Political Choice, Public Policy, and Distributional Outcomes

Nathan J. Kelly  University of Tennessee

I address the functioning of the U.S. governing system by analyzing distributional outcomes from 1947 to 2000. The key question is whether public policy influences distributional outcomes. The macropolitics model and power resource theory suggest that left policies should equalize the distribution of income. I utilize single equation error correction models to assess the impact of policy on income inequality through two mechanisms—market conditioning and redistribution. Since nearly every government action influences markets in some way, I examine policy in the aggregate rather than focusing only on policies explicitly designed to redistribute income. The analysis indicates that policy influences inequality through both mechanisms, with left policy producing more equality. The results are consistent with power resource theory and strongly support the macropolitics model. Furthermore, I find that market conditioning is as important as, and works in tandem with, explicit redistribution.

Politics is about choices, and political contestation involves choices between conflicting goals and paths to those goals. Political parties present choices among alternatives, citizens have preferences about at least some of these choices, and democratic elections provide a formal mechanism for citizens to choose among the options. The choices parties present are alternative policies designed to achieve the goals endorsed by the democratic process. If citizens are to get what they ask for through democracy, policy must have predictable consequences.

This article focuses specifically on distributional consequences. Policy can influence a wide variety of outcomes, but "Who gets what?" is a central political question in the United States and around the world. While nearly every political debate can be related to this question, it is most often about how the economic pie will be divided. Disagreements occur regarding who will bear the tax burden, what benefits social programs will offer, and how economies should be organized. In essence, "Who gets what?" most often means "Who gets the money?" The empirical answer to this question is the distribution of income.

The primary question here is whether and how public policy influences income inequality in the United States. Empirical analyses have demonstrated that government policy is driven by the choices citizens make in elections and the public’s changing attitudes between elections (Erikson, MacKuen, and Stimson 2002; Page and Shapiro 1992; Stimson, MacKuen, and Erikson 1995; Wlezien 1995). We also know that a variety of government programs have distributional consequences (Danziger and Gottschalk 1995; Page and Simmons 2002; Pechman 1986). We know less, however, about whether public policy produces orderly and predictable distributional consequences. I theorize that nearly every government activity influences market decisions in one way or another, rendering the particularistic view of policy that is common in political science inadequate to capture the distributional effects of public policy. Because of this, I examine policy in general rather than focusing on one policy or a particular policy domain. The main contribution of this article, in fact, is that the aggregate policy outputs of the U.S. governing system influence distributional outcomes through both explicit redistribution and market conditioning.

Nathan J. Kelly is assistant professor of political science, University of Tennessee, 1001 McClung Tower, Knoxville, TN 37996 (nathan.j.kelly@gmail.com).

The author expresses gratitude to Jim Stimson, John Stephens, David Lowery, Mike MacKuen, George Rabinowitz, Terry Sullivan, Jana Morgan Kelly, members of the political science departments at the University at Buffalo and Tufts University, and three anonymous reviewers for their helpful comments. Any remaining errors are, of course, my own. This material is based in part upon work supported by the National Science Foundation under Grant Number SES-0318044. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author and do not necessarily reflect the views of the National Science Foundation.


©2005 by the Midwest Political Science Association  ISSN 0092-5853

865
The article is organized in six sections. First, I outline the theory underlying my work by discussing two complimentary theoretical perspectives—the macropolitics model (Erikson, MacKuen, and Stimson 2002) and power resource theory (Esping-Andersen 1990; Hicks 1999; Hicks and Swank 1992; Huber, Ragin, and Stephens 1993; Huber and Stephens 2001; Korpi 1978, 1983; Stephens 1979)—to develop expectations about the connection between public policy and distributional outcomes. Specifically, I describe two mechanisms through which government can influence the distribution of income—redistribution and market conditioning. In the second section I discuss three potential impediments to the linkage between public policy and distributional outcomes. Third, I measure the distribution of income as a two-stage process and describe how this strategy allows an examination of the two mechanisms of policy impact. I then develop the policy concept and measure utilized in this analysis. Finally, I test the theoretical expectations using data from the post-WWII United States.

Macropolitics, Power Resources, and the Distributional Consequences of Policy

The macropolitics model examines relationships between parts of the U.S. governing system at the aggregate level such as public opinion, presidential approval, partisanship, elections, and public policy. The argument is that the parts of the system behave predictably and orderly. Citizens express preferences about competing policy alternatives, the preferred alternatives are enacted, and citizens then judge the quality of the outcomes produced. Tests of this model show that liberal shifts in public opinion produce liberal shifts in policy because policymakers respond to changes in public opinion and, if they do not, are replaced through popular elections. Figure 1 shows the relevant aspects of the macropolitics model, indicated by the boxes with underlined text.

Aggregate public opinion influences the course of public policy in the United States, and this previous finding is an important underpinning of my work. But the macropolitics model in essence assumes that changes in public policy produce changes in societal outcomes. In the realm of income inequality, a leftward shift in policy should produce different distributional consequences than a move to the right according to the macropolitics model. However, this implication has not been rigorously tested. If citizens exert influence over public policy but policy does not influence important societal outcomes, the substantive impact of the opinion-policy link declines.

The macropolitics model presents an ideological model of political conflict, so understanding the distributional preferences of those on competing ends of the ideological spectrum is essential to making the distributional predictions of the macropolitics model more explicit. Since at least the time of FDR and the Great Depression, modern American liberals have placed an intrinsic value on economic equality and have generally favored government action to balance the scales between the rich and the poor. Conservatives, on the other hand, do not find economic inequality to be a societal problem and are less favorable toward government action to balance the

Figure 1  Power Resources, Macro Politics, and Distributional Outcomes
POLITICAL CHOICE, PUBLIC POLICY, AND DISTRIBUTIONAL OUTCOMES

scales of inequality. This is not to say that conservatives are unconcerned with the plight of the poor or lack compassion toward those less fortunate, but liberals are clearly more supportive of government action to reduce inequality while conservatives believe the free market should determine distributional outcomes.

