

Federalism and American Inequality

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Studies of the political determinants of economic inequality have usually focused on the national government, but in federalist systems subnational governments may also be important. In recent decades, the U.S. national government has been less active in fighting inequality, but increasing devolution means that states wanting to address this problem have had a greater incentive and perhaps means by which to do so. Applying power resources theory, we argue that in states where left parties are stronger and more liberal politics are enacted, the government will reduce inequality and that this state effect becomes more pronounced as middle- and lower-class power wanes nationally. In the analysis we find that both federal and state governments influence inequality, and since the Republican takeover of Congress in 1995, the states have played a more important role in shaping the income distribution.

Economic inequality has been increasing in much of the industrialized world, but the United States is unusual in its relatively high levels of inequality and the power reserved to its subnational governments, raising the question of how these governments shape distributional outcomes.¹ Using a power resources framework, we argue that parties representing the middle and lower classes at the federal and state level will enact policies that reduce inequality. We also anticipate that when political power in national government shifts toward the upper classes, state-level politics will become more important, with states having a greater influence on distributional processes. This argument is largely confirmed by examining the effect of federal and state politics on state-level income inequality from 1976 to 2006. We find that prior to the Republican takeover of Congress in 1995 the federal government significantly influenced economic inequality, while in the period since states have played a more important role. We also illustrate one of the underlying policy mechanisms of state influence by considering how state minimum wages responded to federal inaction after 1994 and analyzing the effect of the state minimum wage on state-level economic inequality in both time periods.

Increasing economic inequality in the United States has been of growing interest to the public, political observers, and scholars over the past decade (Jacobs and Skocpol 2005; Kelly and Enns 2010; Kenworthy and Pontusson 2005; Page and Jacobs 2009), and there is substantial disagreement about the degree to which inequality should be viewed as a problem. Some see inequality as a natural product of a market economy that is unimportant relative to outcomes like economic growth and poverty, while others see inequality as a social ill in itself. Despite the attention to this topic, there are still significant gaps in our knowledge. One of these is whether and how subnational governments may influence inequality, and how American federalism affects economic inequality. This question is increasingly important because the federal government has arguably taken steps that increase the income gap (Hacker and Pierson 2010). At the same time, devolution has accelerated. Thus, if states would like to reduce economic inequality they have a greater incentive and perhaps more means by which to do so.

We make three contributions to understanding the political determinants of inequality. First, there is some question over whether the states have the capacity to shape distributional outcomes. Most

¹An online appendix for this article is available at <http://journals.cambridge.org/jop> containing supplemental analyses and discussion. Data and supporting materials necessary to reproduce the results in the article will be made available at <http://dvn.iq.harvard.edu/dvn/dv/nkellydata> prior to publication.

scholars argue that states have a limited ability to redistribute, though some studies have found that states can influence post-redistribution income (Freund and Morris 2005; Langer 2001). We go beyond these important studies by examining pre- and post-redistribution income to determine whether states can influence the income distribution via both “market conditioning” (Kelly 2009) and redistribution. Second, our analysis is rooted in power resources theory, enabling us to better understand the states in the context of national and comparative research. Finally, studies have focused primarily on national (Kelly 2005, 2009) or state governments (Barrilleaux and Davis 2003; Freund and Morris 2005; Langer 2001), but we focus on their *shared* ability to shape inequality (Rose 1973). This is essential because, historically, states have acted in the absence of federal efforts to address social or economic conditions (Amenta et al. 1987; Finegold 1995). Since middle- and lower-class interests have become more marginalized at the national level since the mid-1990s, state politics and policy might have grown in import (Baumgartner and Jones 1993). Thus, we anticipate that state effects on inequality change when there are shifts in national politics.

Federalism and the State Role in Shaping Distributional Outcomes

Scholars have debated the roots of rising inequality, but it is clear that the national government has played a role (Kelly 2005, 2009). State-level activities have also been analyzed (Barrilleaux and Davis 2003; Freund and Morris 2005; Fry and Winters 1979; Langer 2001; Plotnick and Winters 1985), but how these levels of government combine to shape inequality has been relatively neglected.

Federalism and the Ability to Influence Inequality

Both states and the federal government have tools that can influence inequality. Explicit redistribution via taxes and transfers is the mechanism that typically comes to mind when thinking about government’s influence on inequality, and this may have caused analysts to discount the role of states in the distributional process since state tax systems are less progressive and states maintain little or no independent welfare state.

The activity of the federal and inactivity of state governments in explicit redistribution has been explained from a functional or competitive federalism standpoint. The two main economic activities of government are development and redistribution (Peterson 1995). Because the federal government is relatively inefficient at providing developmental policies, and the states are inefficient at providing redistribution, the federal government does more of the latter and subnational governments more of the former (Peterson 1995). This perspective on differing policy responsibilities is seen in studies of competitive federalism, with states limiting redistribution to avoid being a “welfare magnet” (Bailey and Rom 2004). Perhaps not surprisingly then, studies find that state welfare effort has little impact on inequality (Barrilleaux and Davis 2003).

