capital income inequality are found to be negatively related. Moreover, controlling for capital income inequality yields a positive and significant relationship between government size and labor income inequality. However, this paper shows the heterogeneous effects of income inequality in the US. Capital income inequality plays a significant role in poor states, whilst labor income inequality instead does in rich regions with respect to the explanation of the change in state government size.

5 Conclusion

Utilizing the data on the US household income from the Panel Study of Income Dynamics database and the panel estimation with state fixed effects, this paper empirically examines how income inequality affects the size of US state government.

We find three main findings. First, an increase in capital income inequality is found to be negatively associated with government size. Second, the results hold across various econometric specifications employed, such as instrumental variables estimation. Third, controlling for capital income inequality yields a positive relationship between state government size and

labor income inequality in states with lower income levels.

We believe our results contribute to the literature in two ways. First, our analysis examines the sources of income inequality theory within a developed country, under the premise that the existing literature mainly focuses on the analysis of cross-country. Second, we show capital income inequality as one new explanation of the slowdown in the size of government in US, which sheds light on further research direction.

One implication for practice from our results is that the local government is advised to pay attention to the sources of income inequality (i.e., labor income inequality and capital income inequality) and their impact on the size of local government. In addition, the analysis of this paper can be applied in the design of tax system as well as the income taxation literature. The composition of taxes is always neglected by the government and researchers. Tax system is set ideally by economists, but politician cannot follow this ideal tax design. This is due to the risk of losing votes in politician competition. Government did raise revenue through labor income taxes 30 years ago. While it might probably have reached the peak of Laffer curve. This indicates that we need to look elsewhere, such as capital income taxes.

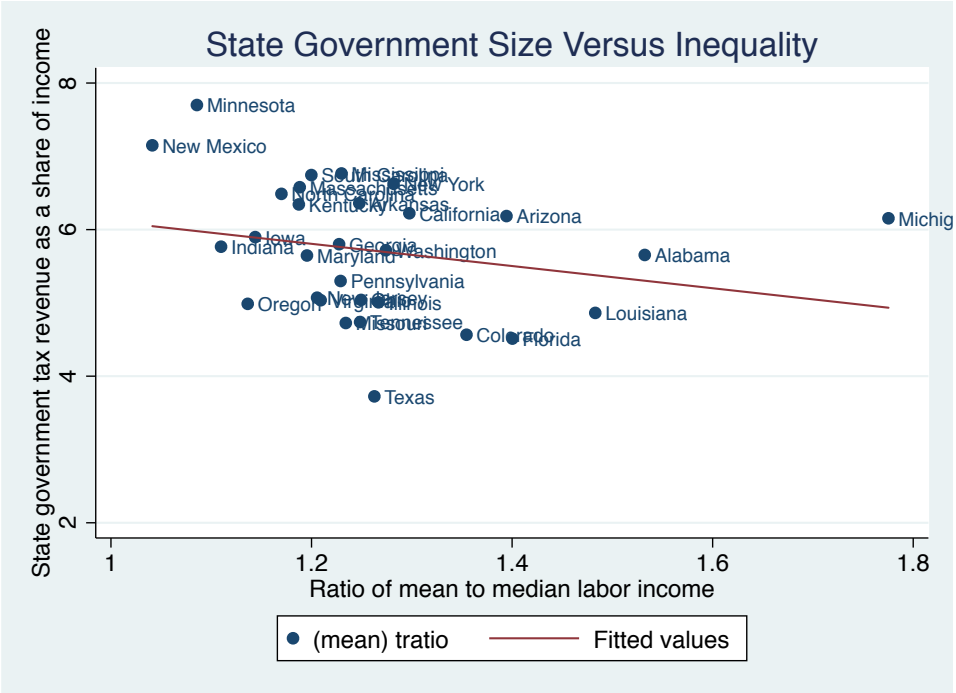

Figure 1: Scatter plot of average US state government tax revenue as a percentage of income and average income inequality by state. Income inequality is defined as the ratio of mean to median household labor income.