This means that the macropolitics model yields an expectation that shifts to the left in public policy will produce reductions in income inequality. Given that previous analyses of the macropolitics model have not examined the distributional consequences of policy, I turn to a second theory to develop expectations about how policy might influence distributional outcomes—the power resource theory of welfare state development (Esping-Andersen 1990; Hicks 1999; Hicks and Swank 1992; Huber, Ragain, and Stephens 1993; Huber and Stephens 2001; Korpi 1978, 1983; Stephens 1979). Perhaps due to their development in separate subfields of political science, the macropolitics model and power resource theory have never been discussed jointly. Despite some important differences in the two theories, power resource theory allows me to extend the macropolitics model to an explicit examination of distributional outcomes.

Power resource theory is rooted in the idea that the upper and lower classes have divergent distributional preferences, with the lower class favoring more egalitarian outcomes than the upper class. The theory goes on to argue that the lower classes must organize in order for their collective voice to be heard and influence outcomes. Power resources are the factors that facilitate organization, and the theory conceptualizes two realms in which the lower classes can organize—the economy and politics. Organization in the economic realm is evidenced by labor union strength, and organization in the political sphere is evidenced by the strength of left parties in government. Left party control and union strength, in turn, influence distributional outcomes. Figure 1 presents these connections in the shaded boxes.

The most important item to note at this point is the overlap of the macropolitics model and power resource theory. In the parlance of the macropolitics model, “election outcomes” are discussed, while “party control of government” is utilized in the vernacular of power resource theory. These phrases indicate a similar concept, linking the two theories theoretically and empirically by a common component. Both theories are concerned with which political team controls the policymaking apparatus.

Previous studies of the U.S. macropolitical system explicitly examine public policy, but empirical tests of power resources theory do not. Thus, analyzing public policy is more clearly connected to previous work in the macropolitics literature than it is to power resource theory, but linkages also exist between power resource theory and the analysis of public policy conducted here. Most conceptions of power resource theory consider public policy an output that varies depending on the constellation of power resources. Under this view the state is an instrument for the exercise of power resources, and indicators of power resources such as left party strength in government are used to explain state action. Probably due in large part to a lack of comparable cross-national data, however, previous studies of power resource theory do not directly observe or measure public policy. They rely instead on observing the connection between power resource variables and policy consequences like government redistribution. Analyses of income inequality in the power resource tradition essentially examine public policy indirectly by treating it as a latent variable that is used by those with power resources to accomplish their distributional objectives.

In this study I treat public policy a bit differently. Rather than viewing policy as the object of power resources, I treat the left-right ideological content of public policy as an indicator of power resources in itself. This strategy is particularly appropriate in the context of the United States because class-based interests are not well-consolidated. While the Democratic Party is clearly more oriented toward lower-class interests than the Republican Party, class-based partisan differences are not as clear in the United States as they are in the European democracies in which power resources theory has been largely developed and tested. The reality of American politics is that parties have been less disciplined (despite recent changes) and more factionalized (often along regional lines) than their European counterparts. In such a context, it seems unlikely that party control is the most appropriate indicator of power resources, and it increases the utility of the more direct examination of public policy that I propose. Given the overlap that exists between the macropolitics model and power resources theory when public policy is viewed as an indicator of power resources, it is sensible to apply insights from the power resource literature to the distributional consequences of macropolitics.

Two Mechanisms of Distributional Impact

In extending the macropolitics model to distributional outcomes, I examine two broad mechanisms through which public policy can influence income inequality. The first has been examined in previous studies of power resource theory—explicit redistribution. Explicit redistribution occurs whenever government takes money from some and gives it to others. Studies of developed democracies have generally concluded that control of government by left parties (the political manifestation of lower
class power resources) produces greater government redistribution and, via this mechanism, less income inequality (Bradley et al. 2003; Corina, Van Arnhem, and Schotsman 1982; Hibbs and Dennis 1988; Hicks and Swank 1984; Sawyer 1976). The connection analyzed in this article—between public policy and redistribution—has not been explicitly examined. Given the previous finding in the macropolitics literature that Democratic Party control produces liberal policy enactments (Erikson, MacKuen, and Stimson 2002), the clear expectation is that leftward shifts in public policy will produce more redistribution.¹

I also examine a mechanism for distributional policy consequences that is related to power resource theory but has not been rigorously assessed—actions that modify market outcomes. One of the fundamental propositions of power resource theory is that lower-class power resources produce organization in the political and economic realms. In the economic sphere, this organization is evidenced by labor union strength. The basic goal of labor unions is to act within market-based wage bargaining processes to achieve outcomes that increase the welfare of their members. Labor unions take action to modify market outcomes, so the centrality of labor unions in power resource theory indicates that the theory is cognizant of mechanisms other than explicit redistribution that influence distributional outcomes. Building on the idea that lower-class power resources influence distributional outcomes through a governmental and market component, I posit that public policy influences distributional outcomes through a governmental and market component.² The governmental component is explicit redistribution, and the market component is market conditioning.