If redistribution were the only mechanism available to influence distributional outcomes, then the states would likely play a minor role in shaping income inequality. Kelly (2005, 2009) argues, however, that government influences the distribution of income via “market conditioning,” by affecting a variety of decisions made in a market context, prior to redistribution, including the decisions that employers make about how much to pay their employees. For example, governments can make it easier to form unions, enabling workers to capture more corporate profits, reducing inequality. So it is mistaken to think that there is an abstract “market,” separate from government, producing an income distribution to which the government must then respond. There is evidence that national inequality is affected by government via both redistribution and market conditioning (Hacker and Pierson 2010; Kelly 2005, 2009). Thus, it is important to consider the ability of state-level politics and policy to influence market outcomes.

States have the authority to make policies in education and economic development (Witko and Newmark) and share responsibility in other areas, like labor regulations, that can condition the market. Previous studies at the state level do not distinguish between pre- and post-redistribution income, but this distinction may be important since state redistributive efforts appear to have little ability to reduce inequality (Barrilleaux and Davis 2003), and some policies examined in previous studies probably condition the market rather than redistribute income (e.g., Langer 2001). Also, though states may have a limited will to redistribute, they do have some authority in federalized welfare programs (Bailey and Rom 2004; Plotnick and Winters 1985; Soss et al. 2001), and

managers can use discretion to expand or contract the scope of programs (Jacoby and Schneider 1996).

Despite these important tools, the federal government appears to have a greater capacity to influence distributional outcomes. The major post-War reduction in inequality in the United States was spurred by changes in national policies and politics, not through the policies of individual states. The ability to create uniform policies affecting all citizens, the superior ability to tax and spend, and control over monetary and trade policy are just some of the tools not available to states. From a functional federalism perspective, then, the federal government should take the lead in fighting economic inequality, and between the New Deal and Great Society it clearly did. By the early 1980s, however, explicit federal government efforts to reduce economic inequality began to wane.

At the same time that the federal government was retreating in this area the states were given more authority in programs that can affect the income distribution (Hill et al. 1995), especially after the Republican takeover of Congress in 1995 (Thompson 2008, S16), embodied in welfare reform. Liberals have traditionally been skeptical of devolution since this has often permitted dramatic inequalities (Soss et al. 2001; Wildavsky 1985). But states could use their authority to advance the interests of lower- and middle-class voters. Historically, when the federal government hesitates to address important socio-economic conditions the states often seek to fill the gap (Amenta et al. 1987; Finegold 1995; Volden 2006). Freeman and Rogers (2007) argue that as inequality has increased in recent years, states have again led on this issue, which they term “progressive federalism.” For example, several states have increased their minimum or prevailing wages or strengthened the bargaining position of labor (Freeman and Rogers 2007). Not all states have engaged in this progressive federalism, however, and variation in state responses likely has implications for inequality in the American states.

Relative Class Power, Federalism, and Government Effects on Inequality

Both levels of government can influence inequality, but what explains their relative action or inaction? Why did the federal government enact policies reducing inequality for decades and then reverse course? Why have some states enacted policies that likely reduce inequality, while others have not? Competitive or functional federalism can only take us so far in answering these questions. The federal

government can more efficiently and effectively implement policies that reduce inequality, but it has reduced such efforts. States should avoid luring poor people from a competitive federalism perspective, but some states have made conditions better for low-wage workers.

We use power resources theory (PRT) as a starting point to understand the effects of federal and state governments on economic inequality. PRT was developed within the context of comparative welfare states research (Huber and Stephens 2001; Korpi 1978). PRT’s main assumption is that the working and middle classes have different preferences than managers and owners of capital, with the former supporting policies that lead to a more equitable income distribution. PRT conceptualizes two major spheres in which the lower and middle classes can organize to achieve more egalitarian outcomes: politics and the market. In the traditional conception of PRT, ideologically left parties are the vehicle through which lower income individuals can shape *government* action. Similarly, labor unions are the vehicle through which *markets* can be pushed in a more egalitarian direction. Previous studies find fairly consistent support for the conclusion that inequality is reduced by higher levels of union membership and the strength of left parties in government (Bradley et al. 2003; Huber et al. 2006; Moller et al. 2003).

Of course, care must be taken in applying PRT in a context that diverges in important respects from Europe. Class identity is not as developed in the United States and the alignment of class and party is not as straightforward as in European democracies, since in a two-party, federalist system in a large, diverse country political parties must build broad electoral coalitions that extend well beyond class-based interests. Nonetheless, with appropriate modifications PRT is useful in explaining the effect of government and politics on inequality. First, we focus on income-based power resources rather than purely class-based power resources. Second, we measure left party power in a way that acknowledges variation across states in the positioning of parties and the linkage between parties and income groups. We elaborate on these two points below.

Class traditionally refers to position in the means of production rather than income, and PRT is an explicitly class-based theory. Our focus on income rather than class is a minor tweak because class and income are highly correlated, and it is common for class-focused studies to use income as a primary indicator of class. Table 1 presents evidence that patterns of variation in political attitudes and

TABLE 1 Attitudes Toward Redistribution, Inequality, Partisanship, and Voting Behavior by Income Group

	Income Group ^a		
	Lower 20%	Middle 40%	Upper 20%
Agree that income differentials too big ^b	68% (175)	68% (469)	53% (102)
Agree that government should reduce income differentials ^c	48% (237)	32% (440)	24% (89)
Voted for Obama ^d	85% (121)	64% (411)	44% (88)
Democratic Partisanship (including leaners) ^e	69% (186)	58% (520)	39% (97)

Note: Table reports column percentages with cell N in parentheses.