Table 1: Descriptive statistics

	obs	mean	std. dev.	min	max
t/y	1,056	5.62	1.14	1.96	9.88
g/y	1,104	11.90	2.49	6.72	23.19
$CapIneq$	782	6.89	0.84	3.54	9.47
$LabIneq$	782	1.26	0.17	0.99	2.35
$Income$	1,104	12.31	2.34	7.70	22.95
$FDLH$	1,174	0.59	0.18	0.16	1
$FDUH$	1,173	0.59	0.19	0.11	1
$DemGov$	1,152	0.54	0.50	0	1
$DemBoth$	1,450	0.65	0.48	0	1
$PolComp$	1,173	-0.04	0.05	-0.25	0
$TranShare$	1,450	-0.01	0.09	-0.24	0.25
$Ideo_c$	1,450	0.46	0.15	0.15	0.86
$Ideo_{g,ADA/COPE}$	1,450	0.50	0.19	0.05	0.94
$Ideo_{g,NOM}$	1,450	0.54	0.10	0.26	0.76

Notes: The table gives descriptive statistics for the variables. t/y is the ratio of total state taxes to state income. g/y is the ratio of total state expenditure to state income. $LabIneq$ is the ratio of mean to median household labor income, and $CapIneq$ is equal to the natural logarithm of the difference between mean and median household capital income - both data are constructed based on the Panel Study of Income Dynamics database. $FDLH$ and $FDUH$ are respectively the fraction of Democrats in the lower and upper houses. $DemGov$ is an indicator variable set equal to one when the governor is a Democrat. $DemBoth$ is an indicator variable set equal to one when the Democrats control both houses. $PolComp$ is a measure of political competition that takes higher values when seat shares are more equal. $TranShare$ is the total net value of transfers received as a share of state income. $Ideo_c$, $Ideo_{g,ADA/COPE}$ and $Ideo_{g,NOM}$ are different measures of ideology, with higher numbers denoting greater 'liberalism' (i.e., increasingly left-wing ideology). All variables, except $LabIneq$ and $CapIneq$, are provided by Pickering and Rockey (2013).

Table 2: Basic Estimation Results

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
CapIneq		-0.271***	-0.168***	-0.200***	-0.189***	-0.265*	-0.334*
		(0.0642)	(0.0564)	(0.0583)	(0.0534)	(0.139)	(0.147)
LabIneq	-0.349*	-0.325*	-0.239	-0.402**	-0.391**	0.227	-0.310
	(0.185)	(0.179)	(0.194)	(0.192)	(0.187)	(0.446)	(0.405)
Income			-0.0830	-0.159	-0.0890	-0.0728	-0.107
			(0.109)	(0.132)	(0.187)	(0.143)	(0.206)
FDLH			0.0417	-0.0758	-0.0668	-0.589	-0.927
			(0.668)	(0.705)	(0.686)	(1.210)	(1.310)
FDUH			-0.732	-0.534	-0.572	-0.776	-0.0565
			(0.571)	(0.628)	(0.622)	(1.063)	(1.031)
DemGov			0.0468	0.0508	0.0500	-0.00245	-0.0062
			(0.0609)	(0.0648)	(0.0630)	(0.103)	(0.105)
DemBoth			-0.0205	-0.0482	-0.0431	0.0405	-0.0951
			(0.0802)	(0.0834)	(0.0849)	(0.223)	(0.221)
PolComp			0.471	-0.927	-1.093	-0.485	-3.078
			(1.335)	(1.691)	(1.328)	(1.777)	(2.405)
TranShare			-0.760	-0.828	-0.803	0.226	0.356
			(0.623)	(0.574)	(0.603)	(1.072)	(0.969)
$Ideo_i$			-3.244	-0.670	0.392	-4.719*	-0.0160
			(2.052)	(1.894)	(3.226)	(2.672)	(2.653)
$Income * Ideo_i$			-0.0609	0.0457	-0.0522	-0.0310	0.0172
			(0.123)	(0.132)	(0.247)	(0.169)	(0.195)
Observations	579	579	548	548	548	108	108
States	30	30	30	30	30	30	30
Data	Annual	Annual	Annual	Annual	Annual	5-year average	5-year averag
Estimation method	FE	FE	FE	FE	FE	FE	FE
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.182	0.229	0.323	0.285	0.285	0.419	0.358

Notes: Dependent variable is total state taxes measured as a percentage of state income. Estimations use p with state fixed effects and robust standard errors clustered by state in parentheses. Year dummies are regressions. Columns (3)-(5) extend column (2) to include *Income*, *FDLH*, *FDUH*, *DemGov*, *DemBo* state population, and the proportions of children and senior citizens, *TranShare*, lagged ideology measur their interaction with state income, $Income * Ideo_i$, as additional control variables (where $i = c, gADA/C$ corresponding to each column). Columns (6)-(8) again test columns (3)-(5) using five-year average of the d annual data. *, **, and *** respectively denote significance levels at 10%, 5% and 1%.