Market conditioning arises when government action produces economic outcomes different than those which would be produced by market forces in the absence of government action. Regulations enforced by the Federal Communications Commission, Environmental Protection Agency, Food and Drug Administration, or any other regulatory agency of the federal government are aimed at producing different outcomes than would be produced by a completely free and unregulated market. Social policies also produce outcomes that diverge from those of a hypothetical free market. Public education, for example, expands opportunities to those who could not afford it in a completely private system. The skill sets produced through education have clear economic consequences. More obviously, any government program that requires taxation of any kind or expends funds from the Treasury influences the economy. Under this definition of market conditioning, in fact, I am hard pressed to think of a government policy that does not produce it. The question is not whether government action changes market outcomes, but whether these market conditionings influence distributional outcomes. Nearly any governmental influence on market outcomes has the potential to influence distributional outcomes, but a few specific examples are useful for illustrative purposes.

Distributional outcomes can be influenced by any policy that affects how much income individuals receive in labor and investment markets. The outcomes produced in these markets can be changed by influencing the characteristics of individuals (e.g., intelligence, experience, and skills) or the market itself (e.g., demand, supply, and stability). Education programs provide an excellent example of government action that influences the characteristics of individuals. As mentioned above, public education provides opportunities for skill development that would not be affordable to some individuals in a privately funded system. The minimum wage is an example of a government regulation that directly influences the labor market by preventing hourly wages from falling below a specified value. There is room for debate about whether these two exemplar programs have their intended effects, but both would be expected to equalize distributional outcomes.³ If distributional outcomes are as central to state activity as power resource theory posits, then we should expect government to use all the policy tools at its disposal to influence income inequality. An ideological change in public policy, then, should yield consistent distributional effects via explicit redistribution and market conditioning. These basic theoretical expectations are presented in Figure 1, indicated by the bold-faced boxes.

¹In chapter 9 of The Macro Polity, Erikson, MacKuen, and Stimson conduct an analysis of a measure nearly identical to my Policy Liberalism variable. Using a regression analysis, they find that the number of policymaking institutions controlled by the Democratic Party (president, House, and Senate) has a significant impact on Policy Liberalism. In one specification, each additional institution controlled by the Democrats produces 4.19 new liberal laws each biennium (2002, 338).

²Both of these mechanisms are governmental in a sense. The distinguishing characteristic is that redistribution is more directly controlled by government action than is the market component. Government has strict control over how much money is redistributed through government programs, but influencing market outcomes is a more uncertain prospect.

³The list of government programs that influence the characteristics of individual or markets in a way that could influence distributional outcomes is almost limitless. Even explicitly redistributive programs have a market-conditioning component. In fact, the market-conditioning effects of programs such as public assistance (e.g., discouraging labor force participation) are often maligned by conservatives as minimizing the effects intended by their well-meaning sponsors.
To summarize, this article makes three theoretical contributions. First, I extend the macropolitics model to distributional outcomes. This is a substantial extension of a model that has focused on the relationship between public opinion and public policy, but not on the substantive impact of policy change. A second, more marginal contribution relates to the examination of public policy, rather than party control, in the context of power resource theory. Cross-national studies of power resource theory have been forced to rely on partisan control of government as a proxy for public policy, but policy can be more directly measured in the single-country context of the United States. Finally, I link insights from the macropolitics model and power resource theory to motivate the examination of two separate, yet related mechanisms through which public policy can influence distributional outcomes—explicit redistribution and market conditioning. The latter has not been examined in previous work, despite the fact that it could produce important distributional consequences.

**Impediments to the Policy-Inequality Link**

Having developed a theory connecting public policy to distributional outcomes, I briefly want to discuss three factors that raise doubts about the linkages discussed above. First, the macropolitics model is not the only model of the U.S. governing system. While the macropolitics model implies that political contestation provides citizens with the ability to influence societal outcomes through the mechanisms of government, the symbolic politics model takes a different view (Edelman 1964, 1971). This theory argues that much political action is symbolic. The choices citizens make, even in a democratic society, are between artificial alternatives, making policy symbolism over substance. Proponents of symbolic politics argue that policymakers of every ideological and partisan stripe really pursue the same goal—to maintain the current power structure. This is not to say that government policy is unimportant in the symbolic politics model. In fact, the main normative concern this theory raises is that government action influences the lives of citizens, but the symbolic nature of policy means it is used as a means of control and maintenance of the status quo rather than as a tool to help citizens. Contrary to the macropolitics model, then, symbolic politics raises fundamental questions about the meaningfulness of political choices made in the U.S. governing system.

A second potential impediment to the linkage between public policy and distributional outcomes arises from the policy implementation literature. Policy is implemented by bureaucrats and governmental agencies, and their actions can diverge greatly from the initial intent of legislators. Because of this, a policy proposal becoming law does not mean that the consequences of the policy will align with the original goals. While successful policy implementation is possible, the overriding message of the literature is that implementation is no simple task and that it is successful under a limited set of circumstances (Hill and Weisheit 1995; Pressman and Wildavsky 1973; Sharkansky 1967). Policymakers may be pursuing alternatives with competing goals, but to the extent that policies cannot be successfully implemented, ideological shifts in public policy will not produce the predicted consequences.

A third problem is the issue of unintended consequences. It is well-known that public policies often have unexpected secondary effects, and there is ample evidence that such unintended consequences have diminished or even completely eliminated the intended effects of a variety of policies. Automobile safety measures can decrease the safety of passengers and non-occupants by increasing risky driving behavior (Calkins and Zloptroper 2001; Chirinko and Harper 1993; Keeler 1994). Building roads to decrease traffic congestion can do just the opposite (Downs 1992; Fulton et al. 2000). The ability of environmental policy to achieve its stated goals has also been questioned (Lueck 2000; Stavins and Jaffe 1990). Finally, efforts to improve the quality of representation for minorities through redistricting have, while increasing the proportion of representatives belonging to underrepresented minorities, also had the unexpected effect of making nonminority representatives less concerned about minority issues (Brace, Grofman, and Handley 1987; Overby and Cosgrove 1996). Even if the symbolic politics model is completely incorrect in its view of the governing system, problems with implementation and unintended consequences create practical impediments to the hypothesized connections between public policy and distributional outcomes.