^aIn GSS data, income group approximations calculated from variable income98. Lower 20% includes categories 1–11, middle 40% includes categories 12–21, and upper 20% includes categories 22–24. In NES data, income is from v083248, with the three income groups corresponding to categories 1–10, 11–20, and 21–25.

^b2000 GSS variable “incgap.”

^cGSS variable “goveqinc.”

^d2008 NES V085044a

^e2008 NES V083098x

behavior across income categories in the United States are broadly consistent with PRT. Separating the U.S. population into categories roughly approximating the bottom 20, middle 60, and top 20% of the income distribution; we see that 68% of those in the lowest income category agree that income inequality should be reduced as opposed to 53% in the top category. Regarding government action more specifically, the lowest income group is twice as likely as the highest income group to support government intervention to reduce inequality. Similar patterns emerge with regard to partisanship and voting behavior—69% of those in the low-income category versus 39% of the high-income group identified as Democrats in 2008. Voting behavior in the 2008 presidential election was also highly correlated with income—44% of the high-income group and 85% of the low-income group reported voting for Obama. These data suggest that an income-based version of PRT can be sensibly applied in the U.S. context.

The traditional indicator of low-income political power resources is left party power in government. Though the Democratic Party would not be categorized as a left party from a cross-national perspective and there is not a perfect alignment of income and party in the United States, lower-income individuals are more aligned with the Democrats than the Republicans and Democrats are clearly to the left of their partisan opposition. Just as is the case for Social Democrats, the left party of most European democracies, when Democrats gain power—regardless of whether their ascension is due to electoral mobilization of the poor, increased support among the rich, or economic conditions—their presence is a power resource for the poor. At the national level, then, we

make use of the purely party-based measure of Democratic strength in government as an indicator of left party power because it is analytically appropriate and maintains greater consistency with previous analyses rooted in power resource theory (Kelly 2009).

But our analysis has an added wrinkle on this front since we are examining inequality at the state level—there is *substantial* variation in the degree to which Democratic strength in state government represents the left partisan power that is so central to PRT. And this variation in the link between left power and Democratic strength is much greater at the state than at the national level. In the time period we analyze, Democrats are likely the left party relative to Republicans in nearly every state (Gelman et al. 2008). Even with this being the case, Democratic strength in New York government is more indicative of left party power than is Democratic strength in Mississippi government. This is an important challenge given that we analyze both temporal and cross sectional variation in state-level inequality. To measure left party strength in government in a manner consistent with PRT, we must somehow account for this variation in Democratic policy makers at the state level.

Fortunately, Berry et al.’s (1998) measure of state government ideology is ideal for our purposes since it generates information about partisan control of government and the “leftness” of both parties in a way that is comparable across states. This is done by applying an ideological score to each state party based on the ideology of their copartisans in the state’s national congressional delegation. Using common ideological scores derived from national politics makes it possible to compare party power across states with a common metric that approximates the

national partisan divide. These state party scores are then weighted by partisan control of the institutions of state government to produce the final measure (each legislative chamber at 0.25 and the governor 0.50). In essence, the Berry et al. (1998) state government ideology measure generates a measure of left power in government that is basically consistent with previous studies in the power resources tradition and accounts for the most important complexities of applying the idea of political power resources to the context of the American states.

One additional complication of applying PRT to the U.S. context relates to the alignment or lack thereof between income class and union membership. At one time, union members could be accurately described as working or lower class. But since the decline of manufacturing, union membership has not only dropped, but has also shifted toward professional employees of state, local, and national government. So in utilizing union membership as an indicator of power resources, we must be careful to specify that union membership in the contemporary United States refers to a more disparate class base than it did historically. Though union membership has shifted away from the manufacturing sector to service and governmental sectors, higher levels of union membership should reduce economic inequality because the National Labor Relations Act only guarantees nonmanagerial employees the right to organize, collective bargaining tends to promote contracts that limit the most dramatic differences between top earners and bottom earners covered by the contract, and these effects spillover to nonunion workers (Fortin and Lemieux 1997; Hyclak 1980; Mosher 2007). Furthermore, from a purely empirical standpoint, for the years in which union membership data at the state level are reported separately for private and public sector workers (since 1992), total union density is more highly correlated with private sector union density than public sector density ($r = 0.93$ vs. 0.86), and public and private union membership are correlated at a fairly robust 0.69 .

The key hypotheses suggested by power resources theory, then, are that inequality is reduced as left parties hold power and as union membership increases. Studies at the national level have previously supported this claim (Kelly 2005, 2009), demonstrating that part of the recent abandonment of national policies that reduce inequality can be attributed to the national decline in unions and the increasing power of the GOP. Despite this shift at the national level, there remains extensive variation in power resources in the states. For example, in 2006 five

states had union membership rates higher than 20 percent, almost double the national rate. In the analysis that follows, one of the most important contributions is an incorporation of both national- and state-level variation. Based on previous studies there is reason to believe that left partisan power in the states will reduce inequality since this factor has been found to influence the adoption of policies that may influence inequality (e.g., Soss et al. 2001). Since labor unions appear to constrain the influence of business and high-income groups, there is also reason to believe that the economic power resources represented by union membership should reduce inequality, particularly the level of inequality produced by the market (Hyclak 1980; Radcliffe and Saiz 1998; Witko and Newmark 2005). Though the effect of left party power and unionization on state income inequality has not been examined in previous longitudinal state studies, Barrilleaux and Davis (2003) found that states with more lower-class voting had less inequality from 1978 to 1990.