Table 3: Instrumental Variables Estimation Results

	(1)	(2)	(3)
CapIneq	-0.406***	-0.506***	-0.464***
	(0.131)	(0.142)	(0.135)
LabIneq	-0.332**	-0.473***	-0.471***
	(0.136)	(0.141)	(0.140)
Observations	518	518	518
States	30	30	30
Data	Annual	Annual	Annual
Estimation method	IV	IV	IV
Year dummies	Yes	Yes	Yes
Ideology measured by	$Ideo_c$	$Ideo_{g,ADA/COPE}$	$Ideo_{g,NOM}$
	$L.CapIneq$	$L.CapIneq$	$L.CapIneq$
Instruments	0.354***	0.345***	0.357***
	(0.0420)	(0.0423)	(0.0422)
Weak instruments	$F = 71.061$	$F = 66.466$	$F = 71.383$
R^2	0.893	0.883	0.884

Notes: Instrumental variables regression of the ratio of total state taxes to state income on capital income inequality using $L.CapIneq$ as an instrument. All control variables, state fixed effects and year dummies are included in all regressions. Columns (1)-(3) respectively correspond to ideology measured by $Ideo_c$, $Ideo_{g,ADA/COPE}$ and $Ideo_{g,NOM}$. *, **, and *** respectively denote significance levels at 10%, 5% and 1%.

Table 4: Robustness and Extensions

	(1)	(2)	(3)	(4)	(5)
Dep. Var.	t/y	t/y	t/y	t/y	g/y
Panel A. Ideology measured by $Ideo_c$					
$L.(t/y)$	0.665***	0.593***			
	(0.0406)	(0.0407)			
CapIneq	-0.101***	-0.112***	-0.125	-0.159***	-0.212
	(0.0347)	(0.0284)	(0.0949)	(0.0385)	(0.178)
LabIneq	-0.214**	-0.173*	-0.549**	0.289	-0.242
	(0.0988)	(0.0976)	(0.230)	(0.350)	(0.263)
Observations	526	467	290	258	577
States	30	29	28	26	30
R^2	0.625		0.392	0.500	0.576
Panel B. Ideology measured by $Ideo_{g,ADA/COPE}$					
$L.(t/y)$	0.685***	0.619***			
	(0.0402)	(0.0445)			
CapIneq	-0.118***	-0.133***	-0.142	-0.165***	-0.257
	(0.0355)	(0.0317)	(0.0853)	(0.0449)	(0.166)
LabIneq	-0.242**	-0.186*	-0.619***	0.157	-0.315
	(0.106)	(0.0975)	(0.212)	(0.365)	(0.255)
Observations	526	467	290	258	577
States	30	29	28	26	30
R^2	0.624		0.375	0.519	0.576
Panel C. Ideology measured by $Ideo_{g,NOM}$					
$L.(t/y)$	0.686***	0.622***			
	(0.0423)	(0.0464)			
CapIneq	-0.112***	-0.125***	-0.155*	-0.138***	-0.236
	(0.0360)	(0.0323)	(0.0829)	(0.0403)	(0.167)
LabIneq	-0.243**	-0.196**	-0.618***	0.147	-0.312
	(0.104)	(0.0978)	(0.214)	(0.371)	(0.267)
Observations	526	467	290	258	577
States	30	29	28	26	30
R^2	0.623		0.373	0.493	0.572
Data	Full	Full	Higher income	Lower income	Full
Estimation method	FE	Arellano-Bond	FE	FE	FE
Year dummies	Yes	Yes	Yes	Yes	Yes

Notes: Column (1) includes lagged dependent variable, $L.(t/y)$. Column (2) contains Arellano-Bond estimation with lagged values of both the predetermined and endogenous variables as instruments. Columns (3) and (4) respectively correspond to higher and lower state income levels. Column (5) instead uses g/y as an alternative dependent variable. Panels A-C respectively correspond to ideology measured by $Ideo_c$, $Ideo_{g,ADA/COPE}$ and $Ideo_{g,NOM}$. *, **, and *** respectively denote significance levels at 10%, 5% and 1%.

DISCLOSURES

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