---

4 Edelman’s argument is about the lack of substantive difference between competing politicians in the United States and how elites manipulate symbols to exert control over the masses. My application of the argument to distributional outcomes is somewhat stylistic. Interestingly, the implications of Edelman’s theory for the connection between policy and outcomes have received little scholarly attention.

5 Most analysts would probably agree than not all policy is symbolic. However, to the extent that policy is used as a means of manipulating symbols, the substantive connection between the ideological direction of policy and distributional outcomes would be diminished.
Measuring Two Stages of Income Inequality

The question I seek to answer is whether policy produces changes in distributional outcomes through market conditioning and/or explicit redistribution. Thinking of distributional outcomes as a two-stage process illuminates a way to gain leverage on this issue. In the first stage individuals sell their services in the labor market and make investments in other markets. Some would call this first stage of the process the “market” income distribution, implying a laissez-faire outcome. While the distribution of income produced by a completely free market is a hypothetical possibility, observing this distribution is impossible from a practical standpoint. The world we can observe is influenced by government, so even “market” outcomes are influenced by government action. Because of this it is impossible to observe the amount of inequality that would exist in the absence of government action. We can, however, observe the distribution of income prior to explicit government redistribution. Thus, I label the first stage of the distributional process “pre-redistribution” inequality because it includes government’s effect on markets but excludes the first-order effects of redistribution. This stage effectively taps any distributional effects that government has through market conditioning.

The second stage of the distributional process is government redistribution. There is no doubt that government action can have redistributional consequences. Means-tested welfare programs like Temporary Aid for Needy Families provide benefits only to those with little income. While unemployment insurance is not means-tested, it is a government program that provides money to those whose earnings would otherwise be lower. Social Security and Medicare are two large programs that provide income and medical services to elderly individuals who often have no other major source of income. Many other programs in the United States provide cash or noncash benefits to individuals’ effect on elderly individuals. Finally, these programs are funded with a slightly progressive tax system (Pechman 1986). Once the income and benefits from all these programs are disbursed and taxes are collected, the second stage of the distributional process is complete, and a “post-government” distribution of income is produced.

This two-stage distributional process motivates the creation of three variables: Pre-Redistribution Inequality, Post-Government Inequality, and Redistribution. Pre-Redistribution Inequality is operationalized as the pretax-pretransfer distribution of income measured as a ratio of the aggregate income of the top 20% of households to the bottom 40%. Specifically, this measure examines inequality in income (adjusted for underreporting) from the following sources as measured by the U.S. Census Bureau: earnings, private retirement income, private pensions, interest, dividends, rents, royalties, estates, trusts, alimony, child support, and outside assistance. Post-Government Inequality is inequality in posttax-posttransfer income and is measured on the same scale as Pre-Redistribution Inequality. Posttax-posttransfer income includes pretax-pretransfer income, plus government cash and noncash benefits (unemployment compensation, state workers’ compensation, social security, Supplemental Security Income, public assistance, veterans’ benefits, government survivor benefits, government disability benefits, government pensions, government educational assistance, Medicare, Medicaid, food stamps), minus federal taxes paid. Finally, Redistribution is the percent reduction in inequality between Pre-Redistribution Inequality and Post-Government Inequality.

My analysis focuses explicitly on Pre-Redistribution Inequality and Redistribution. It is worth noting that these two variables define Post-Government Inequality:

\[
\text{Post} = \text{Pre} \left(1 - \frac{\text{Redist.}}{100}\right)
\]

An increase in Pre-Redistribution Inequality, by definition, produces an increase in Post-Government Inequality. Contrarily, increases in Redistribution decrease inequality. Thus, exploring Pre-Redistribution Inequality and Redistribution is an indirect analysis of Post-Government Inequality as well. Figure 2 charts these three variables from 1947 to 2000. Values for Pre-Redistribution and Post-Government Inequality are listed on the left axis, while values for Redistribution are listed on the right. This chart shows that Pre-Redistribution Inequality has increased dramatically since 1947. Post-Government Inequality, however, has remained remarkably steady apparently due to greater Redistribution over this period.

The two-stage conceptualization of distributional outcomes, while similar in some ways to most previous studies of income inequality, also differs in some respects. The most important difference is that I explicitly model Pre-Redistribution Inequality. This provides an opportunity to see the impact that policy has on inequality through means other than explicit redistribution. My analysis of redistribution also differs from many previous studies in that it directly examines the distributional impact of taxes and transfer spending by comparing the distribution of income prior to taxes and transfers to the distribution

“The benefit of in-kind government expenditures is allocated among the five income quintiles based on incidence studies conducted primarily by economists (see Smeeding 1979).
of income after taxes and transfers. The most common practice in previous studies of income inequality has been to test the connection between party control and transfer spending (e.g., Hibbs and Dennis 1988) and then test the connection between transfer spending and measures of inequality similar to my Post-Government Inequality measure. This method tackles the same general theoretical question in which I am interested, but does it in less direct manner.7

Conceptualizing and Measuring Public Policy

To this point I have often mentioned the term public policy, but have said little about how to define it. In this analysis, policy is conceptualized as the sum total of laws enacted by government. This conceptualization has three important characteristics. First, it is only interested in important and substantive change. Some activities by policy makers—as suggested by the symbolic politics model—represent failed policy attempts or symbolic activities designed for an audience, but laws embody government policy that can actually influence people’s lives. Second, policy is viewed cumulatively, not newly developed each year but the result of modifications to previous decisions. Changes occur at the margin while most previous policy decisions remain in effect. These marginal changes are what should influence the path of distributional outcomes. Finally, this conceptualization of policy is highly aggregated. While it is common to take a particularistic view of policy with each set of policies representing government’s response to a particular set of issues, a focus on individual policies or even policies within a specified domain is not satisfying in the broader theoretical context of this article.