Clearly, the levels of government in the United States do not act in isolation from one another, so it is necessary to consider the influence of the federal and state governments together (Rose 1973). State governments with strong lower- and middle-class power resources may be content to allow the federal government to take the lead in enacting inequality-reducing policies if the national government is willing to do so, but when the federal government is not taking such actions, we anticipate that states will play a greater role in shaping outcomes. If the federal government is not favorable to the interests of middle- and lower-income classes, these interests should have relatively more success in more favorable subnational units (Baumgartner and Jones 1993), and this appears to have taken place in recent years (Martin 2001). After a shift toward conservatism under Reagan in the 1980s capped by the Republican takeover of Congress after the 1994 midterm elections, federal Democrats have sought to give more authority to the states, expecting that some would engage in more liberal policymaking (Grogan and Rigby 2009). Devolution, usually favored by conservatives, can be used to promote liberal policies in the states if lower- and middle-class groups have more power there.

Policy Mechanisms of Distributional Impact

Government can take an almost infinite number of actions that might influence inequality, from passing explicitly redistributionist policies, to a Governor

giving a speech in support of striking laborers. The difficulty of measuring all of these actions is one of the benefits of thinking in terms of class-based power resources, rather than specific policy programs, when examining the influence of government on inequality. Nonetheless, if we can identify the enactment of specific state policies that benefit those with lower incomes, and if it appears that the states have become more active as the federal government has become less active on these policies, it would provide evidence of the policy mechanisms linking power resources to distributional outcomes.

Research has found a link between indicators of state lower-class power and policies with implications for inequality. Most of this research has focused on redistributive policies such as state welfare benefits (Bailey and Rom 2004; Hill, Leighley, and Hinton-Andersson 1995; Plotnick and Winters 1985). We expect that states can also influence inequality via market conditioning policies, but this policy mechanism has been less frequently studied at the state level (though see Amenta et al. 1987, for an example). We consider the possibility of market conditioning by examining the effect of the state minimum wage.

This is an important policy to consider in light of our argument, since some evidence suggests that the federal minimum-wage influences inequality (Lee 1998) and it is jointly provided by the federal and state governments. The Fair Labor Standards Act (1938) established a federal minimum wage, but states have the authority to increase the minimum wage above this amount and set a minimum wage for employees that are exempt from the FLSA. From the 1940s through the 1970s the federal government had routinely increased the minimum wage and expanded the types of workers and industries that it covered. The minimum wage increased modestly in 1980, 1981, 1990, 1991, and, as a result of Democratic pressure, in 1995 and 1996. With unified Republican control of government after the 2000 election, the minimum wage was not increased until the Democrats regained Congress in 2007. It appears that the states responded to federal inaction with minimum-wage increases during this time (Freeman and Rogers 2002).

While the last 30 years are generally regarded as a conservative era, the Republican takeover of both chambers of Congress in 1995 was a watershed moment. Though Republicans had often controlled the Presidency and sometimes controlled the Senate after World War II, the House had remained in Democratic hands since the late 1940's, blunting the most conservative goals of Republican Presidents. This

Congressional majority was looking forward to using the modern, more powerful political parties to finish the conservative shift begun by Ronald Reagan by reversing liberal social welfare and regulatory legislation (Rae 1998, 39). The suddenness of this shift can hardly be overstated. The Democrats in Congress had been becoming more liberal, and the leaders in the prior Congress were liberal Democrats like Senate Majority Leader George Mitchell (ME) (who worked for Senator Edmund Muskie early in his political career), House Speaker Tom Foley (WA), (once a key member of the revolt against conservative southern Democrats as Chair of the Democratic Study Group) and Majority Whip David Bonior (MI) (who once staged an all-night vigil on the floor of the House to advocate for extending unemployment benefits and increasing public works spending) (Barone and Ujifusa 1993). Whereas labor was guaranteed access to congressional leaders in 1993 they were virtually shut out of influence in 1995.² Though the Presidency remained in Democratic hands, Bill Clinton "triangulated" between the left of the Democratic Party and the Republicans in Congress, overseeing major changes in welfare and regulatory policy.

Partly resulting from the actions of the new majority, devolution to the states accelerated at this time (Thompson 2008). Also, while inequality has increased for almost the entire period of our study, there was a clear increase in the rate of growth in the mid 1990's. In sum, the problem of inequality became more acute just as the federal government was less likely to ameliorate it and the states were given more tools with which to address it (Hill, Leighley, and Hinton-Andersson 1995). If states with more power resources for lower-income groups assert themselves amidst federal inaction, we will see that the state lower-class power variables are more important in the latter time period and federal variables are more important earlier, a result we also anticipate with the minimum wage.

Analysis

To examine our arguments we consider the effect of federal and state variables on income inequality from 1976 to 2006. Since we argue that the effect of state

²Unions provided 44.9% of the campaign contributions to the campaigns of Democratic House leaders and 27.2% of contributions to Democratic Senate leaders in their most recent campaigns, but just 3.4% and 0.05% of contributions to Republican House and Senate leaders taking power in 1995, respectively.

lower-class power on inequality will depend to some extent on what the federal government is doing, we split the sample between 1976–1994 and 1995–2006. The theoretical reasons to anticipate differences in the pre and post-1995 eras discussed above were confirmed in an analysis of the data. Specifically, a Chow test of the equality of the coefficients estimated pre-1995 versus post-1994 confirmed the presence of differences across two time periods ($p < 0.01$), and additional analyses (discussed more below) demonstrate that important political variables have a significantly different effect size across the two eras.

Variables and Data

In our analysis we focus on two dependent variables—*household pre-redistribution inequality* and *household posttransfer inequality*. Examining both types of inequality is important since the states are thought to have minimal influence through redistribution, which makes market conditioning a more important mechanism for influencing the income distribution at the state level. If there is a market conditioning mechanism present, we will observe an impact of political variables on distributional outcomes using an income measure excluding government transfers. We also examine posttransfer inequality to confirm that any such effects also translate into final distributional outcomes after redistribution occurs. This is important because reducing (increasing) pre-redistribution inequality can reduce (increase) government's influence via the mechanism of explicit redistribution (Kelly 2009).

For both of these measures, we rely on household income data collected by the U.S. Census Bureau in the Annual Social and Economic Supplement (ASES). Our pre-redistribution income measure includes all sources of income available in the ASES dataset excluding government transfer payments but including private transfers. The sources included are: earnings, private retirement income, private pensions, interest, dividends, rents, royalties, estates, trusts, alimony, child support, and outside assistance. Post-transfer inequality includes all pre-redistribution income sources plus Social Security, welfare, education support, unemployment, worker's compensation, veteran's benefits, survivor benefits, disability, and SSI.³

³Our measure does not include the effect of taxes due to lack of data availability. We could attempt to impute tax payments, but this is particularly difficult at the state level. Because of these challenges and the fact that our primary focus is pre-redistribution income inequality, we have excluded the effect of taxes in our posttransfer measure.

We calculate a Gini coefficient for households as an annual indicator of economic inequality within each state.

Explanatory Variables. The first federal government variable is *party control of the presidency*. To capture partisan effects for control of the White House, we include a straightforward indicator variable (Democrat=1). We also include a measure of the partisan balance in the U.S. Congress, *Democrats in Congress*, which is the proportion of seats held by Democrats. We examine variations in national policy with a measure of *national policy liberalism* created by Erikson, MacKuen, and Stimson (2002).⁴

At the state level we use *union density* and *left government power* to measure economic and political power resources, respectively. The left power measure comes from Berry et al. (1998), updated through 2006. This variable has been rescaled by dividing by 100 to adequately present the coefficients. Union density is the proportion of the nonagricultural workforce represented by a union. The data were originally collected by Hirsch, MacPherson, and Vroman (2001), and we have extended the data into the more recent years included in our analysis. We also consider the effect of changes in the state's minimum-wage law. *State minimum wage* measures each state's minimum wage in current dollars. States without their own minimum wage are coded 0.

Economic and Demographic Controls. It is also necessary to control for economic and demographic variables. We include the state's *unemployment rate* (proportion unemployed) and the proportion of the gross state product derived from manufacturing (*manufacturing GSP*), which we expect to be positively and negatively related to inequality, respectively. Since the total size of the economy may influence inequality, we also include total state *GSP* (in trillions). The unemployment rate data are available from the Bureau of Labor Statistics website back to 1976. The gross state product data were obtained from the Census Bureau website. We also include the proportion of the population that is *nonwhite* and *over age 65*. Since these groups earn less, states with a higher proportion in the population

⁴The starting point of this measure is David Mayhew's list of important laws (1991), updated through 2006 (<http://pantheon.yale.edu/~dmayhew/data3.html>). From this list, EMS categorize each law as expanding (liberal) or contracting (conservative) government. Ambiguous laws are coded 0, liberal legislation is counted +1, conservative legislation -1, and exceptionally important laws (from Mayhew) are counted +2 or -2 (see Erikson, MacKuen, and Stimson (2002, 374–80) for a complete list of coding decisions). We utilize the detrended version of the measure that EMS call "Laws."

likely have more inequality. These data are from the Census Bureau's population estimates data archives.⁵

Model Estimation

We utilize error correction models (ECMs) estimated with OLS with panel corrected standard errors. ECMs have become common in political science applications (De Boef and Keele 2008), and they can be appropriately applied to an analysis of TSCS since, as Beck points out specifically in regard to error correction models: “[w]hatever we can do for time series we can do for TSCS” (2001, 279), so long as the number of time units is sufficient, generally at least 10 (274). Much of the variation in a dataset such as ours comes from differences across states, but over-time variation within a state is also important. ECMs allow us to appropriately capture this temporal variation.⁶

One way to express a single-equation error correction model is as follows:

$$\Delta Y_t = \alpha_1 Y_{t-1} + \beta_1 \Delta X_t + \beta_2 X_{t-1} + \varepsilon_t.$$

The key point to understand is that for each independent variable X we have up to two parameter estimates— β_1 for the differenced variable and β_2 for the lagged level of the variable, which can be dropped from the equation if we find that it has no statistically significant impact. If either of these coefficient estimates indicates a statistically significant relationship, then it is appropriate to conclude that the explanatory variable has a statistically significant relationship with the dependent variable. In this simple bivariate example, β_1 provides an estimate

of the initial change in the dependent variable produced in the short term by a shock to the independent variable. This is called the “short term” effect, not meaning that the effect is impermanent but that the effect occurs wholly at a specific point in time. β_2 and α_1 provide the information needed to estimate the slightly more complicated “long term” impact. This is also called the error correction component of the model. The long-term impact is the portion of the connection between X and Y that does not occur at one particular point in time but is distributed temporally such that a portion of the impact is felt in each period over a time span. The size of this long-run impact is a function not only of β_2 but also of α_1 , which is known as the error correction rate. The total long-term impact of a shock to X on Y via the error correction component, the long-run multiplier, is computed by dividing β_2 by α_1 .