My focus on policy at such a highly aggregated level is likely the most controversial of the characteristics discussed above, so I want to be clear about why I conceptualize policy in this way. Traditionally, analysts interested in public policy divide policy into individual pieces or domains. Questions are framed in terms of “does policy X influence outcome Y?” In the context of distributional outcomes, typical issues are the effect of transfer spending on distributional outcomes or the impact of welfare reform on income inequality. In my view, however, it is inadequate to focus solely on such specific policies if the consequences of government action are to be fully appreciated. I theorize that government policy can influence distributional outcomes through both redistribution

7It is important to note, however, that this two-stage conceptualization of income inequality is not completely novel. Bradley et al. (2003) also conceptualize the distributional process in two stages, but focus on different theoretical questions than I examine here.
and market conditioning. As discussed above, almost everything government does influences markets, so potentially important policies would not be captured by examining only those directly related to transfer spending.

One potential solution to this issue is to create two measures of policy. The first measure would include only policies that explicitly redistribute income. The second measure would include all other policies to avoid excluding potentially important activities that influence market outcomes. One could then separate the effects of explicitly redistributive programs and other programs, with the expectation that Redistribution responds to a subset of policy while Pre-Redistribution Inequality responds to a more general set of policies.

From a practical perspective, however, there is no defendable method for dichotomizing policy. One reason for this is that transfer policies often have secondary effects via market conditioning. Medicare, for example, provides direct benefits to the elderly but also changes market outcomes by inducing demand for medical services that could not be paid for without the government assistance the program provides. Similar issues arise with almost any transfer program. A second issue is that it is rarely, if ever, the case that a piece of legislation relates exclusively to transfer programs. More often, laws encompass myriad policies, some that are explicitly redistributive and others that are not. Would all laws that have any transfer component be categorized as redistributive or would the threshold be higher? Any attempt to dichotomize policy adds unnecessary measurement error and would lead to improper inferences to the degree that a measure of redistributive policy cannot effectively isolate such policies.

With this aggregate conception of policy in mind, I utilize a measure of policy developed by Erikson, MacKuen, and Stimson (2002). This measure examines important policy change by focusing on the crucial public laws identified by Mayhew (1991) and updated through 2000. From this list, laws related to domestic policy with national impact are coded as to whether they were viewed as expanding (liberal) or contracting (conservative) government at the time they were passed. Laws that were ambiguous in their expansion versus contraction of government were coded as neutral and do not contribute to the policy change captured in this measure. Liberal legislation is counted +1, conservative legislation −1, and exceptionally important laws (as defined by Mayhew) are counted +2 or −2. Each year since 1947, a score is produced by summing liberal minus conservative legislation—this is annual policy change.

The current level of policy is produced by accumulating annual policy change over time. A net liberal shift in policy produces a positive change in this policy measure. Since the late 1940s, the most important policy changes have usually led to government expansion. In essence, then, the debate in the United States has not been literally about the contraction versus expansion of government, but about whether government should expand in response to the problems that develop in an increasingly complex society. In the context of the post–WWII United States, conservatives have not regularly offered proposals that would contract government. Rather, they have opposed new government expansion. Given this, the measure discussed above that focuses on the expansion versus contraction of government fails to appropriately capture policy as a result of the ideological conflicts occurring in the governing system of the United States.

Since my interest is in which side of the ideological debate is winning in political conflict, it is more appropriate to examine the accumulation of policy relative to the long-term trend of government expansion. During the period under analysis (1947–2000), there was an average of 2.19 new laws passed each year that expanded government activity. The detrended measure of policy utilized in this analysis removes the trend of 2.19, rising only when the net increase in government-expanding laws exceeds 2.19. I will refer to this measure as Policy Liberalism. It is charted in Figure 3 from 1947 to 2000 and shows the major turning points of policy to occur in some expected places. A sharp liberal turn in policy took place in the early 1960s as Lyndon Johnson began his Great Society program, policy turned in a conservative direction around the time of Reagan’s election to the presidency, and another sharp turn toward the right happened after the Republican takeover of Congress in 1994.

**Policy and Distributional Outcomes, 1947–2000**

My theoretical framework suggests a particular set of relationships between Policy Liberalism and distributional outcomes. Liberal policy is expected increase Redistribution and decrease Pre-Redistribution Inequality.

---

8Updates to the list of most important laws since 1990 are available on Mayhew’s Web site at http://pantheon.yale.edu/~dmayhew.
thereby decreasing overall inequality by definition. With these expectations in mind, I conduct a time-series analysis of the connections between Policy Liberalism, Pre-Redistribution Inequality, and Redistribution. First I examine the relationship about which we know the least—Policy Liberalism and Pre-Redistribution Inequality. This part of the analysis sheds light on whether market conditioning influences income inequality. Then I extend previous analyses of the political determinants of overt government redistribution by examining the connection between Policy Liberalism and Redistribution.

Error correction models (ECMs) are implemented to estimate the connection between Policy Liberalism and both Pre-Redistribution Inequality and Redistribution (Banerjee et al. 1993; Davidson et al. 1978). Such models are appropriate when theory suggests a dependent variable responds to short-term changes in independent variables and/or maintains a long-term level consistent with these variables. When a policy change occurs, there can be an immediate impact, but the impact of policy is likely distributed over time such that the full effect develops over time. I hypothesize that Pre-Redistribution Inequality and Redistribution is responsive to changes in policy. However, even if policy changes do not quickly produce different distributional outcomes, inequality should gradually decrease if liberal policies are maintained.