Results

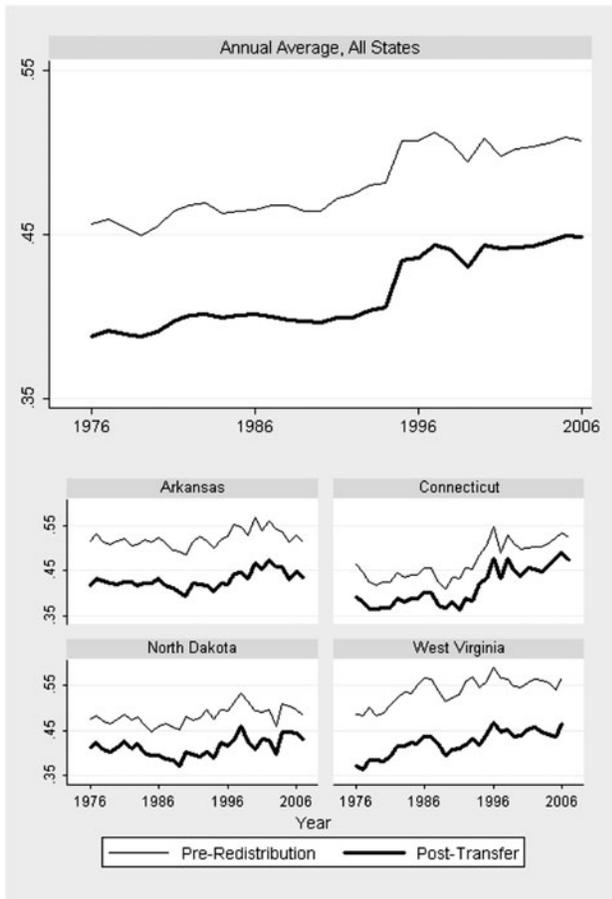
Before turning to the multivariate results it is useful to understand changes in state-level inequality over time. The top of Figure 1 shows the average annual level of pre- and post-redistribution household inequality across all states. We can see that changes in both types of inequality are very similar, but that post-redistribution inequality is consistently lower, as expected. The similar path of pre- and post-redistribution inequality suggests that focusing solely on redistribution is misguided—nearly all of the variation in state inequality is driven by differences in pre-redistribution inequality, underscoring the need to examine the market conditioning mechanism. We also see that there has been a steady increase in inequality since roughly 1980, though as noted above, with a large increase during the mid 1990's as the United States came out of the early 1990s recession.

The bottom portion of Figure 1 presents the same data, but for the individual states of Arkansas, Connecticut, North Dakota, and West Virginia. These states are obviously not representative, but were chosen to show differences in inequality's path over time across states. No state saw a significant decrease in inequality during this time period, but we can see that both Arkansas and North Dakota ended up with about the same level of inequality in 2007 as they started with in 1976. In contrast, Connecticut initially experienced decreasing inequality before experiencing large increases in inequality in the early 1980s and mid 1990s, with subsequent modest

⁵Prior to the 1980 Census the categories of Hispanic and white were mutually exclusive, but subsequently Hispanics could identify as white and Hispanic. Thus, in states with large Hispanic populations there appears to be a major increase in Hispanic population following the 1980 census (see <http://www.census.gov/population/www/documentation/twps0075/twps0075.html>). Removing these states from the analysis or removing this variable from the models does not alter the substantive results.

⁶The level of our pre-redistribution dependent variable contains mixed evidence regarding stationarity. The Im, Pesaran, and Shin test, with a null hypothesis that all panels contain a unit root ($p < .001$), indicates that at least some of the panels in our dataset are stationary. However, Hadri's Lagrange multiplier test indicates that at least some of our panels contain a unit root. The differenced version of the variable is unequivocally stationary. Using an ECM minimizes the possibility of spurious results from regressing an integrated or near-integrated series on another. The primary motivation for using an ECM, however, is that it is a general time series models that imposes the fewest possible restrictions (De Boef and Keele 2008).

FIGURE 1 Mean Pre- and Post-redistribution State-Level Income Inequality, 1976–2007



increases. West Virginia saw a more consistent increase, with some yearly fluctuation. We can see that there is variation across the states in these trends, despite the increase in inequality in nearly every state. Therefore there is variation to be explained by state-level variables.

We begin our discussion of the multivariate results by examining pre-redistribution inequality for the two time periods of our analysis. We can see from the first two columns in Table 2 that the results of the analysis are largely in line with our theoretical expectations, and many of the control variables also have the anticipated effects. For example, a larger proportion of elderly, nonwhite, and unemployed leads to higher levels of inequality in both periods. More importantly for our theoretical concerns, the effect of low-income power resources is in line with theoretical expectations and the differences observed between the two periods are also generally as hypothesized.

Looking first at federal-level variables, a larger proportion of Democrats in Congress is associated with lower levels of inequality during the pre-1995 period but is not statistically significant in the post-1994 period. While postestimation tests fail to find a statistically significant difference between the estimated short-term coefficients for Democrats in Congress in the two periods ($p = 0.47$), the difference across the periods is somewhat supportive of the hypothesis that national-level political power resources became less relevant in the post-Republican Revolution era.⁷

Turning to state variables, we see that left government power has a negative short-term effect on inequality in the post-1994 period but has no statistically significant effect from 1976 to 1994. Wald tests show that we can be fairly confident ($p = 0.08$) that there is a difference in the size of the effect rather than merely a difference in statistical significance across the two models. Left power had a larger equalizing effect on state level inequality after 1995 than it did before. State-level market power resources also have the hypothesized effect. In both time periods union membership reduces economic inequality. Generally speaking, when low-income market and political power resources are present, there is less inequality. Importantly, we see that even after controlling for federal efforts, states can influence the distribution of market income. The third and fourth columns of Table 2 simply replicate the models of pre-redistribution income for posttransfer inequality. These results almost perfectly mirror the earlier results and are presented to show that national- and state-level politics and economic inequality have similar effects on both posttransfer inequality and market inequality. Left power in government had a significantly larger effect in the latter time period ($p=0.02$). The effect of these variables across the entire period can be found in a model in the online appendix.

Though a full analysis of all policies that may influence the income distribution is not our goal, the minimum wage is a good example of a policy that “conditions the market” and might reduce economic inequality by placing a floor under the wages of the lowest paid workers. As the federal minimum stagnated between 1996 and 2006 and inequality rapidly grew, a number of states increased their minimum

⁷Tests for equality of coefficients were conducted in STATA 11 by combining the results from the two periods with the seemingly unrelated estimates command, *suest*. Wald tests for equality of coefficients were then estimated using STATA’s *test* command.

TABLE 2 State and National Politics, Policy, and Income Inequality in the American States

Independent Variables	Δ Market Inequality _t		Δ Post-Transfer Inequality _t	
	(1976–1994)	(1995–2006)	(1976–1994)	(1995–2006)
Inequality _{t-1}	-0.240* (0.042)	-0.389* (0.074)	-0.310* (0.046)	-0.465* (0.085)
<i>National Variables:</i>				
Δ Democratic President _t	0.001 (0.003)	0.008 (0.007)	0.002 (0.002)	-0.001 (0.006)
Democratic President _{t-1}	0.002 (0.003)	0.008 (0.008)	0.001 (0.001)	0.003 (0.007)
Δ Democrats in Congress _t	-0.077* (0.032)	0.029 (0.172)	-0.072* (0.017)	-0.055 (0.154)
Democrats in Congress _{t-1}	0.014 (0.035)	0.133 (0.182)	-0.035 (0.020)	0.025 (0.163)
Δ National Policy Liberalism _t	0.001 (0.001)	0.000 (0.001)	0.000 (0.000)	0.001 (0.001)
National Policy Liberalism _{t-1}	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)
<i>State Variables:</i>				
Δ Left Govt Power _t	-0.002 (0.004)	-0.014* (0.005)	-0.001 (0.003)	-0.014* (0.004)
Left Govt Power _{t-1}	0.002 (0.003)	0.004 (0.003)	0.002 (0.002)	0.003 (0.003)
Δ Union Density	-0.015 (0.030)	-0.116 (0.073)	-0.013 (0.026)	-0.089 (0.062)
Union Density _{t-1}	-0.025* (0.009)	-0.050* (0.011)	-0.028* (0.007)	-0.023* (0.001)
Δ Unemployment _t	0.397* (0.055)	0.201 (0.166)	0.191* (0.040)	0.038 (0.152)
Unemployment _{t-1}	0.228* (0.041)	0.450* (0.114)	0.147* (0.030)	0.291* (0.083)
Δ Manufacturing _t	0.080 (0.053)	0.069 (0.060)	0.061 (0.043)	0.048 (0.055)
Manufacturing _{t-1}	0.006 (0.006)	0.037* (0.018)	-0.001 (0.005)	0.029* (0.014)
Δ GSP _t	-0.263* (0.082)	-0.111 (0.066)	-0.184* (0.068)	-0.065 (0.061)
GSP _{t-1}	0.018* (0.006)	0.012* (0.005)	0.021* (0.005)	0.015* (0.005)
Δ Nonwhite Population _t	0.048 (0.040)	0.453* (0.182)	0.023 (0.029)	0.488* (0.177)
Nonwhite Population _{t-1}	0.014* (0.006)	0.020 (0.010)	0.017* (0.005)	0.026* (0.009)
Δ Elderly Population _t	-0.950 (0.653)	0.706 (0.880)	-0.806 (0.500)	-0.010 (0.801)
Elderly Population _{t-1}	0.191* (0.039)	0.358* (0.077)	0.094* (0.024)	0.212* (0.051)
Constant	0.070* (0.024)	0.054 (0.094)	0.123* (.021)	0.139 (0.086)
R ²	0.19	0.33	0.20	0.37
N	900	600	900	600

Note: OLS regression coefficients with panel corrected standard errors in parentheses.