More specifically, I estimate the short and long-term effects of Policy Liberalism using the single equation method for estimating ECMs. This strategy is selected in favor of the most common alternative, the Engle-Granger two-step estimator, for two reasons (Engle and Granger 1987). First, unlike the two-step method the single equation model does not impose the assumption of cointegration on the series analyzed. In fact, the single equation ECM is a modified version of an autoregressive distributed lag model in which the dependent variable is a function of its past values and past values of the independent variables. This means that the single equation ECM can be applied to integrated and stationary series (Banerjee et al. 1993; De Boef 2001; De Boef and Granato 1999). Secondly, the single equation estimator is preferred in small samples (Banerjee et al. 1986; De Boef and Granato 1999). Overall, use of the single equation model can be justified in a broader range of circumstances than the two-step method.

A bivariate single-equation error correction model can be expressed as:

$$\Delta Y_t = \beta_1 \Delta X_{t-1} - \beta_2 (Y_{t-1} - \beta_3 X_{t-1} - \gamma) + \epsilon_t$$

This equation examines the effect of changes in X and the level of X in comparison to Y. $\beta_2$ is the error correction rate, and $\gamma$ is the (inestimable) distance between the variables when in their equilibrium state. In essence, $\beta_2$ captures how quickly discrepancies in the equilibrium state decrease.
distance between \( X \) and \( Y \) are eliminated. The short-term relationship between \( X \) and \( Y \) is captured by \( \beta_1 \), while the long-term relationship is estimated in \( \beta_3 \). In the models estimated below, Policy Liberalism and nonpolicy factors are independent variables, so multiple \( X \)'s are present.

The Conditioning of Market Outcomes

If liberal policy produces less Pre-Redistribution Inequality, this is evidence that government influences distributional outcomes through market conditioning. While my focus is on government policy, nonpolicy factors have also been explored as causes of inequality, and these other explanations can be divided roughly into two categories: labor market characteristics and demographic factors. I include many of the most prominent nonpolicy explanations in this analysis (see Danziger and Gottschalk 1995 for a thorough review). Specifically, I focus on four demographic factors and three labor market factors. While these variables have received a great amount of attention in other studies, they have rarely been considered collectively.

The demographic explanations address the proportion of single-female headed households, the rates of female labor force participation and immigration, and educational levels. A rising proportion of single-female headed households has been cited as a cause of inequality in the United States because these households earn less than married couple households (Gottschalk and Smeeding 1997; Levy and Michel 1991; Nielsen and Alderson 1997). With regard to female labor force participation, some studies show that it leads to increased income inequality (Karoly and Burtless 1995; Nielsen and Alderson 1997) while other researchers have found no connection (Cancian, Danziger, and Gottschalk 1993). Increased immigration is generally seen as increasing inequality because new immigrants earn less than other workers and immigration increases the relative supply of unskilled workers (Borjas, Freeman, and Katz 1992). I also include a measure of educational attainment to control for the fact that returns to education in income have risen over the past several decades (Danziger and Gottschalk 1995).

Unemployment, deindustrialization, and union membership are the labor market factors examined in this analysis. Clearly, a higher proportion of unemployed individuals earning no income through wages or salaries should produce a greater degree of inequality. Empirical analyses have demonstrated that this is, in fact, the case (Bradley et al. 2003; Hibbs and Dennis 1988). Deindustrialization, in large part produced by globalization, has also been connected to rising inequality (Alderson and Nielsen 2002; Nielsen and Alderson 1995). Finally, declining union membership is also a determinant of increasing inequality (Bradley et al. 2003; Freeman 1993; Stephens 1979). This explanation is, like policy in the current analysis, rooted in power resource theory. While political parties are the institutions in which the lower classes organize to influence the state, organization in unions directly influences wage bargaining in labor markets.

As a first step, then, current changes in Pre-Redistribution Inequality are regressed on short-term changes and long-term levels of Policy Liberalism, the percent of single female-headed households, female labor force participation, the percent of the U.S population comprised of new immigrants, the percent of the population with a high school degree, the unemployment rate, the percent of the workforce in nonmanufacturing jobs, and the percent of the workforce not belonging to a union. As with any single equation error correction model, the levels of the right hand side variables are lagged one period. Short-term changes in Policy Liberalism are also lagged one period because changes in policy are not likely to have an immediate effect on distributional outcomes. Once a law is enacted, it takes time for it to be initially implemented. Some laws take effect quickly while the full implications of other laws are phased in over years. The error correction component of the model can capture the long-term effects, but short-term changes in policy must be lagged to appropriately capture the delay in the onset of the influence. The results of this analysis are presented in Table 1.

The results support the predictions of the macro-politics model. When policy shifts toward the left, Pre-Redistribution Inequality is reduced. On average, a 1-point increase in Policy Liberalism (i.e., the average number liberal laws passed each year is exceeded by one, representing a 1% change based on the variance of this series) reduces the ratio of the aggregate income of the top income quintile to the bottom two quintiles by .031 points. This amounts to approximately a 3% change. So, a 1% increase in policy liberalism produces a 3% reduction in inequality. Since the dependent variable in this analysis captures inequality that exists prior to the explicit effects of government redistribution, it shows that market conditioning is an avenue through which government influences distributional outcomes. While government overtly uses transfer policies to change the income distribution, policy also influences inequality before explicit transfers. Additionally, the distributional consequences of policy via market conditioning are felt quickly since the policy effect is fully captured in the short-term.
### Table 1  Single Equation Error Correction Model of Pre-Redistribution Inequality

<table>
<thead>
<tr>
<th>Short-Term Effects</th>
<th>$\Delta$ Pre-Redistribution Inequality</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\Delta$ Policy Liberalism$_{t-1}$</td>
<td>-.031**</td>
</tr>
<tr>
<td>$\Delta$ % Single-Female Headed Households$_{t-1}$</td>
<td>-.178</td>
</tr>
<tr>
<td>$\Delta$ Female Labor Force Participation Rate$_{t-1}$</td>
<td>-.051</td>
</tr>
<tr>
<td>$\Delta$ % New Immigrants in U.S. Population$_{t-1}$</td>
<td>-.019***</td>
</tr>
<tr>
<td>$\Delta$ Unemployment Rate$_{t-1}$</td>
<td>.165*</td>
</tr>
<tr>
<td>$\Delta$ % Non-Manufacturing Workers$_{t-1}$</td>
<td>-.164</td>
</tr>
<tr>
<td>$\Delta$ % Non-Union Workers$_{t-1}$</td>
<td>-.022</td>
</tr>
<tr>
<td>$\Delta$ % With HS Degree$_{t-1}$</td>
<td>-.057</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Long-Term Effects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Liberalism$_{t-1}$</td>
<td>-.001</td>
</tr>
<tr>
<td>% Single-Female Headed Households$_{t-1}$</td>
<td>.361*</td>
</tr>
<tr>
<td>Female Labor Force Participation Rate$_{t-1}$</td>
<td>-.101</td>
</tr>
<tr>
<td>% New Immigrants in U.S. Population$_{t-1}$</td>
<td>.011*</td>
</tr>
<tr>
<td>Unemployment Rate$_{t-1}$</td>
<td>.008</td>
</tr>
<tr>
<td>% Non-Manufacturing Workers$_{t-1}$</td>
<td>.100</td>
</tr>
<tr>
<td>% Non-Union Workers$_{t-1}$</td>
<td>.052</td>
</tr>
<tr>
<td>% With HS Degree$_{t-1}$</td>
<td>-.045</td>
</tr>
<tr>
<td>Pre-Redistribution Inequality$_{t-1}$ (Error Correction Rate)</td>
<td>-.930***</td>
</tr>
</tbody>
</table>

| Constant                                               | -8.98***                             |

| N                                                      | 52                                    |
| Adj. R²                                                | .55                                   |
| Durbin’s h p value                                      | .03                                   |
| Breusch-Godfrey Lagrange Multiplier p value            | .02                                   |

**Note:** Entries are OLS coefficients with standard errors in parentheses. *p < .10, **p < .05, ***p < .01, two-tailed test.
Explicit Redistribution

Having assessed the connection between policy and the degree of inequality that is present before government takes overt redistributive action, I turn to an analysis of explicit government redistribution. The question is whether policy change produces adjustments in government redistribution. As in the previous analysis, a single-equation error-correction model will be used to test the connection between Policy Liberalism and Redistribution. However, the nonpolicy factors that might affect Redistribution are different from those that influence Pre-Redistribution Inequality. I include controls for the unemployment rate and the percent of the population aged 65 and over. Unemployment captures economic conditions that make payouts from government programs more likely. When unemployment is high, there are more people eligible for unemployment benefits as well as other forms of government assistance. The elderly population is included because Medicare and Social Security are the two largest redistributional programs in the United States. Since they are targeted to older Americans, it is likely that Redistribution will increase when more citizens are eligible for these two programs.

The results of this analysis are presented in Table 2 and show that liberal policy produces more redistribution in the long-run. The key coefficients are those estimated for lagged levels of Policy Liberalism and Redistribution, and their substantive interpretation is fairly straightforward. When Policy Liberalism increases by one point, there is no statistically significant short-term effect on Redistribution. However, this increase in Policy Liberalism disturbs the long-run equilibrium relationship. After a one-point increase in Policy Liberalism, Redistribution is too low compared to the distance between these two variables when in their equilibrium state. The coefficient for the lagged level of Policy Liberalism indicates that Redistribution will eventually increase by .10 to correct for the disturbance to the long-run relationship. The error-correction rate indicates that more than 75% of this effect will be realized the year after the change in policy, and all but 5% of the disequilibrium will be corrected two years after the initial shock. Overall, these results extend the claim that party control influences redistribution by finding that the policies enacted in the governing system, which vary with partisan control, directly influence redistribution.

Simulating the Effect of Conservative Policy Shock

The Great Society programs implemented in the 1960s represent the largest shift toward liberalism in the post-WWII era. In 1965, some 14 important laws that moved policy toward the left were enacted. But what if 1965 would have been a normal year, without the unusual impetus toward liberal policymaking? The elimination of these programs would represent a conservative counterfactual to the observed Policy Liberalism series. How large an impact on overall levels of inequality would such a difference in policy have? The results from the previous two sections can be combined to address this question since Post-Government Inequality is defined by Pre-Redistribution Inequality and Redistribution (Equation 2).

Figure 4 charts two lines. The bottom line is the level of Post-Government Inequality that has been observed since 1947. The top line shows the predicted path of Post-Government inequality after a hypothetical conservative policy shock in 1965. Using the estimates produced in Tables 1 and 2, I simulate the effect of a conservative policy shift of a magnitude similar to that of the Great