* $p < .05$ two-tailed

wage. In 1991 only 12 states had a minimum wage higher than the federal rate, but 30 states had a higher minimum wage before the federal government passed an increase in 2007 (Freeman and Rogers 2007; U.S. Department of Labor 2010). Supplementary analysis indicated that the length of time since the last federal minimum-wage increase, state inequality, and lower-class power all positively and significantly influenced the adoption of state minimum wage increases from 1976 to 2007 (see online appendix). So, as the federal minimum wage stagnated and inequality increased, states became more active if greater low-income power resources were present. We are mostly concerned with the effect of the state minimum wage on inequality across the two time periods, however, and we expect that the state minimum wage was more important after 1995.

In the models in Table 3, all of the previous variables are included along with the state minimum wage, because we expect power resources to have

effects on inequality independent of their effect on minimum-wage laws. We can see in the table that the state minimum wage had no statistically significant effect on inequality from 1976 to 1994. After 1994, however, we can see that states with a higher effective minimum wage had smaller increases in inequality. Testing the equality of the significant state-level coefficients across the models shows that it is likely that these coefficients differ in the two periods ($p = 0.09$) in a manner that is consistent with the expectation that state-level policy factors should have become more relevant after 1994.

Conclusions

We find that both levels of government influence pre and post-redistribution state income inequality. Even after controlling for federal politics, state political

TABLE 3 State Minimum Wage, and Market Income Inequality in the American States

Independent Variables	1976–1994	1995–2006
Market Inequality _{t-1}	-0.250* (0.042)	-0.399* (0.075)
<i>National Variables:</i>		
Δ Democratic President _t	0.001 (0.003)	0.008 (0.007)
Democratic President _{t-1}	0.003 (0.003)	0.007 (0.008)
Δ Democrats in Congress _t	-0.078* (0.032)	0.026 (0.169)
Democrats in Congress _{t-1}	-0.013 (0.034)	0.130 (0.179)
Δ National Policy Liberalism _t	0.001 (0.001)	0.000 (0.001)
National Policy Liberalism _{t-1}	-0.002 (0.002)	-0.000 (0.000)
<i>State Variables:</i>		
Δ Minimum Wage _t	0.000 (0.002)	0.002 (0.002)
Minimum Wage _{t-1}	-0.001 (0.001)	-0.001* (0.000)
Δ Left Govt Power _t	-0.002 (0.004)	-0.013* (0.004)
Left Govt Power _{t-1}	0.003 (0.003)	0.006 (0.003)
Δ Union Density _t	-0.015 (0.030)	-0.105 (0.072)
Union Density _{t-1}	-0.023* (0.009)	-0.035* (0.010)
Δ Unemployment _t	0.400* (0.055)	0.196 (0.166)
Unemployment _{t-1}	0.225* (0.041)	0.428* (0.114)
Δ Manufacturing _t	0.081 (0.053)	0.067 (0.059)
Manufacturing _{t-1}	0.006 (0.006)	0.034 (0.017)
Δ GSP _t	-0.268* (0.082)	-0.107 (0.065)
GSP _{t-1}	0.019* (0.006)	0.013* (0.005)
Δ Nonwhite Population _t	0.048 (0.040)	0.460* (0.180)
Nonwhite Population _{t-1}	0.013* (0.006)	0.014 (0.010)
Δ Elderly Population _t	-1.01 (0.65)	0.687 (0.855)
Elderly Population _{t-1}	0.187* (0.040)	0.340* (0.077)
Constant	0.075* (0.025)	0.067 (0.094)
R ²	0.20	0.34
N	900	600

Note: OLS regression coefficients with panel corrected standard errors in parentheses.

* $p < .05$ two-tailed

factors influence the income distribution. States can influence pre-redistribution income in addition to posttransfer income, which had been examined in previous state-level studies. This is important since many scholars agree that the states have a limited ability to redistribute wealth. Our results strongly suggest that in federalist countries like the United States it is important to consider the actions of subnational governments.

We can conclude based on our analysis that power resources theory is a useful general explanation for increasing inequality both nationally and subnationally, as well as in other countries. Specifically, we observe that when unions are stronger and left party governments are in power at either the federal or state level we see lower levels of inequality. Power resources theory also helps to explain the federalist division of labor in addressing inequality in the United States. Post-1994, after a dramatic shift at the national level away from middle- and lower-class

power resources, state governments with more left party power in government have reduced the growth rate of inequality.

It is important to note, however, that even states with more left party power have not been able to reverse the trend toward rising inequality. Some scholars argue that granting additional authority to the states could lead to less inequality (Freeman and Rogers 2007), and our analysis confirms these arguments to the extent that the federal government is inactive in addressing this problem. Based on the history of the 1930s through the 1960s, however, it seems likely that concerted federal action will be necessary to substantially reduce economic inequality.

This study advanced our understanding of the politics of inequality by exploring the interplay of the federal and state governments, integrating the study of state-level income inequality with the broader literature, and considering the effect of both market

conditioning and redistribution on inequality. Yet, future research should more fully consider the policies that are most clearly related to shaping inequality. Our research indicates that both state and federal policies are likely important. As well, the role that local governments play in distributional outcomes is an important question. Though these governments are more highly constrained than states, scholars should study policies adopted at the city level, like living-wage laws, that may reduce inequality.

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