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Single Equation Error Correction Model of Redistribution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short-Term Effects</strong></td>
<td><strong>Δ</strong></td>
</tr>
<tr>
<td>Δ Policy Liberalism_{t−1}</td>
<td>−.102</td>
</tr>
<tr>
<td>Δ Unemployment Rate_{t}</td>
<td>1.37***</td>
</tr>
<tr>
<td>Δ % Population over 65t</td>
<td>−4.60</td>
</tr>
<tr>
<td><strong>Long-Term Effects</strong></td>
<td></td>
</tr>
<tr>
<td>Policy Liberalism_{t−1}</td>
<td>.100***</td>
</tr>
<tr>
<td>Unemployment Rate_{t−1}</td>
<td>1.45***</td>
</tr>
<tr>
<td>% Population over 65t_{t−1}</td>
<td>5.92***</td>
</tr>
<tr>
<td>Redistribution_{t−1} (Error Correction Rate)</td>
<td>−.763***</td>
</tr>
<tr>
<td>Constant</td>
<td>−31.4***</td>
</tr>
<tr>
<td>N</td>
<td>52</td>
</tr>
<tr>
<td>Adj. R²</td>
<td>.52</td>
</tr>
<tr>
<td>Durbin’s h</td>
<td>−.63</td>
</tr>
<tr>
<td>p value</td>
<td>.06</td>
</tr>
<tr>
<td>Breusch-Godfrey Lagrange Multiplier</td>
<td>2.83</td>
</tr>
<tr>
<td>p value</td>
<td>.09</td>
</tr>
</tbody>
</table>

Note: Entries are OLS coefficients with standard errors in parentheses. *p < .10, **p < .05, ***p < .01, two-tailed test.
Society. The figure clearly demonstrates that the effect of policy is substantively significant, with Post-Government Inequality being 11% higher in 2000 after accounting for a conservative policy shock on the same scale as the Great Society initiatives.

Finally, we can get a sense of the relative effect that a shift in policy has through market conditioning and explicit redistribution by isolating the effect that occurs via Redistribution and that which occurs through Pre-Redistribution Inequality. In 2000 Pre-Redistribution Inequality was 5.64, meaning that the top income quintile had nearly six times the aggregate income of the bottom two quintiles. Post-Government Inequality was 1.92, meaning that Redistribution decreased inequality by 65.9%. Substituting these numbers into equation 1 from above yields:

\[
\text{Post Government Inequality} = 5.64 \left( 1 - \frac{65.9}{100} \right) = 1.923
\]

We know from the models estimated in the previous section that a unit-change in Policy Liberalism produces a decline of .031 in Pre-Redistribution Inequality and an increase of .10 in Redistribution. Applying these estimates to the 2000 data, the overall effect of a one-unit increase in Policy Liberalism would be a decline of Pre-Redistribution Inequality from 5.64 to 5.609 and an increase in Redistribution from 65.9 to 66.0. If these new values are substituted into equation 4, Post-Government Inequality would decline from 1.923 to 1.907. Substituting the new values for Pre-Redistribution Inequality and Redistribution one at a time (66 for 65.9 leaving 5.64 constant then 5.609 for 5.64 leaving 65.9 constant) instead of jointly demonstrates that approximately 33% (.005) of the overall decline in Post-Government Inequality induced by a shock to Policy Liberalism can be attributed to explicit redistribution while 67% (.010) of the decline is due to market conditioning.

This is an important finding. It shows not only that the previous fixation on transfer programs ignores a mechanism of governmental influence on distributional outcomes, but that what has been ignored is likely more important than what has been examined. There should be no doubt that programs like Social Security and Medicare are important—in recent years such programs have reduced inequality by as much as 65%. However, when public policy shifts in one ideological direction or the other, these shifts produce a larger impact on inequality by reducing Pre-Redistribution Inequality than they do by increasing explicit redistribution. The clear message...
of these results is that focusing on the programs of the traditional welfare state ignores government action with distributional consequences. The aggregate finding presented here should motivate those interested in the distributional consequences of specific programs to focus on a more varied array of policies. The finding also raises questions about the degree to which policy makers actively consider distributional issues when dealing with policies that are not explicitly redistributional. It may well be that they are intuitively aware of the distributional consequences of almost every policy they enact, and they recognize that their distributional preferences can be most easily pursued via policies that are not explicitly redistributional.

**Welfare Policy, the Macro Polity, and Distributional Outcomes**

In conclusion, this article has provided at least two important new insights. Most broadly, I have addressed the functioning of the U.S. governing system by asking whether the political choices made in the United States have systematic and predictable outcomes. The answer to this question is a resounding yes. We have previously learned that shifts in public opinion and the electoral choices made by citizens produce different policies. When public opinion moves toward the left and parties of the left are elected, policy moves to the left as well. The results in this paper show that these policy changes are not empty. When policy is altered the expected distributional outcomes are produced—inequality increases with conservative policy and decreases with liberal policy. Despite the many reasons that outcomes are difficult to control through government policy, political choices are important.

Second, the results presented in this article show that the connection between public policy and income inequality occurs through two mechanisms—redistribution and market conditioning. Interestingly, the impact of a policy shift on distributional outcomes is larger via the market conditioning mechanism than it is through the path of explicit redistribution. This means that the previous focus on explicit redistribution is incomplete. It is my hope that this aggregate-level finding will spur future research that can pinpoint and quantify the distributional consequences of a broader variety of policies. It is not adequate to focus almost completely on programs that distribute clear and focused benefits. Some efforts in this direction have been made by those studying tax and fiscal incidence, but better methods and more work are needed in this area.

This second finding also provides a possible solution to a seeming quandary of American politics. While it is believed that distributional outcomes are at the heart of political contestation, they are rarely discussed openly in the United States. If public policy debates were the only evidence, distributional outcomes would not appear to be at the heart of American politics. Are citizens and policy makers in the United States so uninterested in distributional outcomes? Changes in tax laws and welfare programs explicitly redistribute income. In these cases it is difficult to avoid talk of distributional outcomes. But this analysis shows that substantial distributional consequences occur through market conditioning. It is easier to avoid discussion of the distributional consequences of policies that are not overtly designed to transfer income.

Because of the way public policy in the United States influences inequality, the comparatively rare public debate about distributional outcomes does not mean they are not important.

**References**


